



MAKING A **MATERIAL** DIFFERENCE

MERGER & SHARE ISSUANCE PROPOSALS — YOUR VOTE IS VERY IMPORTANT

Dear Stockholders:

On September 30, 2025, Axcelis Technologies, Inc., which is referred to as Axcelis, Veeco Instruments Inc., which is referred to as Veeco, and Victory Merger Sub, Inc., a wholly owned subsidiary of Axcelis, which is referred to as Merger Sub, entered into an Agreement and Plan of Merger, as it may be amended from time to time, which is referred to as the merger agreement, pursuant to which they agreed to combine their respective businesses in a merger of equals. Together, Axcelis and Veeco will be a leading semiconductor equipment company serving complementary, diversified and expanding end markets. The combined company will have an attractive operating profile, a robust research and development innovation engine and an expanded product portfolio with opportunities for cost and revenue synergies.

Pursuant to the terms of the merger agreement, Merger Sub will merge with and into Veeco, which transaction is referred to as the merger, with Veeco as the surviving corporation. Following the closing of the merger, the combined company will have its headquarters in Beverly, Massachusetts. To reflect the transformational nature of the merger, the combined company will assume a new name, ticker symbol and brand following the closing of the merger to be mutually agreed by Axcelis and Veeco. Upon successful completion of the merger, each issued and outstanding share of Veeco common stock as of immediately prior to the completion of the merger will be converted into and become exchangeable for 0.3575 shares of Axcelis common stock, which number is referred to as the exchange ratio, and cash in lieu of any fractional shares of Axcelis common stock any former holder of Veeco common stock would otherwise be entitled to receive. This exchange ratio is fixed and will not be adjusted for changes in the market price of either Axcelis common stock or Veeco common stock between the dates of signing of the merger agreement and completion of the merger.

Upon completion of the merger, Axcelis stockholders will continue to own their existing Axcelis shares. Based on the fully diluted number of shares of Axcelis common stock and Veeco common stock as of September 29, 2025, Axcelis stockholders will own approximately 58.1% and Veeco stockholders will own approximately 41.9% of the issued and outstanding shares of the combined company (based on fully diluted shares outstanding of the combined company) immediately following the completion of the merger. Axcelis common stock is traded on the Nasdaq Global Select Market, which is referred to as Nasdaq, under the symbol “ACLS.” Veeco common stock is traded on Nasdaq under the symbol “VECO.” The common stock of the combined company is expected to be listed on Nasdaq under a ticker symbol to be mutually agreed by Axcelis and Veeco.

Axcelis and Veeco will each hold special meetings of their respective stockholders in connection with the proposed merger, which are referred to as the Axcelis special meeting and the Veeco special meeting, respectively.

At the Axcelis special meeting, Axcelis stockholders will be asked to consider and vote on (1) the proposal to approve the issuance of shares of Axcelis common stock to Veeco equityholders pursuant to the merger agreement, which proposal is referred to as the Axcelis share issuance proposal, and (2) the proposal to adjourn the Axcelis special meeting to solicit additional proxies if there are not sufficient votes to approve the Axcelis share issuance proposal or to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Axcelis stockholders. The board of directors of Axcelis unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Axcelis stockholders vote “FOR” each of the proposals to be considered at the Axcelis special meeting.

At the Veeco special meeting, Veeco stockholders will be asked to consider and vote on (1) the proposal to adopt the merger agreement, which is referred to as the Veeco merger agreement proposal, (2) the proposal to approve, on a non-binding, advisory basis, the compensation that will be paid to Veeco’s named executive officers that is based on or otherwise relates to the transactions contemplated by the merger agreement and (3) the proposal to adjourn the Veeco special meeting to solicit additional proxies if there are not sufficient votes to approve the Veeco merger agreement proposal or to ensure that any supplement or amendment to

the accompanying joint proxy statement/prospectus is timely provided to Veeco stockholders. The board of directors of Veeco unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Veeco stockholders vote “FOR” each of the proposals to be considered at the Veeco special meeting.

The merger agreement requires, as a condition to closing of the merger and the other transactions contemplated by the merger agreement, that Axcelis stockholders approve the Axcelis share issuance proposal and that Veeco stockholders approve the Veeco merger agreement proposal. Your vote on these matters, as well as other proposals, is very important, regardless of the number of shares you own. Whether or not you plan to attend your respective special meeting in person, please promptly mark, sign and date the accompanying proxy card and return it in the enclosed postage-paid envelope or authorize the individuals named on your proxy card to vote your shares by calling the toll-free telephone number or by using the Internet as described in the instructions included with your proxy card.

The accompanying joint proxy statement/prospectus provides you with important information about the special meetings, the merger, and each of the proposals. We encourage you to read the entire document carefully, in particular the “**Risk Factors**” section beginning on page 33 of the accompanying joint proxy statement/prospectus for a discussion of risks relevant to the merger.

We look forward to the successful completion of the merger.

Sincerely,

/s/ Russell J. Low

Russell J. Low, Ph.D.
President and Chief Executive Officer
Axcelis Technologies, Inc.

/s/ William J. Miller

William J. Miller, Ph.D.
Chief Executive Officer
Veeco Instruments Inc.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of the merger or the Axcelis common stock to be issued in the merger or determined if the accompanying joint proxy statement/prospectus is accurate or complete. Any representation to the contrary is a criminal offense.

The accompanying joint proxy statement/prospectus is dated December 31, 2025 and is first being mailed to the stockholders of Axcelis and Veeco on or about December 31, 2025.



Axcelis Technologies, Inc.
108 Cherry Hill Drive
Beverly, Massachusetts 01915
(978) 787-4000

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON FEBRUARY 6, 2026

To the Stockholders of Axcelis Technologies, Inc.:

Notice is hereby given that Axcelis Technologies, Inc., which is referred to as Axcelis, will hold a special meeting of its stockholders, which is referred to as the Axcelis special meeting, at the offices of Axcelis at 108 Cherry Hill Drive, Beverly, Massachusetts, on February 6, 2026, beginning at 11:00 a.m., Eastern Time, for the purpose of considering and voting on the following proposals:

- (1) to approve the issuance of shares of Axcelis common stock (including securities convertible into or exercisable for shares of Axcelis common stock) to certain equityholders of Veeco Instruments Inc., which is referred to as Veeco, pursuant to the Agreement and Plan of Merger, dated as of September 30, 2025 (as it may be amended from time to time), by and among Axcelis, Veeco, and Victory Merger Sub, Inc., a wholly owned subsidiary of Axcelis, which is referred to as the merger agreement, a copy of which is included as Annex A to the accompanying joint proxy statement/prospectus, which proposal is referred to as the Axcelis share issuance proposal; and
- (2) to approve the adjournment of the Axcelis special meeting to solicit additional proxies if there are not sufficient votes at the time of the Axcelis special meeting to approve the Axcelis share issuance proposal or to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Axcelis stockholders, which proposal is referred to as the Axcelis adjournment proposal.

Axcelis will transact no other business at the Axcelis special meeting except such business as may properly be brought before the Axcelis special meeting or any adjournment or postponement thereof. The accompanying joint proxy statement/prospectus, including the merger agreement attached thereto as Annex A, contains further information with respect to these matters.

Only holders of record of Axcelis common stock at the close of business on December 26, 2025, the record date for notice of and voting at the Axcelis special meeting, which is referred to as the Axcelis record date, are entitled to notice of and to vote at the Axcelis special meeting.

The board of directors of Axcelis, which is referred to as the Axcelis board of directors, has approved and declared advisable the merger agreement and the transactions contemplated by the merger agreement, including the Axcelis share issuance proposal, on the terms and subject to the conditions set forth in the merger agreement. **The Axcelis board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Axcelis stockholders vote “FOR” the Axcelis share issuance proposal and “FOR” the Axcelis adjournment proposal.**

Your vote is very important, regardless of the number of shares of Axcelis common stock you own. The merger agreement requires, as a condition to closing of the merger and the other transactions contemplated by the merger agreement, that Axcelis stockholders approve the Axcelis share issuance proposal. Assuming a quorum is present, the approval of the Axcelis share issuance proposal requires the affirmative vote of the holders of a majority in voting power of the votes cast on the Axcelis share issuance proposal at the Axcelis special meeting.

A complete list of Axcelis stockholders as of the record date will be open to examination by any Axcelis stockholder at Axcelis' principal executive office at 108 Cherry Hill Drive, Beverly, Massachusetts for a period of 10 days prior to the Axcelis special meeting.

Whether or not you plan to attend the Axcelis special meeting, Axcelis urges you to please promptly mark, sign and date the accompanying proxy card and return it in the enclosed postage-paid envelope, call the toll-free telephone number or use the Internet as described in the instructions included with the proxy card, so that your shares may be represented and voted at the Axcelis special meeting. The meeting will begin promptly at 11:00 a.m., Eastern Time. If your shares are held in street name through a bank, broker or other nominee, you will receive instructions on how to vote from the bank or broker. You must follow their instructions in order for your shares to be voted. Internet and telephone voting also may be offered to stockholders owning shares through certain banks and brokers. The use of video, still photography or audio recording at the Axcelis special meeting is not permitted. If you have any questions about the merger or how to vote or direct a vote in respect of your shares of Axcelis common stock, you may contact our proxy solicitor, Innisfree M&A Incorporated. Shareholders may call toll-free at +1 (888) 750-5835; banks and brokers may call collect at +1 (212) 750-5833.

By Order of the Axcelis Board of Directors,

/s/ Russell J. Low

Russell J. Low, Ph.D.
President and Chief Executive Officer
Beverly, Massachusetts
Dated: December 31, 2025

Your vote is important. Axcelis stockholders are requested to complete, date, sign and return the enclosed proxy card in the envelope provided, which requires no postage if mailed in the United States, or to submit a proxy to vote your shares electronically through the Internet or by telephone.



1 Terminal Drive • Plainview, New York 11803 U.S.A. • Phone (516) 677-0200 • Fax (516) 677-0380 • www.veeco.com

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON FEBRUARY 6, 2026**

Dear Fellow Stockholder:

Notice is hereby given that Veeco Instruments Inc., which is referred to as Veeco, will hold a special meeting of its stockholders, which is referred to as the Veeco special meeting, on February 6, 2026, beginning at 10:00 a.m., Eastern Time, for the purpose of considering and voting on the following proposals:

- (1) to adopt the Agreement and Plan of Merger, dated as of September 30, 2025 (as it may be amended from time to time), by and among Axcelis Technologies, Inc., which is referred to as Axcelis, Victory Merger Sub, Inc., a wholly owned subsidiary of Axcelis, which is referred to as Merger Sub, and Veeco, which is referred to as the merger agreement, a copy of which is included as Annex A to the accompanying joint proxy statement/prospectus, and approve the transactions contemplated thereby, including the merger, which is referred to as the merger, of Merger Sub with and into Veeco, with Veeco surviving as a wholly owned subsidiary of Axcelis, which proposal is referred to as the Veeco merger agreement proposal;
- (2) to approve, on a non-binding, advisory basis, the compensation that will be paid or become payable to Veeco's named executive officers that is based on or otherwise relates to the transactions contemplated by the merger agreement, which proposal is referred to as the Veeco compensation proposal; and
- (3) to approve the adjournment of the Veeco special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the Veeco special meeting to approve the Veeco merger agreement proposal or to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Veeco stockholders, which proposal is referred to as the Veeco adjournment proposal.

The Veeco special meeting will be a "hybrid" stockholder meeting, meaning that stockholders will be able to attend the meeting (i) virtually via the Internet at www.virtualshareholdermeeting.com/VECO2026SM by following the instructions set forth in the accompanying materials or (ii) in person at Veeco's headquarter offices located at 1 Terminal Drive, Plainview, New York 11803.

Veeco will transact no other business at the Veeco special meeting except such business as may properly be brought before the Veeco special meeting or any adjournment or postponement thereof. The accompanying joint proxy statement/prospectus, including the merger agreement attached thereto as Annex A, contains further information with respect to these matters.

Only holders of record of Veeco common stock at the close of business on December 26, 2025, the record date for notice of and voting at the Veeco special meeting, which is referred to as the Veeco record date, are entitled to notice of and to vote at the Veeco special meeting.

The board of directors of Veeco, which is referred to as the Veeco board of directors, has unanimously (except for one independent director who serves on both the board of directors of Axcelis and the Veeco board of directors recusing himself) determined that the merger is fair to and in the best interests of Veeco and its stockholders, and approved and declared advisable the merger agreement and the transactions contemplated by the merger agreement, including the merger, on the terms and subject to the conditions set forth in the merger agreement. The Veeco board of directors unanimously (except for one independent director who serves on both the board of directors of Axcelis and the Veeco board of directors recusing himself) recommends that Veeco stockholders vote "FOR" the Veeco merger agreement proposal, "FOR" the Veeco compensation proposal and "FOR" the Veeco adjournment proposal.

Your vote is very important, regardless of the number of shares of Veeco common stock you own. The merger agreement requires, as a condition to closing of the merger and the other transactions contemplated by the merger agreement, that Veeco stockholders approve the Veeco merger agreement proposal. Assuming a quorum is present at the Veeco special meeting, the approval of the Veeco merger agreement proposal requires the affirmative vote of the holders of a majority of the issued and outstanding shares of Veeco common stock entitled to vote at the Veeco special meeting on the Veeco merger agreement proposal.

Whether or not you plan to attend the Veeco special meeting in person, Veeco urges you to please promptly mark, sign and date the accompanying proxy card and return it in the enclosed postage-paid envelope, call the toll-free telephone number or use the Internet as described in the instructions included with the proxy card, so that your shares may be represented and voted at the Veeco special meeting. If you hold your shares through a broker, bank or other nominee in "street name" (instead of as a registered holder) and you wish to vote in person at the Veeco special meeting, you must obtain a legal proxy from your bank, broker or other nominee and bring the legal proxy to the meeting in order to vote in person at the Veeco special meeting. You will need to bring identification along with either your notice of special meeting or proof of stock ownership to enter the Veeco special meeting. If you plan to attend the Veeco special meeting in person, you will need to bring identification along with either your notice of special meeting or proof of stock ownership to enter the Veeco special meeting. The use of video, still photography or audio recording at the Veeco special meeting is not permitted. For the safety of attendees, all bags, packages and briefcases are subject to inspection. The use of video, still photography or audio recording at the Veeco special meeting is not permitted. For the safety of attendees, all bags, packages and briefcases are subject to inspection. If you have any questions about the merger or how to vote or direct a vote in respect of your shares of Veeco common stock, you may contact our proxy solicitor, D.F. King & Co., Inc., at (646) 787-3500 (Call Collect) or (866) 356-6140 (Call Toll-Free).

By Order of the Veeco Board of Directors,

/s/ William J. Miller

*William J. Miller, Ph.D.
Chief Executive Officer
Plainview, New York*
Dated: December 31, 2025

Your vote is important. Veeco stockholders are requested to complete, date, sign and return the enclosed proxy card in the envelope provided, which requires no postage if mailed in the United States, or to submit a proxy to vote your shares electronically through the Internet or by telephone.

REFERENCES TO ADDITIONAL INFORMATION

This joint proxy statement/prospectus incorporates important business and financial information about Axcelis Technologies, Inc., which is referred to as Axcelis, and Veeco Instruments Inc., which is referred to as Veeco, from other documents that Axcelis and Veeco have filed with the U.S. Securities and Exchange Commission, which is referred to as the SEC, and that are contained in or incorporated by reference into this joint proxy statement/prospectus. For a listing of documents incorporated by reference into this joint proxy statement/prospectus, please see the section entitled “**Where You Can Find More Information**” beginning on page 189 of this joint proxy statement/prospectus. This information is available for you free of charge to review through the SEC’s website at www.sec.gov.

Any person may request a copy of this joint proxy statement/prospectus and any of the documents incorporated by reference into this joint proxy statement/prospectus or other information concerning Axcelis or Veeco, without charge, by written or telephonic request directed to the appropriate company or its proxy solicitor at the following contacts:

For Axcelis stockholders:
Axcelis Technologies, Inc.
108 Cherry Hill Drive
Beverly, Massachusetts 01915
(978) 787-4000
Attention: Corporate Secretary

Innisfree M&A Incorporated
501 Madison Avenue, 20th Floor
New York, NY 10022
Stockholders may call toll free: +1 (888) 750-5835
Banks and Brokers may call collect: +1 (212) 750-5833

For Veeco stockholders:
Veeco Instruments Inc.
1 Terminal Drive
Plainview, New York 11803
(516) 677-0200
Attention: Corporate Secretary

D.F. King & Co., Inc.
28 Liberty Street, Floor 53
New York, NY 10005
Call Collect: (646) 787-3500
Call Toll-Free: (866) 356-6140
veeco@dfking.com

In order for you to receive timely delivery of the documents in advance of the special meeting of Axcelis stockholders to be held on February 6, 2026, which is referred to as the Axcelis special meeting, or the special meeting of Veeco stockholders to be held on February 6, 2026, which is referred to as the Veeco special meeting, as applicable, you must request the information no later than seven calendar days prior to the applicable special meeting.

The contents of the websites of the SEC, Axcelis, Veeco or any other entity are not being incorporated into this joint proxy statement/prospectus. The information about how you can obtain certain documents that are incorporated by reference into this joint proxy statement/prospectus at these websites is being provided only for your convenience.

ABOUT THIS JOINT PROXY STATEMENT/PROSPECTUS

This document, which forms part of a registration statement on Form S-4 (Registration No. 333-292008) filed with the SEC by Axcelis, constitutes a prospectus of Axcelis under Section 5 of the Securities Act of 1933, as amended, and the rules promulgated thereunder, which is referred to, collectively, as the Securities Act, with respect to the shares of common stock of Axcelis to be issued to Veeco stockholders pursuant to the Agreement and Plan of Merger, dated as of September 30, 2025 (as it may be amended from time to time), by and among Axcelis, Veeco and Victory Merger Sub, Inc., a wholly owned subsidiary of Axcelis, which is referred to as Merger Sub and which agreement is referred to as the merger agreement. This document also constitutes a joint proxy statement of Axcelis and Veeco under Section 14(a) of the Securities Exchange Act of 1934, as amended, which is referred to as the Exchange Act. It also constitutes a notice of meeting with respect to the Axcelis special meeting and a notice of meeting with respect to the Veeco special meeting.

Axcelis has supplied all information contained or incorporated by reference into this joint proxy statement/prospectus relating to Axcelis, and Veeco has supplied all such information relating to Veeco. Axcelis and Veeco have both contributed to the information related to the merger contained in this joint proxy statement/prospectus.

You should rely only on the information contained in or incorporated by reference into this joint proxy statement/prospectus. Axcelis and Veeco have not authorized anyone to provide you with information that is different from that contained in or incorporated by reference into this joint proxy statement/prospectus. This joint proxy statement/prospectus is dated December 31, 2025, and you should not assume that the information contained in this joint proxy statement/prospectus is accurate as of any date other than such date unless otherwise specifically provided herein.

Further, you should not assume that the information incorporated by reference into this joint proxy statement/prospectus is accurate as of any date other than the date of the incorporated document. Neither the mailing of this joint proxy statement/prospectus to Axcelis stockholders or Veeco stockholders nor the issuance by Axcelis of shares of its common stock pursuant to the merger agreement will create any implication to the contrary.

Neither Axcelis nor Veeco assumes any obligation to update the information included or incorporated by reference into this joint proxy statement/prospectus (whether as a result of new information, future events or otherwise), except as required by law.

This joint proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction to or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction.

Unless otherwise indicated or the context otherwise requires, when used in this joint proxy statement/prospectus:

- “Axcelis” refers to Axcelis Technologies, Inc., a Delaware corporation;
- “Axcelis adjournment proposal” refers to the proposal for Axcelis stockholders to approve the adjournment of the Axcelis special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the Axcelis special meeting to approve the Axcelis share issuance proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Axcelis stockholders;
- “Axcelis board of directors” refers to the board of directors of Axcelis;
- “Axcelis bylaws” refers to the bylaws of Axcelis;
- “Axcelis charter” refers to the certificate of incorporation of Axcelis;
- “Axcelis common stock” refers to the common stock, par value \$0.001 per share, of Axcelis;
- “Axcelis Qualified Plan” refers to each U.S. tax-qualified defined contribution plan maintained by Axcelis or one of its subsidiaries;
- “Axcelis record date” refers to December 26, 2025;

- “Axcelis RSA” refers to each Axcelis restricted stock award;
- “Axcelis RSU” refers to each Axcelis restricted stock unit;
- “Axcelis share issuance proposal” refers to the proposal for Axcelis stockholders to approve the issuance of shares of Axcelis common stock to equityholders of Veeco in connection with the merger;
- “Axcelis special meeting” refers to the special meeting of Axcelis stockholders to consider and vote upon the Axcelis share issuance proposal and the Axcelis adjournment proposal;
- “Axcelis stockholders” refers to holders of Axcelis common stock;
- “business day” refers to any day other than a Saturday, a Sunday or a day on which banking institutions in New York, New York are authorized or obligated by law or executive order to close;
- “closing date” refers to the date on which the closing of the merger occurs;
- “Code” refers to the U.S. Internal Revenue Code of 1986, as amended;
- “combined company” refers to Axcelis (which, after the effective time, as defined below, will assume a new corporate name and ticker symbol) following the completion of the merger;
- “continuing employee” refers to each employee of the surviving corporation and its subsidiaries as of the effective time who continues employment with Axcelis or its subsidiaries (including the surviving corporation and its subsidiaries) following the effective time;
- “cost synergies” refers to cost synergies expected to result from the merger;
- “Current Purchase Period” refers to the Purchase Period (as defined in the Veeco ESPP) in effect as of September 30, 2025;
- “D&O Insurance” refers to directors and officers insurance policies;
- “DGCL” refers to the General Corporation Law of the State of Delaware;
- “DOJ” refers to the U.S. Department of Justice;
- “effective time” refers to the date and time when the merger becomes effective under the DGCL, which will be the date and time at which the certificate of merger is filed with the Secretary of State of the State of Delaware, or such other time as may be mutually agreed to by Axcelis and Veeco and specified in the applicable certificate of merger;
- “ERISA” refers to the United States Employee Retirement Income Security Act of 1974, as amended;
- “Exchange Act” refers to the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder;
- “Exchange Agent” refers to the financial institution or trust company appointed by Veeco and Axcelis to act as exchange agent;
- “exchange ratio” refers to 0.3575 of a fully paid and nonassessable share of Axcelis common stock;
- “Final Purchase Period” refers to the Purchase Period in effect as of the effective time;
- “FTC” refers to the U.S. Federal Trade Commission.
- “GAAP” refers to U.S. generally accepted accounting principles;
- “Government Shutdown” refers to any sequester, stoppage, shutdown, default or similar event of the United States federal government generally;
- “HSR Act” refers to the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended;
- “IRS” refers to the U.S. Internal Revenue Service;
- “merger agreement” refers to the Agreement and Plan of Merger, dated as of September 30, 2025, as it may be amended from time to time, by and among Axcelis, Veeco and Merger Sub;
- “merger consideration” refers to the shares of Axcelis common stock, and any cash for any fractional shares of Axcelis common stock that a Veeco stockholder would otherwise receive in connection

with the merger, that a Veeco stockholder is entitled to receive upon conversion of such Veeco stockholder's shares of Veeco common stock in connection with the merger;

- “Merger Sub” refers to Victory Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Axcelis, formed for the purpose of effecting the merger;
- “merger” refers to the merger of Merger Sub with and into Veeco, with Veeco surviving as a wholly owned subsidiary of Axcelis;
- “Nasdaq” refers to the Nasdaq Global Select Market;
- “post-closing plans” refers to employee benefit plans, programs and arrangements of Axcelis and its subsidiaries (including the surviving corporation and its subsidiaries) in effect after the effective time;
- “Regulation S-K” means Regulation S-K promulgated under the Securities Act;
- “SEC” refers to the U.S. Securities and Exchange Commission;
- “Securities Act” refers to the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder;
- “Unvested Veeco PSU” refers to each then-outstanding Veeco PSU that is not a Vested Veeco PSU at the effective time;
- “Unvested Veeco RSU” refers to each then-outstanding Veeco RSU that is not a Vested Veeco RSU at the effective time;
- “Veeco” refers to Veeco Instruments Inc., a Delaware corporation;
- “Veeco adjournment proposal” refers to the proposal for Veeco stockholders to approve the adjournment of the Veeco special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the Veeco special meeting to approve the Veeco merger agreement proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Veeco stockholders;
- “Veeco board of directors” refers to the board of directors of Veeco;
- “Veeco bylaws” refers to the Seventh Amended and Restated Bylaws of Veeco;
- “Veeco Capped Call Instruments” refers to base capped call confirmations, dated as of May 13, 2020, between Veeco and each of Barclays Bank PLC, Societe Generale and Wells Fargo Bank, National Association with respect to the issuance of instruments representing rights to purchase shares of Veeco common stock from the applicable dealer entered into in connection with the issuance of Veeco’s previously outstanding 3.75% Convertible Senior Notes due 2027;
- “Veeco charter” refers to the Amended and Restated Certificate of Incorporation of Veeco, as amended;
- “Veeco common stock” refers to the common stock, par value \$0.01 per share, of Veeco;
- “Veeco compensation committee” means the compensation committee of the Veeco board of directors;
- “Veeco compensation proposal” refers to the proposal to approve, on a non-binding, advisory basis, the compensation that will be paid or become payable to Veeco named executive officers that is based on or otherwise relates to the transactions contemplated by the merger agreement;
- “Veeco Convertible Notes Indenture” refers to the indenture governing Veeco’s 2.875% Convertible Senior Notes due 2029;
- “Veeco Convertible Notes” refers to Veeco’s 2.875% Convertible Senior Notes due 2029;
- “Veeco Director RSA” refers to each Veeco RSA granted to a non-employee member of the Veeco board of directors;
- “Veeco ESPP” refers to the Veeco 2016 Employee Stock Purchase Plan, as amended;

- “Veeco merger agreement proposal” refers to the proposal for Veeco stockholders to adopt the merger agreement and the transactions contemplated thereby, including the merger;
- “Veeco PSU” refers to each then-outstanding Veeco performance-based stock unit at the effective time;
- “Veeco Qualified Plan” refers to each U.S. tax-qualified defined contribution plan provided to current and former employees of Veeco and its subsidiaries;
- “Veeco record date” refers to December 26, 2025;
- “Veeco RSA” refers to each then-outstanding Veeco restricted stock award at the effective time;
- “Veeco RSU” refers to each then-outstanding Veeco restricted stock unit at the effective time;
- “Veeco special meeting” refers to the special meeting of Veeco stockholders to consider and vote upon the Veeco merger agreement proposal, the Veeco compensation proposal and the Veeco adjournment proposal;
- “Veeco special meeting website” refers to the website that Veeco stockholders can visit to attend and vote at the Veeco special meeting, accessible at the following web address: www.virtualshareholdermeeting.com/VECO2026SM;
- “Veeco stockholders” refers to holders of Veeco common stock;
- “Vested Veeco PSU” refers to each then-outstanding Veeco PSU that is vested in accordance with its terms at the effective time; and
- “Vested Veeco RSU” refers to each then-outstanding Veeco RSU that is vested in accordance with its terms at the effective time.

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QUESTIONS AND ANSWERS	1
SUMMARY	15
The Parties to the Merger	15
The Merger and the Merger Agreement	15
Exchange Ratio	15
Treatment of Existing Axcelis Equity Awards	16
Treatment of Existing Veeco Equity Awards	16
Axcelis' Recommendation and Reasons for the Merger	17
Veeco's Recommendation and Reasons for the Merger	17
Opinion of Financial Advisor to Axcelis (Annex B)	18
Opinion of Financial Advisor to Veeco (Annex C)	18
The Axcelis Special Meeting	19
The Veeco Special Meeting	19
Interests of Axcelis' Directors and Executive Officers in the Merger	20
Interests of Veeco's Directors and Executive Officers in the Merger	20
Governance of the Combined Company (Annex A)	21
Certain Beneficial Owners of Axcelis Common Stock	22
Certain Beneficial Owners of Veeco Common Stock	22
Regulatory Approvals	22
Ownership of the Combined Company after the Merger	23
No Appraisal Rights	23
Conditions to the Completion of the Merger	23
No Solicitation of Competing Proposals	24
No Change of Recommendation	25
Termination of the Merger Agreement	25
Termination Fees	26
Accounting Treatment	28
Treatment of the Veeco Convertible Notes	28
Material U.S. Federal Income Tax Consequences of the Merger	28
Comparison of Stockholders' Rights	29
Listing of Axcelis Common Stock; Delisting and Deregistration of Veeco Common Stock	29
Risk Factors	29
COMPARISON OF AXCELIS AND VEECO MARKET PRICES AND IMPLIED VALUE OF MERGER CONSIDERATION	30
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	31
RISK FACTORS	33
Risks Relating to the Merger	33
Risks Relating to the Combined Company	40
Risks Relating to Axcelis' Business	43
Risks Relating to Veeco's Business	43
THE PARTIES TO THE MERGER	44
Axcelis Technologies, Inc.	44
Victory Merger Sub, Inc.	44
Veeco Instruments Inc.	44

THE AXCELIS SPECIAL MEETING	45
Date, Time and Place of the Axcelis Special Meeting	45
Matters to be Considered at the Axcelis Special Meeting	45
Recommendation of the Axcelis Board of Directors	45
Record Date for the Axcelis Special Meeting and Voting Rights	45
Quorum; Abstentions and Broker Non-Votes	46
Required Votes; Vote of Axcelis' Directors and Executive Officers	46
Methods of Voting	47
Revocability of Proxies	48
Proxy Solicitation Costs	48
Attending the Axcelis Special Meeting	49
Householding	49
Tabulation of Votes	49
Adjournments	49
Assistance	50
AXCELIS PROPOSAL #1: AXCELIS SHARE ISSUANCE PROPOSAL	51
AXCELIS PROPOSAL #2: AXCELIS ADJOURNMENT PROPOSAL	52
THE VEECO SPECIAL MEETING	53
Date, Time and Place of the Veeco Special Meeting	53
Matters to be Considered at the Veeco Special Meeting	53
Recommendation of the Veeco Board of Directors	53
Record Date for the Veeco Special Meeting and Voting Rights	53
Quorum; Abstentions and Broker Non-Votes	54
Required Votes; Vote of Veeco's Directors and Executive Officers	54
Methods of Voting	55
Revocability of Proxies	56
Proxy Solicitation Costs	57
Attending the Veeco Special Meeting	57
Householding	58
Tabulation of Votes	58
Adjournments	58
Assistance	58
VEECO PROPOSAL #1: VEECO MERGER AGREEMENT PROPOSAL	60
VEECO PROPOSAL #2: VEECO COMPENSATION PROPOSAL	61
VEECO PROPOSAL #3: VEECO ADJOURNMENT PROPOSAL	62
THE MERGER	63
General	63
Exchange Ratio	63
Background of the Merger	63
Recommendation of the Axcelis Board of Directors; Axcelis' Reasons for the Merger	83
Recommendation of the Veeco Board of Directors; Veeco's Reasons for the Merger	88
Opinion of Financial Advisor to Axcelis	93
Opinion of Financial Advisor to Veeco	98
Certain Financial Forecasts Utilized in Connection with the Merger	104

Closing and Effective Time of the Merger	109
Regulatory Approvals	110
Ownership of the Combined Company After the Merger	110
Governance of the Combined Company	110
U.S. Federal Securities Law Consequences	111
Accounting Treatment	111
Exchange of Shares	111
Market Listing	112
Delisting and Deregistration of Veeco Common Stock	112
THE MERGER AGREEMENT	113
Explanatory Note Regarding the Merger Agreement	113
Structure of the Merger	113
Completion and Effectiveness of the Merger	113
Merger Consideration	114
Treatment of Veeco Equity Awards	114
Exchange of Shares	115
Dividends and Distributions with Respect to Unexchanged Shares of Veeco Common Stock	116
Treatment of Fractional Shares	116
Termination of the Exchange Fund	116
Withholding Rights	117
Adjustments to Prevent Dilution	117
Governance Matters	117
Representations and Warranties	117
Conduct of Business Prior to the Effective Time	119
No Solicitation of Competing Proposals	122
Notice Regarding Competing Proposals	123
No Change of Recommendation	123
Existing Discussions	125
Special Meetings	125
Cooperation; Efforts to Consummate	126
Status and Notifications	128
Access to Information	128
Nasdaq Listing; Nasdaq Delisting	129
Publicity	129
Employee Benefits Matters	129
Tax Matters	130
Expenses	130
Directors' and Officers' Insurance and Indemnification	131
Litigation	131
Conditions to the Completion of the Merger	131
Termination of the Merger Agreement	132
Termination Fees	133
Amendment	134
Waiver	135

Specific Performance	135
Third-Party Beneficiaries	135
TREATMENT OF THE CONVERTIBLE NOTES	136
UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION	137
INTERESTS OF AXCELIS' DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER	156
INTERESTS OF VEECO'S DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER ..	157
Executive Officers	157
Veeco Change in Control	158
MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER	165
COMPARISON OF STOCKHOLDERS' RIGHTS	168
NO APPRAISAL RIGHTS	181
LEGAL MATTERS	181
EXPERTS	181
CERTAIN BENEFICIAL OWNERS OF AXCELIS COMMON STOCK	182
CERTAIN BENEFICIAL OWNERS OF VEECO COMMON STOCK	184
STOCKHOLDER PROPOSALS	187
Axcelis	187
Veeco	187
HOUSEHOLDING OF PROXY MATERIALS	188
WHERE YOU CAN FIND MORE INFORMATION	189
Axcelis (SEC File No. 000-30941):	189
Veeco (SEC File No. 0-16244):	190
ANNEX A — Agreement and Plan of Merger	A-1
ANNEX B — Opinion of J.P. Morgan Securities LLC	B-1
ANNEX C — Opinion of UBS Securities LLC	C-1

QUESTIONS AND ANSWERS

The following are some questions that you, as an Axcelis stockholder or a Veeco stockholder, as applicable, may have regarding the merger and the other matters being considered at the special meetings of each company's stockholders, and brief answers to those questions. You are urged to carefully read this joint proxy statement/prospectus and the other documents referred to in this joint proxy statement/prospectus in their entirety because this section may not provide all the information that is important to you regarding these matters. Additional important information is contained in the annexes to, and the documents incorporated by reference into, this joint proxy statement/prospectus. You may obtain the information incorporated by reference in this joint proxy statement/prospectus, without charge, by following the instructions under the section entitled "Where You Can Find More Information" beginning on page 189 of this joint proxy statement/prospectus.

Q: Why am I receiving this joint proxy statement/prospectus?

A: You are receiving this joint proxy statement/prospectus because Axcelis and Veeco have agreed to combine their companies in a merger of equals structured through the merger of Merger Sub with and into Veeco, resulting in Veeco surviving as a wholly owned subsidiary of Axcelis. The merger agreement, which governs the terms of the business combination and the merger, is attached to this joint proxy statement/prospectus as Annex A and is incorporated by reference herein.

In order to complete the merger, among other things:

- Axcelis stockholders must approve the issuance of shares of Axcelis common stock (including securities convertible into or exercisable for shares of Axcelis common stock) in connection with the merger; and
- Veeco stockholders must adopt the merger agreement in accordance with the DGCL.

Axcelis is holding the Axcelis special meeting to obtain Axcelis stockholders' approval of the Axcelis share issuance proposal. Axcelis stockholders will also be asked to approve the proposal to adjourn the Axcelis special meeting to solicit additional proxies if there are not sufficient votes at the time of the Axcelis special meeting to approve the Axcelis share issuance proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Axcelis stockholders.

Veeco is holding the Veeco special meeting to obtain approval of the Veeco merger agreement proposal. Veeco stockholders will also be asked to approve (i) on a non-binding advisory basis, the compensation that will be paid or become payable to Veeco's named executive officers that is based on or otherwise relates to the transactions contemplated by the merger agreement and (ii) the proposal to adjourn the Veeco special meeting to solicit additional proxies if there are not sufficient votes at the time of the Veeco special meeting to approve the Veeco merger agreement proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Veeco stockholders.

Your vote is very important, regardless of the number of shares that you own. The approval of the Axcelis share issuance proposal by Axcelis stockholders and the approval of the Veeco merger agreement proposal by Veeco stockholders are conditions to the obligations of Axcelis and Veeco to complete the merger. None of the approvals of the Veeco compensation proposal, the Veeco adjournment proposal or the Axcelis adjournment proposal are conditions to the obligations of Axcelis or Veeco to complete the merger.

Q: When and where will each of the special meetings take place?

A: The Axcelis special meeting will be held at the offices of Axcelis at 108 Cherry Hill Drive, Beverly, Massachusetts, on February 6, 2026 at 11:00 a.m., Eastern Time.

For Axcelis stockholders, if you choose to vote your shares in person at the Axcelis special meeting, please bring required documentation in accordance with the section entitled "**The Axcelis Special Meeting — Attending the Axcelis Special Meeting**" beginning on page 49 of this joint proxy statement/prospectus, with respect to the Axcelis special meeting. The use of video, still photography or audio recording at the Axcelis special meeting is not permitted. For the safety of in-person attendees at the Axcelis special meeting, all bags, packages and briefcases are subject to inspection.

The Veeco special meeting will be held on February 6, 2026, beginning at 10:00 a.m., Eastern Time and may be attended (i) virtually via the Internet on the Veeco special meeting website, at www.virtualshareholdermeeting.com/VECO2026SM, or (ii) in person at Veeco's headquarter offices located at 1 Terminal Drive, Plainview, New York 11803.

For Veeco stockholders, if you choose to vote your shares in person at the Veeco special meeting, please bring required documentation in accordance with the section entitled "**The Veeco Special Meeting — Attending the Veeco Special Meeting**" beginning on page 57 of this joint proxy statement/prospectus, with respect to the Veeco special meeting. The use of video, still photography or audio recording at the Veeco special meeting is not permitted. For the safety of in-person attendees at the Veeco special meeting, all bags, packages and briefcases are subject to inspection.

To participate in the Veeco special meeting electronically, you will need the 16-digit control number included on your proxy card or on the instructions that accompanied your proxy materials. The Veeco special meeting webcast will begin promptly at 10:00 a.m., Eastern Time on February 6, 2026. We encourage you to access the meeting prior to the start time. Online check-in for the Veeco special meeting will begin at 9:45 a.m., Eastern Time, and you should allow ample time for check-in procedures. If you hold your shares through a bank or broker, instructions should also be provided on the voting instruction card provided by your bank or brokerage firm. If you lose your 16-digit control number, you may join the Veeco special meeting as a "*Guest*," but you will not be able to vote, ask questions, or access the list of stockholders as of the record date.

Even if you plan to attend or virtually attend your company's special meeting, Axcelis and Veeco recommend that you vote your shares in advance as described below so that your vote will be counted if you later decide not to or become unable to attend the applicable special meeting. With respect to both the Axcelis special meeting and the Veeco special meeting, shares held in "street name" may be voted in person by you only if you obtain a signed legal proxy from your bank, broker or other nominee giving you the right to vote the shares.

Q: Does my vote matter?

A: Yes, your vote is very important, regardless of the number of shares that you own. The merger cannot be completed unless Veeco stockholders approve the Veeco merger agreement proposal and Axcelis stockholders approve the Axcelis share issuance proposal.

For Axcelis stockholders, if you do not return or submit your proxy or vote at the special meeting as provided in this joint proxy statement/prospectus, it will have no effect on the Axcelis share issuance proposal or the Axcelis adjournment proposal. The Axcelis board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that you vote "**FOR**" the Axcelis share issuance proposal and "**FOR**" the Axcelis adjournment proposal.

For Veeco stockholders, if you do not return or submit your proxy or vote at the special meeting as provided in this joint proxy statement/prospectus, the effect will be the same as a vote "**AGAINST**" the Veeco merger agreement proposal and will have no effect on the Veeco compensation proposal or the Veeco adjournment proposal. The Veeco board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that you vote "**FOR**" the Veeco merger agreement proposal, "**FOR**" the Veeco compensation proposal and "**FOR**" the Veeco adjournment proposal.

Q: What will I receive if the merger is completed?

A: If the merger is completed, each share of Veeco common stock issued and outstanding immediately prior to the effective time will be converted into the right to receive 0.3575 shares of Axcelis common stock. No fractional shares will be issued in the merger, and each Veeco stockholder will receive cash for any fractional shares of Axcelis common stock that such stockholder would otherwise receive in the merger. Any cash amounts to be received by a Veeco stockholder in respect of fractional shares will be equal to the product of (i) the aggregate proceeds from the sale by the Exchange Agent of the excess

shares and (ii) a fraction, the numerator of which is the amount of the fractional share interest to which such holder of Veeco common stock would otherwise be entitled and the denominator of which is the aggregate amount of fractional share interests to which all holders of Veeco common stock would otherwise be entitled, without interest, subject to any applicable withholding taxes. As referred to in this joint proxy statement/prospectus, the effective time will be the date and time when the certificate of merger for the merger has been duly filed with the Secretary of State of the State of Delaware, or such other date and time as may be agreed by Axcelis and Veeco and specified in the certificate of merger for the merger.

If the merger is completed, Axcelis stockholders' shares of Axcelis common stock will, after the effective time, constitute shares of the combined company. Because Axcelis will issue a fixed number of shares of Axcelis common stock in exchange for each outstanding share of Veeco common stock, the value of the merger consideration that Veeco stockholders will receive in the merger will depend on the market price of shares of Axcelis common stock at the effective time. The market price of shares of Axcelis common stock that Veeco stockholders receive in connection with the merger could be greater than, less than or the same as the market price of shares of Axcelis common stock on the date of this joint proxy statement/prospectus or at the time of the special meetings. You should obtain current market quotations for Axcelis common stock and Veeco common stock before deciding how to vote with respect to any of the proposals described in this joint proxy statement/prospectus. Axcelis common stock and Veeco common stock are traded on Nasdaq under the symbols "ACLS" and "VECO," respectively. Following the merger, shares of common stock of the combined company are expected to trade on Nasdaq under a ticker symbol to be mutually agreed by Axcelis and Veeco.

For more information regarding the merger consideration to be received by Veeco stockholders if the merger is completed, see the section entitled "**The Merger Agreement — Merger Consideration**" beginning on page 114 of this joint proxy statement/prospectus.

Q: Will Axcelis equity awards be affected by the merger?

A: Axcelis equity awards will not be affected by the merger and will remain equity awards relating to shares of Axcelis common stock and will generally remain outstanding and continue to vest subject to the same terms and conditions as applicable immediately prior to the effective time. The merger will not constitute a "change in control" or term of similar meaning for purposes of the Axcelis compensation and benefit plans, including Axcelis equity awards.

Q: Will Veeco equity awards be affected by the merger?

A: Veeco RSUs

As of the effective time, each Vested Veeco RSU will be canceled, and the holder thereof will be entitled to receive, subject to any applicable tax withholding, (i) the merger consideration in respect of each share of Veeco common stock subject to such Vested Veeco RSU immediately prior to the effective time and (ii) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Vested Veeco RSU.

As of the effective time, each Unvested Veeco RSU will be assumed by Axcelis and converted into an Axcelis RSU covering Axcelis common stock with the same terms and conditions as applied to the Unvested Veeco RSU immediately prior to the effective time, except that such Unvested Veeco RSUs will cover the number of whole shares of Axcelis common stock (rounded down to the nearest whole share) equal to the product of (i) the number of shares of Veeco common stock subject to such Unvested Veeco RSU and (ii) the exchange ratio. All dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Unvested Veeco RSU will also be assumed and become an obligation of Axcelis in connection with the applicable Axcelis RSU.

Veeco PSUs

As of the effective time, each Vested Veeco PSU will be canceled, and the holder thereof will be entitled to receive, subject to any applicable tax withholding, (i) the merger consideration in respect of each

share of Veeco common stock subject to such Vested Veeco PSU immediately prior to the effective time (based on the achievement of the applicable performance metrics (x) for those Vested Veeco PSUs where the applicable performance period has elapsed prior to the effective time, at the actual level of performance as determined by the Veeco compensation committee in the ordinary course of business consistent with past practice at the conclusion of such performance period and (y) for those Vested Veeco PSUs where the applicable performance period has not elapsed prior to the effective time, at the greater of (A) target level of performance or (B) actual performance through the most recent practicable date prior to the date on which the closing occurs, as determined in good faith and consistent with past practice by the Veeco compensation committee) and (ii) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Vested Veeco PSU.

As of the effective time, each Unvested Veeco PSU will be assumed by Axcelis and converted into an Axcelis RSU covering Axcelis common stock with the same terms and conditions as applied to the Unvested Veeco PSU immediately prior to the effective time, except that each such Axcelis RSU will be subject solely to the service-based conditions applicable to the corresponding Unvested Veeco PSU and will cover that number of whole shares of Axcelis common stock (rounded down to the nearest whole share) equal to the product of (i) the number of shares of Veeco common stock subject to such Unvested Veeco PSU (based on the achievement of the applicable performance metrics at the greater of (y) target level of performance or (z) actual performance through the most recent practicable date prior to the closing date, as determined in good faith and consistent with past practice by the Veeco compensation committee) and (ii) the exchange ratio. All dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Unvested Veeco PSU will also be assumed and become an obligation of Axcelis in connection with the applicable Axcelis RSU.

Veeco Restricted Stock

As of the effective time, each Veeco Director RSA will, to the extent not vested, become fully vested and canceled, and the holder thereof will be entitled to receive the merger consideration in respect of each share of Veeco common stock subject to such Veeco Director RSA immediately prior to the effective time.

At the effective time, each Veeco RSA that is not a Veeco Director RSA will be automatically, and without any required action on the part of the holder thereof, assumed by Axcelis and converted into an Axcelis RSA, with the same terms and conditions as were applicable to such Veeco RSA immediately prior to the effective time, except that such awards will, after the effective time, relate to the number of shares of Axcelis common stock equal to the product of (i) the number of shares of Veeco common stock subject to the Veeco RSA, as of immediately prior to the effective time and (ii) the exchange ratio (rounded down to the nearest whole share of Axcelis common stock).

The merger will be treated as a “change in control” or term of similar meaning for purposes of the Veeco compensation and benefit plans, which determination may result in certain “double trigger” benefits under certain of such plans upon a qualifying termination of employment by certain executives subsequent to the effective time. For more information, see the information provided in the section entitled **“Interests of Veeco’s Directors and Executive Officers in the Merger”** beginning on page 157 of this joint proxy statement/prospectus.

Q: What will happen to the Axcelis Employee Stock Purchase Plan?

A: The Axcelis 2020 Employee Stock Purchase Plan will remain in effect in accordance with its terms.

Q: What will happen to the Veeco ESPP?

A: Employees who are not currently participants may not become participants in the Veeco ESPP with respect to the Current Purchase Period and current participants in the Veeco ESPP are prohibited from increasing their payroll deduction elections or from making separate non-payroll contributions to the Veeco ESPP in respect of the Current Purchase Period. Prior to the effective time:

- the Purchase Period that is in effect at the Final Purchase Period will be terminated no later than ten (10) business days prior to the date on which the effective time occurs;
- any pro rata adjustments that may be necessary to reflect the Final Purchase Period will be made, but otherwise the Final Purchase Period will be a fully effective and completed Purchase Period for all purposes pursuant to the Veeco ESPP; and
- each outstanding purchase right pursuant to the Veeco ESPP will be exercised (as of no later than ten (10) business days prior to the date on which the effective time occurs). On such exercise date, Veeco will apply the funds credited as of such date pursuant to the Veeco ESPP within each participant's payroll withholding account to the purchase of whole shares of Veeco common stock and such shares shall be entitled to the merger consideration.

The Veeco ESPP will be terminated immediately prior to and effective as of the effective time (but subject to the consummation of the Merger).

Q: How does the Axcelis board of directors recommend that I vote at the Axcelis special meeting?

A: The Axcelis board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that you vote **"FOR"** the Axcelis share issuance proposal and **"FOR"** the Axcelis adjournment proposal.

In considering the recommendations of the Axcelis board of directors, Axcelis stockholders should be aware that Axcelis directors and executive officers have interests in the merger that are different from, or in addition to, their interests as Axcelis stockholders. These interests may include, among others, the payment of severance benefits and acceleration of outstanding Axcelis equity awards upon a qualifying termination of employment. For a more complete description of these interests, see the information provided in the section entitled **"Interests of Axcelis' Directors and Executive Officers in the Merger"** beginning on page 156 of this joint proxy statement/prospectus.

Q: How does the Veeco board of directors recommend that I vote at the Veeco special meeting?

A: The Veeco board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that you vote **"FOR"** the Veeco merger agreement proposal, **"FOR"** the Veeco compensation proposal and **"FOR"** the Veeco adjournment proposal.

In considering the recommendations of the Veeco board of directors, Veeco stockholders should be aware that Veeco directors and executive officers have interests in the merger that are different from, or in addition to, their interests as Veeco stockholders. These interests may include, among others, the payment of severance benefits, including the acceleration of outstanding Veeco equity awards upon certain qualifying terminations of employment in connection with the merger. For a more complete description of these interests, see the information provided in the section entitled **"Interests of Veeco's Directors and Executive Officers in the Merger"** beginning on page 157 of this joint proxy statement/prospectus.

Q: Who is entitled to vote at the Axcelis special meeting?

A: The record date for the Axcelis special meeting is December 26, 2025. All holders of shares of Axcelis common stock who held shares at the close of business on the Axcelis record date are entitled to receive notice of, and to vote at, the Axcelis special meeting and all adjournments thereof (if any). Each such holder of Axcelis common stock is entitled to cast one vote on each matter properly brought before the Axcelis special meeting for each share of Axcelis common stock that such holder owned of record as of the Axcelis record date. In person attendance at the special meeting is not required to vote. See below and the section entitled **"The Axcelis Special Meeting — Methods of Voting"** beginning on page 47 of this joint proxy statement/prospectus for instructions on how to vote your shares without attending the Axcelis special meeting.

Q: Who is entitled to vote at the Veeco special meeting?

A: The record date for the Veeco special meeting is December 26, 2025. All holders of shares of Veeco common stock who held shares at the close of business on the Veeco record date are entitled to receive notice of, and to vote at, the Veeco special meeting and all adjournments thereof (if any). Each such holder of Veeco common stock is entitled to cast one vote on each matter properly brought before the Veeco special meeting for each share of Veeco common stock that such holder owned of record as of the Veeco record date. Physical attendance at the special meeting is not required to vote. See below and the section entitled “**The Veeco Special Meeting — Methods of Voting**” beginning on page 55 of this joint proxy statement/prospectus for instructions on how to vote your shares without attending the Veeco special meeting.

Q: What is a proxy?

A: A proxy is a stockholder’s legal designation of another person to vote such stockholder’s shares of common stock at a special meeting. The document used to designate a proxy to vote your shares of Axcelis common stock or Veeco common stock, as applicable, is referred to as a proxy card.

Q: How many votes do I have for the Axcelis special meeting?

A: Each Axcelis stockholder is entitled to one vote for each share of Axcelis common stock held of record as of the close of business on the Axcelis record date on each proposal presented at the Axcelis special meeting. As of the close of business on the Axcelis record date, there were 30,699,201 outstanding shares of Axcelis common stock.

Q: How many votes do I have for the Veeco special meeting?

A: Each Veeco stockholder is entitled to one vote for each share of Veeco common stock held of record as of the close of business on the Veeco record date on each proposal presented at the Veeco special meeting. As of the close of business on the Veeco record date, there were 60,297,087 outstanding shares of Veeco common stock.

Q: What constitutes a quorum for the Axcelis special meeting?

A: The holders of a majority in voting power of the shares of Axcelis common stock issued and outstanding and entitled to vote at the Axcelis special meeting as of the Axcelis record date must be represented at the Axcelis special meeting in person, or by proxy in order to constitute a quorum.

Q: What constitutes a quorum for the Veeco special meeting?

A: The holders of a majority in voting power of the shares of the Veeco common stock issued and outstanding and entitled to vote at the Veeco special meeting as of the Veeco record date must be represented at the Veeco special meeting in person, virtually via the Veeco special meeting website, or by proxy in order to constitute a quorum.

Q: Where will the common stock of the combined company that I receive in the merger be publicly traded?

A: Axcelis will use its reasonable best efforts to cause the shares of Axcelis common stock to be issued in the merger to be listed on Nasdaq under a ticker symbol to be mutually agreed by Axcelis and Veeco.

Q: What happens if the merger is not completed?

A: If the Veeco stockholders do not approve the Veeco merger agreement proposal, the Axcelis stockholders do not approve the Axcelis share issuance proposal or the merger is not completed for any other reason, Veeco and Axcelis will remain independent public companies and Veeco common stock and Axcelis common stock will each continue to be listed and traded on Nasdaq. If the merger is not completed, Axcelis will not complete the Axcelis share issuance pursuant to the merger agreement as contemplated by the Axcelis share issuance proposal, and Veeco stockholders will not receive any merger

consideration for their shares of Veeco common stock in connection with the merger. If the merger agreement is terminated under specified circumstances, Axcelis may be required to pay or cause to be paid to Veeco a termination fee of \$108,700,000. If the merger agreement is terminated under specified circumstances, Veeco may be required to pay or cause to be paid to Axcelis a termination fee of \$77,500,000. If the merger agreement is terminated under specified circumstances, Axcelis may be required to pay Veeco, or Veeco may be required to pay Axcelis, a fixed expense reimbursement of \$15,000,000. See the section entitled “**The Merger Agreement — Termination Fees**” beginning on page 133 of this joint proxy statement/prospectus for a more detailed discussion of the termination fees and the expense reimbursement obligations.

Q: What is a “broker non-vote”?

A: Under the rules of the New York Stock Exchange, which is referred to as NYSE, banks, brokers and other nominees may use their discretion to vote “uninstructed” shares (*i.e.*, shares of record held by banks, brokers or other nominees, but with respect to which the beneficial owner of such shares has not provided instructions on how to vote on a particular proposal) with respect to matters that are considered to be “routine,” but not with respect to “non-routine” matters. All of the proposals currently scheduled for consideration at the Axcelis special meeting and the Veeco special meeting are “non-routine” matters. These NYSE rules are applicable to the votes to be held at the Axcelis special meeting and Veeco special meeting even though the Axcelis common stock and Veeco common stock are currently listed on Nasdaq.

A “broker non-vote” occurs on an item when (i) a bank, broker or other nominee has discretionary authority to vote on one or more proposals to be voted on at a meeting of stockholders, but is not permitted to vote on other proposals without instructions from the beneficial owner of the shares and (ii) the beneficial owner fails to provide the bank, broker or other nominee with such instructions. None of the proposals currently scheduled to be voted on at either the Axcelis special meeting or the Veeco special meeting are routine matters for which brokers may have discretionary authority to vote and therefore, we do not anticipate any “broker non-votes” at either special meeting.

Q: What stockholder vote is required for the approval of each proposal at the Axcelis special meeting? What will happen if I fail to vote or abstain from voting on each proposal at the Axcelis special meeting?

A: *Axcelis Proposal #1: Axcelis Share Issuance Proposal.* Assuming a quorum is present at the Axcelis special meeting, the approval of the share issuance by Axcelis stockholders requires the affirmative vote of the holders of a majority in voting power of the votes cast at the Axcelis special meeting on the Axcelis share issuance proposal. Accordingly, an Axcelis stockholder’s abstention from voting, a broker non-vote or the failure of an Axcelis stockholder not present at the meeting to vote (including the failure of an Axcelis stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Axcelis share issuance proposal.

Axcelis Proposal #2: Axcelis Adjournment Proposal. Whether or not a quorum is present, the affirmative vote of the holders of a majority in voting power of the votes cast at the Axcelis special meeting on the Axcelis adjournment proposal is required to adjourn the Axcelis special meeting. Accordingly, in such case, an Axcelis stockholder’s abstention from voting, a broker non-vote or the failure of an Axcelis stockholder not present at the meeting to vote (including the failure of an Axcelis stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Axcelis adjournment proposal. If a quorum is not present, then either (i) the person presiding over the meeting or (ii) a majority in voting power of the stockholders entitled to vote at the meeting, present in person, or by remote communication, or represented by proxy, shall have power to adjourn the Axcelis special meeting.

Q: What stockholder vote is required for the approval of each proposal at the Veeco special meeting? What will happen if I fail to vote or abstain from voting on each proposal at the Veeco special meeting?

A: *Veeco Proposal #1: Veeco Merger Agreement Proposal.* Assuming a quorum is present at the Veeco special meeting, the approval of the merger agreement proposal by Veeco stockholders requires the

affirmative vote of the holders of a majority of the issued and outstanding shares of Veeco common stock entitled to vote at the Veeco special meeting on the Veeco merger agreement proposal. Accordingly, a Veeco stockholder's abstention from voting, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including the failure of a Veeco stockholder who holds shares in "street name" through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have the same effect as votes cast "AGAINST" the Veeco merger agreement proposal.

Veeco Proposal #2: Veeco Compensation Proposal. Assuming a quorum is present at the Veeco special meeting, the approval, on a non-binding, advisory basis, of the Veeco compensation proposal requires the affirmative vote of the holders of a majority of the votes cast at the Veeco special meeting on the Veeco compensation proposal. Accordingly, a Veeco stockholder's abstention from voting, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including the failure of a Veeco stockholder who holds shares in "street name" through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Veeco compensation proposal.

Veeco Proposal #3: Veeco Adjournment Proposal. Whether or not a quorum is present, the affirmative vote of the holders of a majority of the votes cast at the Veeco special meeting on the Veeco adjournment proposal is required to approve the Veeco adjournment proposal, and the chairman of the Veeco special meeting also has the power to adjourn such Veeco special meeting from time to time, whether or not Veeco stockholders have approved the Veeco adjournment proposal. Accordingly, a Veeco stockholder's abstention from voting, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including the failure of a Veeco stockholder who holds shares in "street name" through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Veeco adjournment proposal.

Q: Why am I being asked to consider and vote on, by non-binding, advisory vote, the Veeco compensation proposal?

A: Under SEC rules, Veeco is required to seek a non-binding, advisory vote of its stockholders relating to the compensation that will be paid or become payable to Veeco's named executive officers that is based on or otherwise relates to the merger (also known as "golden parachute" compensation).

Q: What happens if Veeco stockholders do not approve, by non-binding, advisory vote, the Veeco compensation proposal?

A: Because the vote on the proposal to approve the Veeco compensation proposal is advisory in nature, the outcome of the vote will not be binding upon Veeco, Axcelis, their respective boards of directors or the combined company. Further, the underlying plans and arrangements are contractual in nature and not subject to stockholder approval. Accordingly, the merger-related compensation, which is described under "**Interests of Veeco's Directors and Executive Officers in the Merger**," will be paid to Veeco's named executive officers even if Veeco stockholders do not approve the Veeco compensation proposal.

Q: What if I hold shares in both Axcelis and Veeco?

A: If you are both an Axcelis stockholder and a Veeco stockholder, you will receive two separate packages of proxy materials. A vote cast as an Axcelis stockholder will not count as a vote cast as a Veeco stockholder, and a vote cast as a Veeco stockholder will not count as a vote cast as an Axcelis stockholder. Therefore, please submit separate proxies for your shares of Axcelis common stock and your shares of Veeco common stock.

Q: How can I vote my shares in person at my respective special meeting?

A: *Record Holders.* Shares held directly in your name as the stockholder of record of Axcelis or Veeco may be voted in person at the Axcelis special meeting or in person or electronically at the Veeco special meeting, as applicable. If you choose to vote your shares in person at the Axcelis special meeting or

in person or electronically at the Veeco special meeting, as applicable, please ensure that you have and, in the case of in-person attendance at the Axcelis special meeting and/or Veeco special meeting, bring all required documentation in accordance with the section entitled **“The Axcelis Special Meeting — Attending the Axcelis Special Meeting”** beginning on page 49 of this joint proxy statement/prospectus, with respect to the Axcelis special meeting, and the section entitled **“The Veeco Special Meeting — Attending the Veeco Special Meeting”** beginning on page 57 of this joint proxy statement/prospectus, with respect to the Veeco special meeting.

Shares in “street name.” With respect to the Axcelis special meeting and the Veeco special meeting, shares held in “street name” may be voted in person by you only if you obtain a signed legal proxy from your bank, broker or other nominee giving you the right to vote the shares and bring the signed legal proxy to the meeting. If you choose to vote your shares in person at the Axcelis special meeting or Veeco special meeting, please bring required documentation in accordance with the section entitled **“The Axcelis Special Meeting — Attending the Axcelis Special Meeting”** beginning on page 49 of this joint proxy statement/prospectus or **“The Veeco Special Meeting — Attending the Veeco Special Meeting”** beginning on page 57 of this joint proxy statement/prospectus, as applicable.

With respect to the Axcelis special meeting and shares to be voted electronically at the Veeco special meeting, if your shares are held in street name through a bank, broker or other nominee, you will receive instructions on how to vote from the bank or broker. You must follow their instructions in order for your shares to be voted. Internet and telephone voting also may be offered to stockholders owning shares through certain banks and brokers. If your shares are not registered in your own name and you would like to vote your shares at the Veeco special meeting, you may visit www.virtualshareholdermeeting.com/VECO2026SM, and enter the 16-digit control number included in the voting instruction card provided to you by your bank or brokerage firm. If you hold your shares in street name and you do not receive a 16-digit control number, you need to obtain a signed legal proxy from your bank, broker or other nominee giving you the right to vote your shares and submit that signed legal proxy when you vote on the virtual website.

Even if you plan to attend the Axcelis special meeting in person or the Veeco special meeting in person or electronically, as applicable, Axcelis and Veeco recommend that you submit a proxy to vote your shares in advance as described below so that your vote will be counted if you later decide not to or become unable to attend the applicable special meeting. The use of video, still photography or audio recording is not permitted at either the Axcelis special meeting or the Veeco special meeting and, for the safety of in-person attendees at both the Axcelis special meeting and the Veeco special meeting, all bags, packages and briefcases are subject to inspection.

Additional information on attending the special meetings can be found in the section entitled **“The Axcelis Special Meeting”** beginning on page 45 of this joint proxy statement/prospectus and in the section entitled **“The Veeco Special Meeting”** beginning on page 53 of this joint proxy statement/prospectus.

Q: What if during the check-in time or during the Veeco special meeting I have technical difficulties or trouble accessing the virtual meeting website?

A: Veeco will have technicians ready to assist you with any technical difficulties you may have accessing the virtual meeting website for the Veeco special meeting. If you encounter any difficulties accessing the virtual meeting website during the check-in or meeting time for the Veeco special meeting, please call the technical support number found on the Veeco special meeting website.

Q: How can I vote my shares without attending my respective special meeting?

A: Whether you hold your shares directly as the stockholder of record of Axcelis or Veeco or beneficially in “street name,” you may direct your vote by proxy without attending the Axcelis special meeting or the Veeco special meeting, as applicable. You can vote by proxy over the Internet, by telephone or by mail by following the instructions provided in the enclosed proxy card. Please note that if you hold shares beneficially in “street name,” you should follow the voting instructions provided by your bank, broker or other nominee.

Additional information on voting procedures can be found under the section entitled “**The Axcelis Special Meeting**” beginning on page 45 of this joint proxy statement/prospectus and under the section entitled “**The Veeco Special Meeting**” beginning on page 53 of this joint proxy statement/prospectus.

Q: What is the difference between holding shares as a stockholder of record and as a beneficial owner of shares held in “street name”?

A: If your shares of common stock of Axcelis or Veeco are registered directly in your name with Computershare Trust Company, N.A., Axcelis’ transfer agent, or Equiniti Trust Company LLC (formerly known as American Stock Transfer & Trust Company), Veeco’s transfer agent, you are considered the stockholder of record with respect to those shares. As the stockholder of record, you have the right to vote, or to grant a proxy for your vote, directly to Axcelis or Veeco, as applicable, or to a third party to vote, at the applicable special meeting.

If your shares of common stock in Axcelis or Veeco are held by a bank, broker or other nominee, you are considered the beneficial owner of shares held in “street name,” and your bank, broker or other nominee is considered the stockholder of record with respect to those shares. Your bank, broker or other nominee will provide you, as the beneficial owner, a package describing the procedure for voting your shares. You should follow the instructions provided by them to vote your shares. You are invited to attend the Axcelis special meeting or the Veeco special meeting, as applicable; however, you may not vote these shares in person at the Axcelis special meeting or at the Veeco special meeting unless you obtain a signed legal proxy, executed in your favor, from your bank, broker or other nominee that holds your shares, giving you the right to vote the shares in person at the Veeco special meeting. With respect to the shares to be voted electronically at the Veeco special meeting, if your shares are not registered in your own name and you would like to vote your shares at the Veeco special meeting, you may visit www.virtualshareholdermeeting.com/VECO2026SM, and enter the 16-digit control number included in the voting instruction card provided to you by your bank or brokerage firm. If you hold your shares in street name and you do not receive a 16-digit control number, you need to obtain a signed legal proxy from your bank, broker or other nominee giving you the right to vote your shares and submit that signed legal proxy when you vote on the virtual website.

Q: If my shares of Axcelis common stock or Veeco common stock are held in “street name” by my bank, broker or other nominee, will my bank, broker or other nominee automatically vote those shares for me?

A: For all proposals, your bank, broker or other nominee will only be permitted to vote your shares of Axcelis common stock or Veeco common stock, as applicable, if you instruct your bank, broker or other nominee how to vote. You should follow the procedures provided by your bank, broker or other nominee regarding the voting of your shares. Under the rules of the NYSE and Nasdaq, banks, brokers and other nominees who hold shares of Axcelis common stock or Veeco common stock in “street name” for their customers have authority to vote on “routine” proposals when they have not received instructions from beneficial owners. However, banks, brokers and other nominees are prohibited from exercising their voting discretion with respect to non-routine matters. All the proposals currently scheduled to be considered and voted on at each of the Axcelis special meeting and the Veeco special meeting are considered non-routine. As a result, absent specific instructions from the beneficial owner of such shares, banks, brokers and other nominees are not empowered to vote such shares.

For Axcelis stockholders, not instructing your bank, broker or other nominee how you wish to vote your shares will have no effect on the Axcelis adjournment proposal or, assuming a quorum is present at the Axcelis special meeting, the Axcelis share issuance proposal.

For Veeco stockholders, not instructing your bank, broker or other nominee how you wish to vote your shares will have the same effect as a vote “**AGAINST**” the Veeco merger agreement proposal, but will not be counted as “**FOR**” or “**AGAINST**” and will have no effect on the Veeco adjournment proposal or, assuming a quorum is present at the Veeco special meeting, the Veeco compensation proposal.

Q: What should I do if I receive more than one set of voting materials for the same special meeting?

A: If you hold shares of Axcelis common stock or Veeco common stock in “street name” and also directly in your name as a stockholder of record or otherwise, or if you hold shares of Axcelis common stock or Veeco common stock in more than one brokerage account, you may receive more than one set of voting materials relating to the same special meeting.

Record Holders. For shares held directly, please complete, sign, date and return each proxy card (or submit a proxy to cast your vote over the Internet, or by telephone, as provided on each proxy card) or otherwise follow the voting instructions provided in this joint proxy statement/prospectus in order to ensure that all of your shares of Axcelis common stock or Veeco common stock are voted.

Shares in “street name.” For shares held in “street name” through a bank, broker or other nominee, you should follow the procedures provided by your bank, broker or other nominee to vote your shares.

Q: If a stockholder gives a proxy, how are the shares of Axcelis common stock or Veeco common stock voted?

A: Regardless of the method by which you choose to vote, the individuals named on the enclosed proxy card will vote your shares of Axcelis common stock or Veeco common stock, as applicable, in the way that you indicate. When completing the Internet or telephone processes or the proxy card, you may specify whether your shares of Axcelis common stock or Veeco common stock, as applicable, should be voted for or against, or abstain from voting on, all, some or none of the specific items of business to come before the respective special meetings.

Q: How will my shares of Axcelis common stock be voted if I return a blank proxy?

A: If you are a stockholder of record and you sign, date and return your proxy and do not indicate how you want your shares of Axcelis common stock to be voted, then your shares of Axcelis common stock will be voted “FOR” the Axcelis share issuance proposal and “FOR” the Axcelis adjournment proposal.

Q: How will my shares of Veeco common stock be voted if I return a blank proxy?

A: If you are a stockholder of record and you sign, date and return your proxy and do not indicate how you want your shares of Veeco common stock to be voted, then your shares of Veeco common stock will be voted “FOR” the Veeco merger agreement proposal, “FOR” the Veeco compensation proposal and “FOR” the Veeco adjournment proposal.

Q: Can I change my vote after I have submitted my proxy?

A: Any Axcelis or Veeco stockholder giving a proxy has the right to revoke it before the proxy is exercised at the applicable special meeting by doing any of the following:

- subsequently submitting a new later dated, validly executed proxy (including by submitting a proxy via the Internet or telephone) that is received prior to the applicable special meeting (which should be received by the deadline specified on the accompanying proxy card in order to ensure that your proxy is counted);
- giving written notice of your revocation to Axcelis’ corporate secretary or Veeco’s corporate secretary, as applicable; or
- voting in person at the Axcelis special meeting, or voting at the Veeco special meeting, in person or virtually via the Veeco special meeting website, as applicable.

Execution or revocation of a proxy will not in any way affect your right to attend the applicable special meeting and vote at the Axcelis special meeting or at the Veeco special meeting, in person or

electronically, as applicable. Attending the applicable special meeting will not, by itself, revoke a proxy. Written notices of revocation and other communications with respect to the revocation of proxies should be addressed:

If you are an Axcelis stockholder, to:
Axcelis Technologies, Inc.
108 Cherry Hill Drive
Beverly, Massachusetts 01915
(978) 787-4000
Attention: Corporate Secretary

If you are a Veeco stockholder, to:
Veeco Instruments Inc.
1 Terminal Drive
Plainview, New York 11803
(516) 677-0200
Attention: Corporate Secretary

For more information, see the section entitled “**The Axcelis Special Meeting — Revocability of Proxies**” beginning on page 48 of this joint proxy statement/prospectus and the section entitled “**The Veeco Special Meeting — Revocability of Proxies**” beginning on page 56 of this joint proxy statement/prospectus, as applicable.

Q: If I hold my shares in “street name,” can I change my voting instructions after I have submitted voting instructions to my bank, broker or other nominee?

A: If your shares are held in the name of a bank, broker or other nominee and you previously provided voting instructions to your bank, broker or other nominee, you should follow the instructions provided by your bank, broker or other nominee to revoke or change your voting instructions.

Q: Where can I find the voting results of the special meetings?

A: The preliminary voting results for each special meeting will be announced at that special meeting. In addition, within four business days after completion of its special meeting, each of Axcelis and Veeco intends to file the final voting results of its respective special meeting with the SEC on a Current Report on Form 8-K.

Q: If I do not favor the merger, what are my rights?

A: Neither Axcelis stockholders nor Veeco stockholders are entitled to appraisal rights under the DGCL. If they are not in favor of the merger, Axcelis stockholders may vote against the Axcelis share issuance proposal and Veeco stockholders may vote against the Veeco merger agreement proposal. For more information, see the section entitled “**No Appraisal Rights**” beginning on page 181 of this joint proxy statement/prospectus. Information about how Axcelis stockholders may vote on the proposals being considered in connection with the merger can be found under the section entitled “**The Axcelis Special Meeting**” beginning on page 45 of this joint proxy statement/prospectus. Information about how Veeco stockholders may vote on the proposals being considered in connection with the merger can be found under the section entitled “**The Veeco Special Meeting**” beginning on page 53 of this joint proxy statement/prospectus.

Q: Are there any risks that I should consider in deciding whether to vote for the approval of the Axcelis share issuance proposal or the approval of the Veeco merger agreement proposal?

A: Yes. You should read and carefully consider the risk factors set forth in the section entitled “**Risk Factors**” beginning on page 33 of this joint proxy statement/prospectus. You also should read and carefully consider the risk factors of Axcelis and Veeco contained in the documents that are incorporated by reference into this joint proxy statement/prospectus.

Q: Who will solicit and pay the cost of soliciting proxies?

A: Axcelis has engaged Innisfree M&A Incorporated, which is referred to as Innisfree, to assist in the solicitation of proxies for the Axcelis special meeting. Axcelis estimates that it will pay Innisfree a fee of approximately \$75,000, plus reimbursement of reasonable expenses. Axcelis has agreed to indemnify Innisfree against various liabilities and expenses that relate to or arise out of its solicitation of proxies (subject to certain exceptions). Veeco has engaged D.F. King & Co., Inc., which is referred to as D.F. King,

to assist in the solicitation of proxies for the Veeco special meeting and to provide related advice and informational support, for a services fee and the reimbursement of customary disbursements, which are not expected to exceed \$25,000 in total. Veeco has agreed to indemnify D.F. King against various liabilities and expenses that relate to or arise out of its solicitation of proxies (subject to certain exceptions). Axcelis and Veeco also may be required to reimburse banks, brokers and other custodians, nominees and fiduciaries or their respective agents for their expenses in forwarding proxy materials to beneficial owners of Axcelis common stock and Veeco common stock, respectively. Axcelis' directors, officers and employees and Veeco's directors, officers and employees also may solicit proxies, by telephone, by mail, by electronic means or in person. They will not be paid any additional amounts for soliciting proxies.

Q: What are the material U.S. federal income tax consequences of the merger to Veeco stockholders?

A: Axcelis and Veeco intend for the merger to qualify as a “reorganization” within the meaning of Section 368(a) of the Code for U.S. federal income tax purposes. Provided that the merger so qualifies, U.S. holders (as defined in the section entitled **“Material U.S. Federal Income Tax Consequences of the Merger”** beginning on page 165 of this joint proxy statement/prospectus) of Veeco common stock are not expected to recognize any gain or loss for U.S. federal income tax purposes upon the exchange of their shares of Veeco common stock for shares of Axcelis common stock pursuant to the merger, except for any gain or loss attributable to the receipt of cash in lieu of a fractional share of Axcelis common stock.

The obligation of the parties to consummate the merger is not conditioned upon the receipt of a tax opinion from counsel. Further, neither Axcelis nor Veeco intends to seek any ruling from the IRS regarding any matters relating to the transactions. As a result, there can be no assurance that the IRS would not assert, or that a court would not sustain, a position contrary to any of the conclusions herein. The tax consequences of the transactions to any particular Veeco stockholder will depend on that stockholder's particular facts and circumstances. Accordingly, U.S. holders are urged to consult their tax advisors as to the U.S. federal income tax consequences of the merger, including the income tax consequences arising from such U.S. holders' particular circumstances, and as to any estate, gift, state, local or non-U.S. tax consequences arising out of the merger.

A more detailed discussion of the material U.S. federal income tax consequences of the merger can be found in the section entitled **“Material U.S. Federal Income Tax Consequences of the Merger”** beginning on page 165 of this joint proxy statement/prospectus.

Q: When is the merger expected to be completed?

A: Subject to the satisfaction or waiver of the closing conditions described under the section entitled **“The Merger Agreement — Conditions to the Completion of the Merger”** beginning on page 131 of this joint proxy statement/prospectus, including the adoption of the merger agreement by Veeco stockholders and the approval of the Axcelis stock issuance proposal by Axcelis stockholders, the merger is expected to close in the second half of 2026. However, neither Axcelis nor Veeco can predict the actual date on which the merger will be completed, or if the merger will be completed at all, because completion of the merger is subject to conditions and factors outside the control of both companies.

Q: What are the conditions to the completion of the merger?

A: The merger is subject to a number of conditions to closing as specified in the merger agreement. These closing conditions include, among others, (i) approval by the Axcelis stockholders of the issuance of the shares of Axcelis common stock, (ii) the adoption by the Veeco stockholders of the merger agreement, (iii) authorization for listing on Nasdaq of the shares of Axcelis common stock to be issued in the merger, subject to official notice of issuance, (iv) effectiveness of the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, (v) the expiration or termination of any applicable waiting period, together with any extensions thereof, under the HSR Act, and obtaining the approvals or the expiration of applicable waiting periods under applicable antitrust and investment screening laws, and (vi) the absence of any law or order promulgated, entered, enforced, enacted or issued

by a governmental authority (whether temporary, preliminary or permanent) which prohibits, restrains, or makes illegal the consummation of the merger and shall continue in effect. The obligation of each of Axcelis and Veeco to consummate the merger is also conditioned on, among other things, (1) the representations and warranties of the other party being true and correct as of the date of the merger agreement and as of the closing date of the merger, subject to certain materiality exceptions, (2) the performance in all material respects by the other party of its obligations under the merger agreement required to be performed on or prior to the date of the closing of the merger and (3) the absence of a continuing material adverse effect with respect to the other party. No assurance can be given that the required consents and approvals will be obtained or that the required conditions to closing will be satisfied, and, even if all required consents and approvals are obtained and the conditions are satisfied, no assurance can be given as to the terms, conditions and timing of such consents and approvals. Any delay in completing the merger could cause the combined company not to realize, or to be delayed in realizing, some or all of the benefits that Axcelis and Veeco expect to achieve if the merger is successfully completed within the expected time frame. For a more complete summary of the conditions that must be satisfied or waived prior to completion of the merger, see the sections entitled **“The Merger Agreement — Conditions to the Completion of the Merger”** and **“The Merger — Regulatory Approvals”** beginning on pages 131 and 110, respectively, of this joint proxy statement/prospectus.

Q: What respective equity stakes will Axcelis stockholders and Veeco stockholders hold in the combined company immediately following the merger?

A: As of the date of this joint proxy statement/prospectus, based on the exchange ratio of 0.3575 and the fully diluted number of shares of Axcelis common stock and Veeco common stock as of September 29, 2025, Axcelis stockholders will own approximately 58.1% and Veeco stockholders will own approximately 41.9% of the issued and outstanding shares of the combined company (based on fully diluted shares outstanding of the combined company) immediately following the completion of the merger. The exact equity stake of Axcelis stockholders and Veeco stockholders in the combined company immediately following the merger will depend on the number of shares of Axcelis common stock and Veeco common stock issued and outstanding immediately prior to the merger.

Q: What should I do now?

A: You should read this joint proxy statement/prospectus carefully and in its entirety, including the annexes, and return your completed, signed and dated proxy card(s) by mail in the enclosed postage-paid envelope(s) or submit your voting instructions over the Internet, or by telephone by following the instructions set forth on the enclosed proxy card, as soon as possible so that your shares will be voted in accordance with your instructions.

Q: Whom do I call if I have questions about the Axcelis special meeting, the Veeco special meeting or the merger?

A: If you have questions about the Axcelis special meeting, the Veeco special meeting or the merger, or desire additional copies of this joint proxy statement/prospectus or additional proxies, you may contact:

For Axcelis stockholders:

Innisfree M&A Incorporated
501 Madison Avenue, 20th Floor
New York, NY 10022

Stockholders may call toll free:
+1 (888) 750-5835

Banks and Brokers may call collect:
+1 (212) 750-5833

For Veeco stockholders:

D.F. King & Co., Inc.
28 Liberty Street, Floor 53
New York, NY 10005
Call Collect: (646) 787-3500
Call Toll-Free: (866) 356-6140
veeco@dfking.com

SUMMARY

For your convenience, provided below is a brief summary of certain information contained in this joint proxy statement/prospectus. This summary highlights selected information from this joint proxy statement/prospectus and does not contain all of the information that may be important to you as an Axcelis stockholder or a Veeco stockholder, as applicable. To understand the merger fully and for a more complete description of the terms of the merger, you should read carefully this entire joint proxy statement/prospectus, its annexes and the other documents to which you are referred. You may obtain the information incorporated by reference into this joint proxy statement/prospectus without charge by following the instructions under the section entitled “Where You Can Find More Information” beginning on page 189 of this joint proxy statement/prospectus.

The Parties to the Merger

Axcelis Technologies, Inc.

Axcelis designs, manufactures and services ion implantation and other processing equipment used in the fabrication of semiconductor chips. In addition to equipment, Axcelis provides extensive aftermarket lifecycle products and services, including used tools, spare parts, equipment upgrades, maintenance services and customer training. Axcelis’ principal executive office is located at 108 Cherry Hill Drive, Beverly, MA 01915. Its telephone number is (978) 787-4000.

Veeco Instruments Inc.

Veeco is a manufacturer of advanced semiconductor process equipment that solves an array of challenging materials engineering problems for their customers. Veeco’s comprehensive collection of ion beam, laser annealing, metal organic chemical vapor deposition, chemical vapor deposition, advanced packaging lithography, single wafer wet processing, molecular beam epitaxy, and atomic layer deposition technologies play an integral role in the fabrication of key devices. Veeco’s principal executive office is located at 1 Terminal Drive, Plainview, NY 11803. Its telephone number is (516) 677-0200.

Victory Merger Sub, Inc.

Merger Sub, a newly formed wholly owned subsidiary of Axcelis, is a Delaware corporation that was formed on September 29, 2025, for the sole purpose of effecting the merger. Merger Sub has not conducted any activities other than those incidental to its formation and the matters contemplated by the merger agreement.

The Merger and the Merger Agreement

The terms and conditions of the merger are contained in the merger agreement, a copy of which is attached as Annex A to, and is incorporated by reference into, this joint proxy statement/prospectus. You are encouraged to read the merger agreement carefully and in its entirety, as it is the primary legal document that governs the merger.

Pursuant to the terms of the merger agreement, Merger Sub will merge with and into Veeco, with Veeco surviving as a wholly owned subsidiary of Axcelis. As a result of the merger, the separate existence of Merger Sub will cease and Veeco will continue its existence under the laws of the State of Delaware as the surviving corporation in the merger.

Following the merger, Veeco common stock will be delisted from Nasdaq, deregistered under the Exchange Act and will cease to be publicly traded.

Exchange Ratio

At the effective time, by virtue of the merger and without any further action on the part of the parties, holders of any securities of Veeco, Merger Sub or any other person, each share of Veeco common stock that is issued and outstanding immediately prior to the effective time will be converted into the right to receive 0.3575 shares of Axcelis common stock and cash in lieu of any fractional shares of Axcelis common stock any former holder of Veeco common stock would otherwise be entitled to receive.

The exchange ratio is fixed, which means that it will not change between now and the effective time, regardless of whether the market price of either Axcelis common stock or Veeco common stock changes. Therefore, the value of the merger consideration will depend on the market price of Axcelis common stock at the effective time. The market price of Axcelis common stock has fluctuated since the date of the announcement of the merger agreement and may continue to fluctuate from the date of this joint proxy statement/prospectus to the date of the special meetings, the date the merger is completed and thereafter. The market price of Axcelis common stock, when received by Veeco stockholders after the merger is completed, could be greater than, less than or the same as the market price of Axcelis common stock on the date of this joint proxy statement/prospectus or at the time of the respective special meetings. You should obtain current market quotations for Axcelis common stock and Veeco common stock before deciding how to vote with respect to any of the proposals described in this joint proxy statement/prospectus. Axcelis common stock is listed on Nasdaq under the symbol “ACLS,” and Veeco common stock is listed on Nasdaq under the symbol “VECO.”

At the effective time, all shares of Veeco common stock owned by Axcelis, Veeco or Merger Sub will be canceled and will cease to exist, and no consideration will be delivered in exchange for such shares.

Treatment of Existing Axcelis Equity Awards

Axcelis equity awards will not be affected by the merger and will remain equity awards relating to shares of Axcelis common stock and will generally remain outstanding and continue to vest subject to the same terms and conditions as applicable immediately prior to the effective time. The merger will not constitute a “change in control” or term of similar meaning for purposes of the Axcelis compensation and benefit plans, including Axcelis equity awards.

Treatment of Existing Veeco Equity Awards

Veeco RSUs

As of the effective time, each then-outstanding Vested Veeco RSU will be canceled, and the holder thereof will be entitled to receive, subject to any applicable tax withholding, (i) the merger consideration in respect of each share of Veeco Common Stock subject to such Vested Veeco RSU immediately prior to the effective time and (ii) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Vested Veeco RSU.

As of the effective time, each then-outstanding Unvested Veeco RSU will be assumed by Axcelis and converted into an Axcelis RSU covering Axcelis common stock with the same terms and conditions as applied to the Unvested Veeco RSU immediately prior to the effective time, except that such Unvested Veeco RSUs will cover the number of whole shares of Axcelis common stock (rounded down to the nearest whole share) equal to the product of (i) the number of shares of Veeco common stock subject to such Unvested Veeco RSU and (ii) the exchange ratio. All dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Unvested Veeco RSU will also be assumed and become an obligation of Axcelis in connection with the applicable Axcelis RSU.

Veeco PSUs

As of the effective time, each then-outstanding Vested Veeco PSU will be canceled, and the holder thereof will be entitled to receive, subject to any applicable tax withholding, (i) the merger consideration in respect of each share of Veeco common stock subject to such Vested Veeco PSU immediately prior to the effective time (based on the achievement of the applicable performance metrics (x) for those Vested Veeco PSUs where the applicable performance period has elapsed prior to the effective time, at the actual level of performance as determined by the Veeco compensation committee in the ordinary course of business consistent with past practice at the conclusion of such performance period and (y) for those Vested Veeco PSUs where the applicable performance period has not elapsed prior to the effective time, at the greater of (A) target level of performance or (B) actual performance through the most recent practicable date prior to the closing date, as determined in good faith and consistent with past practice by the Veeco compensation committee) and (ii) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Vested Veeco PSU.

As of the effective time, each then-outstanding Unvested Veeco PSU will be assumed by Axcelis and converted into an Axcelis RSU covering Axcelis common stock with the same terms and conditions as applied to the Unvested Veeco PSU immediately prior to the effective time, except that each such Axcelis RSU will be subject solely to the service-based conditions applicable to the corresponding Unvested Veeco PSU and will cover the number of whole shares of Axcelis common stock (rounded down to the nearest whole share) equal to the product of (i) the number of shares of Veeco common stock subject to such Unvested Veeco PSU (based on the achievement of the applicable performance metrics at the greater of (y) target level of performance or (z) actual performance through the most recent practicable date prior to the closing date, as determined in good faith and consistent with past practice by the Veeco compensation committee) and (ii) the exchange ratio. All dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Unvested Veeco PSU will also be assumed and become an obligation of Axcelis in connection with the applicable Axcelis RSU.

Veeco Restricted Stock

As of the effective time, each then-outstanding Veeco Director RSA will, to the extent not vested, become fully vested and canceled, and the holder thereof will be entitled to receive the merger consideration in respect of each share of Veeco common stock subject to such Veeco Director RSA immediately prior to the effective time.

At the effective time, each then-outstanding Veeco RSA that is not a Veeco Director RSA will be automatically, and without any required action on the part of the holder thereof, assumed by Axcelis and converted into an Axcelis RSA, with the same terms and conditions as were applicable to such Veeco RSA immediately prior to the effective time, except that such awards will, after the effective time, relate to the number of shares of Axcelis common stock equal to the product of (i) the number of shares of Veeco common stock subject to the Veeco RSA, as of immediately prior to the effective time and (ii) the exchange ratio (rounded down to the nearest whole share of Axcelis common stock).

The merger will be treated as a “change in control” or term of similar meaning for purposes of the Veeco compensation and benefit plans, which determination may result in certain “double trigger” benefits under such plans upon certain qualifying terminations of employment of certain executives in connection with such change in control. For more information, see the information provided in the section entitled “**Interests of Veeco’s Directors and Executive Officers in the Merger**” beginning on page 157 of this joint proxy statement/prospectus.

Axcelis’ Recommendation and Reasons for the Merger

The Axcelis board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Axcelis stockholders vote “**FOR**” the Axcelis share issuance proposal and “**FOR**” the Axcelis adjournment proposal. In evaluating the proposed merger, the Axcelis board of directors consulted with Axcelis senior management and outside legal and financial advisors and, in reaching its determinations and recommendations, considered a number of factors that weighed in favor of the merger. For a complete description of the factors considered by the Axcelis board of directors in reaching this decision, including potentially negative factors against which these advantages and opportunities were weighed, and additional information on the recommendation of the Axcelis board of directors, see the section entitled “**The Merger — Recommendation of the Axcelis Board of Directors; Axcelis’ Reasons for the Merger**” beginning on page 83 of this joint proxy statement/prospectus.

Veeco’s Recommendation and Reasons for the Merger

The Veeco board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Veeco stockholders vote “**FOR**” the Veeco merger agreement proposal, “**FOR**” the Veeco compensation proposal and “**FOR**” the Veeco adjournment proposal. In evaluating the proposed merger, the Veeco board of directors consulted with Veeco senior management and outside legal and financial advisors and, in reaching its determinations and recommendations, considered a number of factors that it weighed in favor of the merger. For a complete description of the factors considered by the Veeco board of directors in reaching

this decision, including potentially negative factors against which these advantages and opportunities were weighed, and additional information on the recommendation of the Veeco board of directors, see the section entitled “**The Merger — Recommendation of the Veeco Board of Directors; Veeco’s Reasons for the Merger**” beginning on page 88 of this joint proxy statement/prospectus.

Opinion of Financial Advisor to Axcelis (Annex B)

Pursuant to an engagement letter, Axcelis retained J.P. Morgan Securities LLC, which is referred to as J.P. Morgan, as financial advisor to Axcelis in connection with the proposed merger. As part of such engagement, J.P. Morgan delivered a written opinion dated September 30, 2025 to the Axcelis board of directors to the effect that, as of such date and based upon and subject to the assumptions made, procedures followed, matters considered and limitations on the review undertaken by J.P. Morgan in preparing the opinion, the exchange ratio in the proposed merger was fair, from a financial point of view, to Axcelis.

The full text of the written opinion of J.P. Morgan dated September 30, 2025, which sets forth the assumptions made, procedures followed, matters considered and limitations on the review undertaken by J.P. Morgan in preparing the opinion, is attached as Annex B to this joint proxy statement/prospectus and is incorporated herein by reference. The issuance of J.P. Morgan’s opinion was approved by a fairness opinion committee of J.P. Morgan. The summary of the opinion of J.P. Morgan set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of such opinion. Axcelis stockholders are encouraged to read the opinion in its entirety. J.P. Morgan’s written opinion was addressed to the Axcelis board of directors (in its capacity as such) in connection with and for the purposes of its evaluation of the proposed merger, was directed only to the exchange ratio in the proposed merger and did not address any other terms, aspects or implications of the merger. J.P. Morgan expressed no opinion as to the fairness of the merger, or any consideration paid in connection therewith, to the holders of any class of securities, creditors or other constituencies of Axcelis or as to the underlying decision by Axcelis to engage in the proposed merger. J.P. Morgan’s opinion does not constitute a recommendation to any stockholder as to how any stockholder should vote with respect to the proposed merger or any other matter.

Opinion of Financial Advisor to Veeco (Annex C)

UBS Securities LLC, which is referred to as UBS, was retained by Veeco to act as financial advisor in connection with the merger. As part of that engagement, the Veeco board of directors requested that UBS render an opinion as to the fairness, from a financial point of view, to the holders of Veeco common stock (other than Axcelis and its affiliates) of the exchange ratio provided for in the merger agreement. On September 30, 2025, at a meeting of the Veeco board of directors held to evaluate the merger agreement and the transactions contemplated thereby, UBS delivered to the Veeco board of directors an oral opinion, which opinion was confirmed by delivery of a written opinion dated as of September 30, 2025, to the effect that, as of that date and based upon, and subject to, among other things, the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by UBS in connection with its opinion, the exchange ratio provided for in the merger agreement was fair, from a financial point of view, to the holders of Veeco common stock (other than Axcelis and its affiliates).

The full text of UBS’s written opinion dated September 30, 2025, which sets forth the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by UBS in preparing its opinion, is attached as Annex C to this joint proxy statement/prospectus and is incorporated herein by reference. The issuance of UBS’s opinion was approved by an authorized committee of UBS. The summary of UBS’s opinion set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of such opinion. Veeco stockholders are encouraged to read UBS’s opinion in its entirety. UBS’s opinion was addressed to the Veeco board of directors (in its capacity as such) in connection with and for the purposes of its evaluation of the exchange ratio in the proposed merger and did not address any other terms, aspects or implications of the merger. UBS’s opinion did not address the relative merits of the merger as compared to other business strategies or transactions that might be available to Veeco or the underlying decision by Veeco to engage in the proposed merger. UBS’s opinion does not constitute a recommendation to any stockholder as to how such stockholder should vote with respect to the proposed merger or any other matter.

The Axcelis Special Meeting

The Axcelis special meeting will be held on February 6, 2026 at 11:00 a.m., Eastern Time, at the offices of Axcelis at 108 Cherry Hill Drive, Beverly, Massachusetts. The purposes of the Axcelis special meeting are as follows:

- *Axcelis Proposal #1: Axcelis Share Issuance Proposal.* To consider and vote on the Axcelis share issuance proposal; and
- *Axcelis Proposal #2: Axcelis Adjournment Proposal.* To consider and vote on the Axcelis adjournment proposal.

Completion of the merger is conditioned on the approval of the Axcelis share issuance proposal by Axcelis stockholders. Approval of the Axcelis adjournment proposal is not a condition to the obligation of either Axcelis or Veeco to complete the merger.

Only holders of record of issued and outstanding shares of Axcelis common stock as of the close of business on December 26, 2025, the record date for the Axcelis special meeting, are entitled to notice of, and to vote at, the Axcelis special meeting. Axcelis stockholders may cast one vote for each share of Axcelis common stock that Axcelis stockholders held as of that record date.

Assuming a quorum is present at the Axcelis special meeting, approval of the Axcelis share issuance proposal requires the affirmative vote of the holders of a majority in voting power of the votes cast (excluding abstentions and broker non-votes) at the Axcelis special meeting on the Axcelis share issuance proposal. An abstention, a broker non-vote or the failure of an Axcelis stockholder not present at the meeting to vote (including the failure of an Axcelis stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Axcelis share issuance proposal.

If there is a quorum present, approval of the Axcelis adjournment proposal requires the affirmative vote of the holders of a majority in voting power of the votes cast (excluding abstentions and broker non-votes) at the Axcelis special meeting on the Axcelis adjournment proposal. In that case, an abstention, a broker non-vote or the failure of an Axcelis stockholder not present at the meeting to vote (including the failure of an Axcelis stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Axcelis adjournment proposal. If a quorum is not present, then either (i) the person presiding over the meeting or (ii) a majority in voting power of the stockholders entitled to vote at the meeting, present in person, or by remote communication, or represented by proxy, shall have power to adjourn the Axcelis special meeting.

The Veeco Special Meeting

The Veeco special meeting will be held on February 6, 2026, beginning at 10:00 a.m., Eastern Time. The Veeco special meeting will be a “hybrid” stockholder meeting, meaning that stockholders will be able to attend the meeting (i) virtually via the Internet on the Veeco special meeting website, at www.virtualshareholdermeeting.com/VECO2026SM, or (ii) in person at Veeco’s headquarter offices located at 1 Terminal Drive, Plainview, New York 11803. The purposes of the Veeco special meeting are as follows:

- *Veeco Proposal #1: Adoption of the Merger Agreement.* To consider and vote on the Veeco merger agreement proposal;
- *Veeco Proposal #2: Veeco Compensation Proposal.* To consider and vote on the Veeco compensation proposal; and
- *Veeco Proposal #3: Adjournment of the Veeco Special Meeting.* To adjourn the Veeco special meeting to a later date or dates, if necessary or appropriate, to allow time to solicit additional proxies if there are insufficient votes to adopt the merger agreement at the time of the Veeco special meeting.

Only holders of record of issued and outstanding shares of Veeco common stock as of the close of business on December 26, 2025, the record date for the Veeco special meeting, are entitled to notice of, and

to vote at, the Veeco special meeting. Veeco stockholders may cast one vote for each share of Veeco common stock that Veeco stockholders held as of the Veeco record date.

Assuming a quorum is present at the Veeco special meeting, the approval of the merger agreement proposal by Veeco stockholders requires the affirmative vote of the holders of a majority of the issued and outstanding shares of Veeco common stock entitled to vote at the Veeco special meeting on the Veeco merger agreement proposal. An abstention, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including the failure of a Veeco stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have the same effect as a vote cast “AGAINST” the proposal to adopt the merger agreement.

Assuming a quorum is present at the Veeco special meeting, approval of the Veeco compensation proposal requires the affirmative vote of the holders of a majority of the votes cast at the Veeco special meeting on the Veeco compensation proposal. An abstention, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including the failure of a Veeco stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Veeco compensation proposal.

Whether or not there is a quorum present, approval of the Veeco adjournment proposal requires the affirmative vote of the holders of a majority of the votes cast at the Veeco special meeting on the Veeco adjournment proposal and the chairman of the Veeco special meeting also has the power to adjourn the Veeco special meeting from time to time, whether or not Veeco stockholders have approved the Veeco adjournment proposal. An abstention, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including the failure of a Veeco stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Veeco adjournment proposal.

Interests of Axcelis’ Directors and Executive Officers in the Merger

In considering the recommendations of the Axcelis board of directors to vote for the Axcelis share issuance proposal and the Axcelis adjournment proposal, Axcelis stockholders should be aware that Axcelis directors and executive officers may have interests in the merger, including financial interests that may be different from, or in addition to, the interests of other Axcelis stockholders generally. The Axcelis board of directors was aware of and considered such interests, among other matters, in making its recommendation that Axcelis stockholders vote to approve the Axcelis share issuance proposal and the Axcelis adjournment proposal. These interests include:

- certain members of the Axcelis board of directors and executive officers will continue to serve as directors or executive officers, as applicable, of the combined company following the merger; and
- Axcelis directors and executive officers are entitled to continued indemnification and insurance coverage under their existing agreements with Axcelis.

For a more complete description of these interests, see the information provided in the section entitled “**Interests of Axcelis’ Directors and Executive Officers in the Merger**” beginning on page 156 of this joint proxy statement/prospectus.

Interests of Veeco’s Directors and Executive Officers in the Merger

In considering the recommendations of the Veeco board of directors, Veeco stockholders should be aware that Veeco directors and executive officers have interests in the merger, including financial interests, that may be different from, or in addition to, the interests of other Veeco stockholders generally. The Veeco board of directors was aware of and considered such interests, among other matters, in making its recommendation that Veeco stockholders vote to approve the Veeco merger agreement proposal, the Veeco compensation proposal, and the Veeco adjournment proposal. These interests include, among others, the following:

- the transactions contemplated by the merger agreement will be treated as a “change in control” or term of similar meaning for purposes of the Veeco compensation and benefit plans, including with respect to Veeco equity awards held by directors and executive officers;

- Veeco's executive officers may be entitled to enhanced severance benefits, including the acceleration of outstanding equity awards, in the event of a qualifying termination of employment within the period beginning three months prior to and ending eighteen months following the effective time;
- all Veeco Director RSAs will be subject to accelerated vesting, and will become free of any restrictions and risks of forfeiture, as of the effective time; and
- certain members of the Veeco board of directors and executive officers will continue to serve as directors of the combined company following the merger, and Mr. St. Dennis will serve as chairman of the board of directors of the combined company following the merger.

For a more complete description of these interests, see the information provided in the section entitled **"Interests of Veeco's Directors and Executive Officers in the Merger"** beginning on page 157 of this joint proxy statement/prospectus.

Governance of the Combined Company (Annex A)

The merger agreement contains certain provisions relating to the governance of the combined company following completion of the merger.

Board of Directors

As of the effective time, the board of directors of the combined company will consist of eleven directors, including:

- Thomas St. Dennis, who will serve as the chairman of the board of directors of the combined company;
- Six directors designated by Axcelis, who are referred to as the Axcelis designees, including:
 - Russell J. Low, Ph.D., the president and chief executive officer of Axcelis, who is referred to as the Axcelis CEO, who will be the chief executive officer of the combined company;
 - Jorge Titinger, the chairperson of the Axcelis board of directors; and
 - four additional directors to be designated by Axcelis prior to completion of the merger.
- Four directors designated by Veeco, who are referred to as the Veeco designees, including:
 - William J. Miller, Ph.D., the chief executive officer of Veeco, who is referred to as the Veeco CEO;
 - Keith D. Jackson;
 - Lena Nicolaides, Ph.D.; and
 - Sujeet Chand, Ph.D.

Each of the Axcelis designees, other than the Axcelis CEO, and each of the Veeco designees, other than the Veeco CEO, will meet the independence standards of Nasdaq with respect to the combined company as of the effective time. Except for Drs. Low and Miller and Messrs. St. Dennis and Titinger, none of the designees for service on the board of directors of the combined company were determined prior to the effective time of the merger agreement.

Chairman of the Board of Directors

Thomas St. Dennis, a member of the board of directors of Axcelis and Veeco, will serve as the Chairman of the board of directors of the combined company as of the effective time.

Chief Executive Officer

As of the effective time, Russell J. Low, Ph.D., the Axcelis CEO, will serve as the chief executive officer of the combined company.

Name

The name of the combined company as of the effective date will be mutually agreed by Axcelis and Veeco prior to the effective date.

Headquarters

As of the effective time, the headquarters of the combined company will be located in Beverly, Massachusetts.

Certain Beneficial Owners of Axcelis Common Stock

At the close of business on December 26, 2025, directors and executive officers of Axcelis beneficially owned and were entitled to vote approximately 136,925 shares of Axcelis common stock, collectively representing less than 1% of the shares of Axcelis common stock outstanding on December 26, 2025. Axcelis currently expects that all of its directors and executive officers will vote their shares “FOR” the Axcelis share issuance proposal, and “FOR” the Axcelis adjournment proposal. For more information regarding the security ownership of Axcelis directors and executive officers, see the information provided in the section entitled “**Certain Beneficial Owners of Axcelis Common Stock — Security Ownership of Axcelis Directors and Executive Officers**” beginning on page 182 of this joint proxy statement/prospectus.

Certain Beneficial Owners of Veeco Common Stock

At the close of business on December 26, 2025, directors and executive officers of Veeco beneficially owned and were entitled to vote approximately 1,352,038 shares of Veeco common stock, collectively representing 2.24% of the shares of Veeco common stock outstanding on December 26, 2025. Veeco currently expects that all of its directors and executive officers will vote their shares “FOR” the Veeco merger agreement proposal, “FOR” the Veeco compensation proposal and “FOR” the Veeco adjournment proposal. For more information regarding the security ownership of Veeco directors and executive officers, see the information provided in the section entitled “**Certain Beneficial Owners of Veeco Common Stock — Security Ownership of Veeco Directors and Executive Officers**” beginning on page 184 of this joint proxy statement/prospectus.

Regulatory Approvals

Pursuant to the merger agreement, Veeco, Axcelis and Merger Sub must use their reasonable best efforts to consummate and make effective the transactions contemplated by the merger agreement, including using their respective reasonable best efforts to obtain, or cause to be obtained, all waivers, permits, consents, approvals, authorizations, qualifications, orders and expirations or terminations of applicable waiting periods of all governmental entities and parties to contracts with Veeco, Axcelis, or either company’s subsidiaries that may be or become necessary or advisable for the performance of obligations pursuant to the merger agreement and the consummation of the transactions contemplated thereby.

Pursuant to the merger agreement, the parties must cooperate and assist one another in good faith in connection with all the actions to be taken in this regard, including (i) in the preparation and making of the filings referred to in the merger agreement and, if requested, amending or furnishing additional information thereunder, and (ii) in seeking, as promptly as reasonably practicable, to obtain all such waivers, permits, consents, approvals, authorizations, qualifications, orders or expirations or terminations of applicable waiting periods. Upon the terms and subject to the conditions set forth in the merger agreement, each party has agreed to make any filings required or advisable to be made pursuant to the HSR Act or other applicable antitrust and investment screening laws, including applicable antitrust laws in the People’s Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom, with respect to the transactions as promptly as reasonably practicable (and, in the case of the required notification and report forms pursuant to the HSR Act, in any event, unless otherwise mutually agreed by Veeco and Axcelis, within twenty (20) business days after the date merger agreement, it being understood that if on such twentieth (20th) business day a Government Shutdown were in effect and the applicable governmental entities are not accepting filings, such twentieth (20th) business day deadline would be extended until the fifth (5th) business day after the date on which the governmental entities are accepting filings) and to supply

as promptly as reasonably practicable to the appropriate governmental entities any information and documentary material that may be requested by such governmental entities pursuant to the HSR Act or such other applicable antitrust and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom. All such antitrust filings and filings pursuant to any investment screening laws to be made must be made in substantial compliance with the requirements of the HSR Act and such other applicable antitrust laws and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom. Other than in Sweden, foreign direct investment filings were made in each of the foregoing countries. The parties will determine in January 2026 whether or not to make a filing in Sweden in light of facts and circumstances as of that time. The parties' HSR Act notifications were filed with the FTC and the DOJ on October 29, 2025. The waiting period under the HSR Act expired on November 28, 2025 at 11:59 p.m. Eastern Time. On November 20, 2025, the parties notified the State Administration of Market Regulation in China of the merger. On December 10, 2025, the Inward Investment Screening Unit of the Department of Enterprise, Tourism and Employment of Ireland notified the parties that the merger will not be subject to screening under Irish foreign direct investment laws. On December 22, 2025, the German Federal Ministry for Economic Affairs and Energy issued a certificate of non-objection with respect to the merger.

Neither Axcelis nor Veeco nor any of their respective affiliates may, without the prior consent of the other party, propose, consent to, commit to or take any divestiture actions, such as selling or otherwise holding separate or disposing of asset or business, terminating existing business relationships or contractual rights or obligations or creating new ones, terminating any venture or other arrangement, or otherwise restructuring, that would result in a material adverse impact to either party or their reasonably anticipated benefits of the transactions. Moreover, neither party should be required to license their respective intellectual property (as described in the section entitled **“The Merger Agreement — Cooperation; Efforts to Consummate”** beginning on page 126 of this joint proxy statement/prospectus).

Litigation Related to the Merger

Axcelis and Veeco have received several demand letters from purported Axcelis and Veeco stockholders regarding alleged disclosure deficiencies in the preliminary joint proxy statement/prospectus filed on December 8, 2025 with the SEC.

For further information, see the information in the section entitled **“The Merger — Litigation Related to the Merger”** beginning on page 110 of this joint proxy statement/prospectus.

Ownership of the Combined Company after the Merger

As of the date of this joint proxy statement/prospectus, based on the exchange ratio of 0.3575 and the fully diluted number of shares of Axcelis common stock and Veeco common stock outstanding as of September 29, 2025, Axcelis stockholders will own approximately 58.1% and Veeco stockholders will own approximately 41.9% of the issued and outstanding shares of the combined company (based on fully diluted shares outstanding of the combined company) immediately following the completion of the merger.

No Appraisal Rights

Neither Axcelis stockholders nor Veeco stockholders are entitled to appraisal rights under the DGCL.

Conditions to the Completion of the Merger

Each party's obligation to effect the merger is subject to the satisfaction at closing or waiver at or prior to closing of each of the following conditions:

- receipt of the required Axcelis stockholder vote on the Axcelis share issuance proposal and the required Veeco stockholder vote on the Veeco merger agreement proposal;
- the effectiveness of the registration statement of which this joint proxy statement/prospectus forms a part and the absence of a stop order by the SEC;

- the absence of any law or order promulgated, entered, enforced, enacted or issued by a governmental authority (whether temporary, preliminary or permanent) which prohibits, restrains, or makes illegal the consummation of the merger that continues in effect;
- the expiration or termination of any applicable waiting period, together with any extensions thereof, under the HSR Act and the receipt of any requisite waivers, consents, authorizations, orders or expiration of applicable waiting periods pursuant to other applicable antitrust and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom;
- the shares of Acelis common stock, including the shares of Acelis common stock to be issued to Veeco stockholders in accordance with the merger agreement, having been approved for listing on Nasdaq, subject to official notice of issuance;
- that no material adverse effect of the other party has occurred and is continuing since the date of the merger agreement;
- the other party's compliance with and performance of, in all material respects, all covenants, obligations and agreements under the merger agreement required to be complied with or performed by such party at or prior to the closing;
- the accuracy of the representations and warranties of the other party to the extent required under the merger agreement; and
- the receipt by such party of a certificate of an executive officer of the other party certifying that the conditions with respect to representations and warranties and performance of obligations have been satisfied.

No Solicitation of Competing Proposals

Acelis and Veeco have agreed that neither Acelis nor Veeco, nor any of their respective subsidiaries, will, and that they will not permit their and their respective subsidiaries' directors, officers, employees and other representatives to, directly or indirectly:

- solicit, initiate, knowingly encourage, knowingly induce (including by way of furnishing information) or take any other action intentionally designed to facilitate, any inquiry or the making of any proposal that constitutes or would be reasonably expected to lead to a competing proposal;
- engage in any negotiations or discussions regarding a competing proposal;
- approve, endorse, recommend or enter into, or publicly propose to do any of the foregoing, any letter of intent, memorandum of understanding, agreement in principle, acquisition agreement, merger agreement or similar definitive agreement with respect to any competing proposal (excluding an acceptable confidentiality agreement);
- take any action to make the provisions of any takeover statute inapplicable to any transactions contemplated by a competing proposal;
- terminate, amend, release, modify or knowingly fail to enforce any provision of, or grant any permission, waiver or request under, any standstill, confidentiality or similar agreement entered into by the applicable party in respect of or in contemplation of a competing proposal (other than to the extent the Acelis board of directors or the Veeco board of directors, as applicable, determines in good faith after consultation with its outside legal counsel that failure to take any of such actions would be inconsistent with its fiduciary duties under applicable law), or
- propose to take any of the actions listed in the immediately preceding three paragraphs.

Notwithstanding the limitations described above, (i) Veeco or Acelis, as applicable, may ascertain facts from any person making an unsolicited competing proposal for the sole purpose of the applicable board of directors' informing itself about the terms of the competing proposal and the person that made it and (ii) prior to the time, in the case of Veeco, the required Veeco stockholder vote to approve the merger agreement proposal is obtained or, in the case of Acelis, the required Acelis stockholder vote to approve the Acelis

share issuance proposal is obtained, if such party receives a *bona fide* written competing proposal made after the date of the merger agreement that did not result from a breach in any respect of the above obligations, and the Veeco board of directors or Axcelis board of directors, as applicable, (y) determines in good faith (after consulting with its financial advisors and outside legal counsel) that said competing proposal is or would reasonably be expected to lead to a superior proposal and (z) determines in good faith after consulting with its financial advisors and outside legal counsel that a failure to take action with respect to such competing proposal would be inconsistent with its fiduciary duties under applicable law, Axcelis or Veeco or their representatives, as applicable, may take the following actions after giving prior notice to the other party to the merger agreement of its intent to do so: (A) furnish information with respect to Veeco or Axcelis, as applicable, to the person making such competing proposal pursuant to an acceptable confidentiality agreement and (B) engage in discussions or negotiations with such person with respect to such competing proposal.

No Change of Recommendation

Subject to certain exceptions described below, neither the Axcelis board of directors nor the Veeco board of directors, including any committee thereof, may make a change of recommendation (as defined in the section entitled “**The Merger Agreement — No Change of Recommendation**” beginning on page 123 of this joint proxy statement/prospectus).

Permitted Change of Recommendation — Intervening Event

Prior to the time, in the case of Axcelis, the required Axcelis stockholder vote to approve the Axcelis share issuance proposal is obtained or, in the case of Veeco, the required Veeco stockholder vote to approve the Veeco merger agreement proposal is obtained, the Axcelis board of directors or the Veeco board of directors, as applicable, may effect a change of recommendation if an intervening event (as defined in the section entitled “**The Merger Agreement — No Change of Recommendation — Permitted Change of Recommendation — Intervening Event**” beginning on page 124 of this joint proxy statement/prospectus) has occurred and is continuing, and the Axcelis board of directors or Veeco board of directors, as applicable, determines in good faith, after consultation with its outside legal counsel, that the failure to make a change in recommendation in response to such intervening event would be inconsistent with its fiduciary duties under applicable law, and meets certain other conditions as described in the section entitled “**The Merger Agreement — No Change of Recommendation — Permitted Change of Recommendation — Intervening Event**” beginning on page 124 of this joint proxy statement/prospectus.

Permitted Change of Recommendation — Superior Proposal

Prior to the time, in the case of Axcelis, the required Axcelis stockholder vote to approve the Axcelis share issuance proposal is obtained or, in the case of Veeco, the required Veeco stockholder vote to approve the Veeco merger agreement proposal is obtained, the Axcelis board of directors or the Veeco board of directors, as applicable, may effect a change of recommendation if such party receives a *bona fide* written competing proposal that did not result from a breach in any respect of such party’s obligations under the merger agreement, and the Veeco board of directors or Axcelis board of directors, as applicable, (i) determines in good faith (after consulting with its financial advisors and outside legal counsel) that said competing proposal is or would reasonably be expected to lead to a superior proposal and (ii) determines in good faith after consulting with its outside legal counsel that a failure to take action with respect to such competing proposal would be inconsistent with its fiduciary duties under applicable law, and meets certain other conditions as described in the section entitled “**The Merger Agreement — No Change of Recommendation — Permitted Change of Recommendation — Superior Proposal**” beginning on page 124 of this joint proxy statement/prospectus.

Termination of the Merger Agreement

Termination by Mutual Consent

The merger agreement may be terminated and the merger and the other transactions contemplated by the merger agreement may be abandoned at any time prior to the effective time by mutual written consent of Axcelis and Veeco.

Termination by Either Axcelis or Veeco

Either Axcelis or Veeco may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time if:

- any law or final and non-appealable order has been promulgated, entered, enforced, enacted or issued or deemed applicable to the merger by any governmental entity of competent jurisdiction which permanently prohibits, restrains or makes illegal the consummation of the merger;
- the merger has not been completed by 11:59 p.m. Eastern time on September 30, 2026, which is referred to as the initial outside date (unless such date has been extended to March 30, 2027, which is referred to as the first extended outside date, or subsequently to June 30, 2027, which is referred to as the second extended outside date, each of which extensions will be automatic but only in limited circumstances related to antitrust or similar laws);
- the required Axcelis stockholder approval for the Axcelis share issuance proposal has not been obtained at the Axcelis special meeting or at any adjournment or postponement thereof; or
- the required Veeco stockholder approval of the Veeco merger agreement proposal has not been obtained at the Veeco special meeting or at any adjournment or postponement thereof.

For a more complete description of these termination rights, see the information provided in the section entitled **“The Merger Agreement — Termination of the Merger Agreement — Termination by Either Axcelis or Veeco”** beginning on page 132 of this joint proxy statement/prospectus.

Termination by Axcelis

Axcelis may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time:

- if there has been a breach by Veeco of any of its representations, warranties, or covenants under the merger agreement, which breach (i) resulted in the conditions to the merger agreement not being satisfied and (ii) is not curable prior to the outside date, or if curable prior to the outside date, has not been cured within the earlier of (y) 20 business days after the giving of notice thereof by Axcelis to Veeco or (z) one business day prior to the outside date; or
- if the Veeco board of directors has effected an adverse recommendation change.

Termination by Veeco

Veeco may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time:

- if there has been a breach by Axcelis or Merger Sub of any of their representations, warranties, or covenants under the merger agreement, which breach (i) resulted in the conditions to the merger agreement not being satisfied and (ii) is not curable prior to the outside date, or if curable prior to the outside date, has not been cured within the earlier of (y) 20 business days after the giving of notice thereof by Veeco to Axcelis or (z) one business day prior to the outside date; or
- if the Axcelis board of directors has effected an adverse recommendation change.

Termination Fees

Axcelis will be required to pay to Veeco a termination fee of \$108,700,000 if the merger agreement is terminated:

- by Veeco, due to the Axcelis board of directors making a change of recommendation;
- by Veeco, due to Axcelis' breach or failure to perform any of its representations, warranties or covenants contained in the merger agreement, which breach or failure to perform would result in a failure of conditions to the merger agreement and which is incapable of being cured by Axcelis prior to the outside date or otherwise is not cured by the earlier of (i) 20 business days following written notice to Axcelis by Veeco of such breach or (ii) the first business day prior to the outside date, if (y) a

competing proposal for Axcelis has been publicly announced or otherwise communicated to the Axcelis board of directors (and not withdrawn) prior to the date of termination and (z) within 12 months after such termination, either (A) Axcelis consummates a competing proposal or (B) Axcelis has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of “competing proposal”);

- if the Axcelis stockholder approval has not been obtained upon a vote taken thereon at the Axcelis stockholders meetings duly convened therefor or at any adjournment or postponement thereof, if (i) a competing proposal for Axcelis has been publicly announced or otherwise communicated to the Axcelis board of directors (and not withdrawn) prior to the date of the Axcelis special meeting and (ii) within 12 months after such termination, either (y) Axcelis consummates a competing proposal or (z) Axcelis has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of “competing proposal”); or
- by either Axcelis or Veeco due to Axcelis’ failure to consummate the transactions by the outside date, subject to certain exceptions in the merger agreement, if (i) a competing proposal for Axcelis has been publicly announced or communicated to the Axcelis board of directors (and not withdrawn) prior to the date of termination and (ii) within 12 months after such termination, either (y) Axcelis consummates a competing proposal or (z) Axcelis has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of “competing proposal”).

Axcelis will be required to pay to Veeco a fixed expense reimbursement amount of \$15,000,000 if the merger agreement is terminated:

- by Veeco, due to Axcelis not obtaining the required Axcelis stockholder approval during the Axcelis stockholder meeting, unless Veeco does not obtain the required Veeco stockholder approval during the Veeco stockholder meeting; or
- by Veeco, due to Axcelis’ breach or failure to perform any of its representations, warranties or covenants contained in the merger agreement, which breach or failure to perform would result in a failure of conditions to the merger agreement and which is incapable of being cured by Axcelis prior to the outside date or otherwise is not cured by the earlier of (i) 20 business days following written notice to Axcelis by Veeco of such breach or (ii) the first business day prior to the outside date.

Veeco will be required to pay to Axcelis a termination fee of \$77,500,000 if the merger agreement is terminated:

- by Axcelis, due to the Veeco board of directors making a change of recommendation;
- by Axcelis, due to Veeco’s breach or failure to perform any of its representations, warranties or covenants contained in the merger agreement, which breach or failure to perform would result in a failure of conditions to the merger agreement and which is incapable of being cured by Veeco prior to the outside date or otherwise is not cured by the earlier of (i) 20 business days following written notice to Veeco by Axcelis of such breach or (ii) the first business day prior to the outside date, if (y) a competing proposal for Veeco has been publicly announced or otherwise communicated to the Veeco board of directors (and not withdrawn) prior to the date of termination and (z) within 12 months after such termination, either (A) Veeco consummates a competing proposal or (B) Veeco has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of “competing proposal”);
- if the Veeco stockholder approval has not been obtained upon a vote taken thereon at the Veeco stockholders meetings duly convened therefor or at any adjournment or postponement thereof, if (i) a competing proposal for Veeco has been publicly announced or communicated to the Veeco board of directors (and not withdrawn) prior to the date of the Veeco special meeting and (ii) within 12 months after such termination, either (y) Veeco consummates a competing proposal or (z) Veeco has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of “competing proposal”); or
- by either Axcelis or Veeco due to Veeco’s failure to consummate the transactions by the outside date, subject to certain exceptions in the merger agreement, if (i) a competing proposal for Veeco has

been publicly announced or communicated to the Veeco board of directors (and not withdrawn) prior to the date of termination and (ii) within 12 months after such termination, either (y) Veeco consummates a competing proposal or (z) Veeco has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of “competing proposal”).

Veeco will be required to pay to Axcelis a fixed expense reimbursement amount of \$15,000,000 if the merger agreement is terminated:

- by Axcelis, due to Veeco not obtaining the required Veeco stockholder approval during the Veeco stockholder meeting, unless Axcelis does not obtain the required Axcelis stockholder approval during the Axcelis stockholder meeting; or
- by Axcelis due to Veeco’s breach or failure to perform any of its representations, warranties or covenants contained in the merger agreement, which breach or failure to perform would result in a failure of conditions to the merger agreement and which is incapable of being cured by Veeco prior to the outside date or otherwise is not cured by the earlier of (i) 20 business days following written notice to Veeco by Axcelis of such breach or (ii) the first business day prior to the outside date.

Accounting Treatment

The merger will be accounted for using the acquisition method of accounting in accordance with ASC 805, Business Combinations. GAAP requires that one of the companies in the merger be designated as the acquirer for accounting purposes based on the evidence available. Axcelis expects that it will be treated as the acquiring entity for accounting purposes. Accordingly, Axcelis will measure the assets acquired and liabilities assumed at their fair values including net tangible and identifiable intangible assets acquired and liabilities assumed as of the closing date of the merger, with any excess purchase price over those fair values being recorded as goodwill. In identifying Axcelis as the acquiring entity for accounting purposes, Axcelis and Veeco took into account the voting rights of all equity instruments, the intended corporate governance structure of the combined company, and the size of each of the companies. No single factor was the sole determinant in the overall conclusion that Axcelis is the acquirer for accounting purposes, rather all factors were considered in arriving at such conclusion.

Treatment of the Veeco Convertible Notes

In connection with the merger, Veeco, Axcelis and the trustee under the Veeco Convertible Notes Indenture governing the Veeco Convertible Notes are expected to enter into a supplemental indenture to the Veeco Convertible Notes Indenture (to be effective upon completion of the merger) pursuant to which, among other things, the Veeco Convertible Notes will become convertible into Axcelis common stock from and after completion of the merger.

Material U.S. Federal Income Tax Consequences of the Merger

Axcelis and Veeco intend for the merger to qualify as a “reorganization” within the meaning of Section 368(a) of the Code. Provided that, the merger so qualifies, the U.S. federal income tax consequences to U.S. holders (as defined in the section entitled **“Material U.S. Federal Income Tax Consequences of the Merger”** beginning on page 165 of this joint proxy statement/prospectus) will generally be as follows:

No gain or loss will be recognized by, or be includible in the income of, a U.S. holder as a result of the receipt of Axcelis common stock pursuant to the merger agreement, except for any gain or loss recognized with respect to cash received in lieu of a fractional share of Axcelis common stock as described below.

The aggregate tax basis in the shares of Axcelis common stock received by a U.S. holder pursuant to the merger (including fractional shares deemed received) will be equal to such U.S. holder’s aggregate tax basis in its Veeco common stock surrendered in exchange for the Axcelis common stock.

The holding period for the Axcelis common stock received in the merger (including fractional shares deemed received) will include the holding period for the Veeco common stock surrendered in the merger.

The receipt of cash in lieu of a fractional share of Axcelis common stock will be treated as having received such fractional share pursuant to the merger and then as having sold such fractional share for cash. Gain or loss will generally be recognized based on the difference between the amount of cash received in lieu of the fractional share and such U.S. holder's adjusted basis in the fractional share. Such gain or loss will generally be capital gain or loss, and will be long-term capital gain or loss if, as of the effective date of the merger, the U.S. holder's holding period for the relevant shares is greater than one year. For U.S. holders of Veeco common stock that are non-corporate holders, long-term capital gain will generally be taxed at a U.S. federal income tax rate that is lower than the rate for ordinary income or for short-term capital gains. The deductibility of capital losses is subject to limitations.

The obligation of the parties to consummate the merger is not conditioned upon the receipt of a tax opinion from counsel. Further, neither Axcelis nor Veeco intends to seek any ruling from the IRS regarding any matters relating to the transactions. As a result, no assurance can be given that the IRS will not challenge the treatment of the merger as a reorganization or that a court would not sustain such a challenge. If the IRS were to challenge the "reorganization" status of the merger successfully or the form or structure of the merger was changed in a manner such that it did not qualify as a "reorganization," holders of Veeco common stock could be subject to U.S. federal income tax upon the receipt of Axcelis common stock in the merger.

U.S. holders are urged to consult their tax advisors as to the U.S. federal income tax consequences of the merger, including the income tax consequences arising from such U.S. holders' particular circumstances, and as to any estate, gift, state, local or non-U.S. tax consequences arising out of the merger. You should read the section entitled "**Material U.S. Federal Income Tax Consequences of the Merger**" beginning on page 165 of this joint proxy statement/prospectus for a more complete discussion of the U.S. federal income tax consequences of the merger.

Comparison of Stockholders' Rights

Upon completion of the merger, Veeco stockholders receiving shares of Axcelis common stock will become stockholders of the combined company, and their rights will be governed by the DGCL and the governing corporate documents of the combined company in effect at the effective time. Veeco stockholders will have different rights once they become stockholders of the combined company due to differences between the governing corporate documents of Veeco and the proposed governing corporate documents of the combined company, as described in more detail under the section entitled "**Comparison of Stockholders' Rights**" beginning on page 168 of this joint proxy statement/prospectus.

Listing of Axcelis Common Stock; Delisting and Deregistration of Veeco Common Stock

The shares of Axcelis common stock to be issued in connection with the merger are expected to be listed for trading on Nasdaq under a ticker symbol to be mutually agreed by Axcelis and Veeco. It is a condition of the merger that the shares of Axcelis common stock to be issued to Veeco stockholders in the merger be approved for listing on Nasdaq, subject to official notice of issuance. Axcelis will use its reasonable best efforts to cause the shares of Axcelis common stock to be issued in connection with the merger to be approved for listing on Nasdaq.

If the merger is completed, Veeco common stock will be delisted from Nasdaq and deregistered under the Exchange Act, and Veeco will no longer be required to file periodic reports with the SEC with respect to Veeco common stock.

Veeco has agreed to cooperate with Axcelis to take, or cause to be taken, all actions necessary to delist the Veeco common stock from Nasdaq and to terminate their registration under the Exchange Act after the effective time.

Risk Factors

In evaluating the merger agreement, the merger or the issuance of shares of Axcelis common stock in the merger, you should carefully read this joint proxy statement/prospectus and give special consideration to the factors discussed in the section entitled "**Risk Factors**" beginning on page 33 of this joint proxy statement/prospectus.

COMPARISON OF AXCELIS AND VEECO MARKET PRICES AND IMPLIED VALUE OF MERGER CONSIDERATION

The following table presents trading information for Axcelis common stock and Veeco common stock on Nasdaq on September 30, 2025, the last trading day before announcement of the merger, and on December 26, 2025, the most recent practicable trading day before the date of this joint proxy statement/prospectus. The table also shows the estimated equivalent per-share value of the per-share consideration proposed for each share of Veeco common stock as of the same two dates. This estimated equivalent per-share value was calculated by multiplying the closing price of a share of Axcelis common stock on the relevant date by the exchange ratio of 0.3575 shares for each share of Veeco common stock.

	Veeco Common Stock			Axcelis Common Stock			Equivalent Per-Share Value		
	High	Low	Close	High	Low	Close	High	Low	Close
Date									
September 30, 2025 . .	\$30.84	\$30.03	\$30.43	\$98.58	\$95.00	\$97.64	\$35.24	\$33.96	\$34.91
December 26, 2025 . . .	\$29.39	\$29.12	\$29.29	\$83.72	\$82.29	\$82.61	\$29.93	\$29.42	\$29.53

The market prices of Axcelis common stock and Veeco common stock fluctuated prior to and have fluctuated after the date of the announcement of the merger agreement and may continue to fluctuate prior to the completion of the merger. No assurance can be given concerning the market prices of Axcelis common stock or Veeco common stock before completion of the merger or of the market price of the common stock of the combined company after completion of the merger. Because the exchange ratio is fixed and will not be adjusted for changes in the market prices of either Axcelis common stock or Veeco common stock, the market price of Axcelis common stock (and, therefore, the value of the per-share merger consideration) when received by Veeco stockholders after the merger is completed could be greater than, less than or the same as shown in the table above. Accordingly, these comparisons may not provide meaningful information to Axcelis stockholders and Veeco stockholders in determining how to vote with respect to the proposals described in this joint proxy statement/prospectus. Axcelis stockholders and Veeco stockholders are encouraged to obtain current market quotations for Axcelis common stock and Veeco common stock and to review carefully the other information contained in this joint proxy statement/prospectus or incorporated by reference into this joint proxy statement/prospectus. For more information, see the section entitled **“Where You Can Find More Information”** beginning on page 189 of this joint proxy statement/prospectus.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, and the documents to which Axcelis and Veeco refer you to in this registration statement, and any related oral statements, that are not historical facts are forward-looking statements for purposes of the safe harbor provisions under the United States Private Securities Litigation Reform Act of 1995. Statements in this document other than historical facts, such as statements pertaining to: (i) future industry demand for semiconductors and wafer fabrication equipment; (ii) future development of regulatory landscape; (iii) Axcelis' or Veeco's market position for the future; (iv) forecasts of financial measures for future periods; (v) long-term financial targets and underlying assumptions; (vi) the future investment plan of Axcelis, Veeco and the combined company for research and development, technology and infrastructure; (vii) future stockholder returns; and (viii) potential cost synergies or other benefits of a potential transaction between Axcelis and Veeco, are forward-looking statements.

Any statements that involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events, or performance (often but not always using phrases such as "expects" or "does not expect," "is expected," "anticipates" or "does not anticipate," "plans," "budget," "scheduled," "forecasts," "estimates," "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could," "would," "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking information and are intended to identify forward-looking information.

These forward-looking statements are based on current information and assumptions and involve a number of risks and uncertainties, including relating to obtaining applicable regulatory and stockholder approvals, satisfying other closing conditions to the merger, the expected tax treatment of the merger, the expected timing of the merger and the integration of the businesses and the expected benefits, cost savings, accretion, cost synergies and growth to result therefrom. These risks include, among other things:

- failure to obtain applicable regulatory or stockholder approvals in a timely manner or otherwise;
- failure to satisfy other closing conditions to the proposed transaction or to complete the merger on anticipated terms and timing;
- negative effects of the announcement of the merger;
- risks that the businesses will not be integrated successfully or that the combined company will not realize expected benefits, cost savings, accretion, cost synergies and/or growth, or that such benefits may take longer to realize or may be more costly to achieve than expected;
- the risk that disruptions from the proposed transaction will harm business plans and operations;
- risks relating to unanticipated costs of integration;
- significant transaction and/or integration costs, or difficulties in connection with the merger and/or unknown or inestimable liabilities;
- restrictions during the pendency of the merger that may impact the ability to pursue certain business opportunities or strategic transactions;
- potential litigation associated with the merger;
- the potential impact of the announcement or consummation of the merger on Axcelis', Veeco's or the combined company's relationships with suppliers, customers, employees and regulators; and
- demand for the combined company's products.

Actual results may differ materially from those projected in such statements due to various factors, including but not limited to: economic, political and social conditions in the countries in which Axcelis and Veeco, their respective customers and suppliers operate; disruption to Axcelis' and Veeco's respective manufacturing facilities or other operations, or the operations of Axcelis' and Veeco's respective customers and suppliers, due to natural catastrophic events, health epidemics or terrorism; ongoing changes in the technology industry, and the semiconductor industry in particular, including future growth rates, pricing trends in end-markets, or changes in customer capital spending patterns; Axcelis', Veeco's and the combined

company's ability to timely develop new technologies and products that successfully anticipate or address changes in the semiconductor industry; Acelis', Veeco's and the combined company's ability to maintain their respective technology advantage and protect their respective proprietary rights; Acelis', Veeco's and the combined company's ability to compete with new products introduced by their respective competitors; Acelis', Veeco's and the combined company's ability or the ability of their respective customers to obtain U.S. export control licenses for the sale of certain products or provision of certain services to customers in China.

For other factors that may cause actual results to differ materially from those projected and anticipated in forward-looking statements in this joint proxy statement/prospectus, please refer to the section entitled "**Risk Factors**" beginning on page 33 of this joint proxy statement/prospectus, the section entitled "**Where You Can Find More Information**" beginning on page 189 of this joint proxy statement/prospectus, Acelis' most recent Annual Report on Form 10-K and Veeco's most recent Annual Report on Form 10-K, and other subsequent filings with the SEC made by Acelis and/or Veeco. Unless required by law, neither Acelis nor Veeco assumes any obligation to, and does not currently intend to, update these forward-looking statements.

RISK FACTORS

*In deciding whether to vote for the Axcelis share issuance proposal, in the case of Axcelis stockholders, or the Veeco merger agreement proposal, in the case of Veeco stockholders, you are urged to carefully consider all of the information included or incorporated by reference in this joint proxy statement/prospectus, which is listed in the section entitled “**Where You Can Find More Information**” beginning on page 189 of this joint proxy statement/prospectus. You should also read and consider the risks associated with each of the businesses of Axcelis and Veeco because these risks will also affect the combined company. The risks associated with the business of Axcelis can be found in Axcelis’ Annual Report on Form 10-K for the fiscal year ended December 31, 2024 and the risks associated with the business of Veeco can be found in Veeco’s Annual Report on Form 10-K for the fiscal year ended December 31, 2024, as such risks may be updated or supplemented in each company’s subsequently filed Quarterly Reports on Form 10-Q or Current Reports on Form 8-K (excluding any information and exhibits furnished under Item 2.02 or 7.01 thereof), each of which are incorporated by reference into this joint proxy statement/prospectus. In addition, you are urged to carefully consider the following material risks relating to the merger, the business of the combined company, the business of Axcelis, and the business of Veeco.*

Risks Relating to the Merger

The exchange ratio is fixed and will not be adjusted in the event of any change in either Axcelis’ or Veeco’s stock price.

Upon completion of the merger, each share of Veeco common stock issued and outstanding immediately prior to the merger will be converted into and become exchangeable for 0.3575 shares of Axcelis common stock. This exchange ratio is fixed in the merger agreement and will not be adjusted for changes in the market price of either Axcelis common stock or Veeco common stock. The market prices of Axcelis common stock and Veeco common stock have fluctuated prior to and after the date of the announcement of the merger agreement and may continue to fluctuate from the date of this joint proxy statement/prospectus to the date of the Axcelis special meeting and the Veeco special meeting, respectively, and the date the merger is consummated, which could occur a considerable amount of time after the Axcelis special meeting and the Veeco special meeting, and the market price of the common stock of the combined company may continue to fluctuate thereafter.

Because the value of the merger consideration will depend on the market price of Axcelis common stock at the time the merger is completed, Veeco stockholders will not know or be able to determine at the time of the Veeco special meeting the market value of the merger consideration they would receive upon completion of the merger. Similarly, Axcelis stockholders will not know or be able to determine at the time of the Axcelis special meeting the market value of the shares of Axcelis common stock to be issued pursuant to the merger agreement compared to the market value of the shares of Veeco common stock that are being exchanged in the merger.

Stock price changes may result from a variety of factors, including, among others, general market and economic conditions, changes in Axcelis’ or Veeco’s respective businesses, operations and prospects, short-selling activity, changes in and speculation regarding Axcelis’ and Veeco’s respective businesses, operations and prospects, reductions or changes in U.S. government spending or budgetary policies, market assessments of the likelihood that the merger will be completed and/or expectations regarding the timing thereof, interest rates, general market, industry and economic conditions, including the impact of continued inflation and associated changes in monetary policy, and other factors generally affecting the respective prices of Axcelis’ or Veeco’s common stock, federal, state and local legislation, governmental regulation and legal developments in the industry segments in which Axcelis or Veeco operate, and the timing of the merger.

Many of these factors are beyond Axcelis’ and Veeco’s control, and neither Axcelis nor Veeco are permitted to terminate the merger agreement solely due to a decline in the market price of the common stock of the other party. You are urged to obtain current market quotations for Axcelis common stock and Veeco common stock in determining whether to vote for, in the case of Veeco stockholders, the Veeco merger agreement proposal and, in the case of the Axcelis stockholders, the Axcelis share issuance proposal. In

addition, see the section entitled “**Comparison of Axcelis and Veeco Market Prices and Implied Value of Merger Consideration**” beginning on page 30 of this joint proxy statement/prospectus.

The merger may be delayed or may not be completed and the merger agreement may be terminated in accordance with its terms, which could materially and adversely effect Axcelis and/or Veeco.

The merger is subject to a number of conditions that must be satisfied, some of which are beyond the control of Axcelis and Veeco, may not be satisfied or waived in a timely manner or at all, and, accordingly, the merger may be delayed or not completed. These conditions include: the approval by Axcelis stockholders of the Axcelis share issuance proposal and approval by Veeco stockholders of the Veeco merger agreement proposal, approval for listing on Nasdaq of the shares of Axcelis common stock to be issued in connection with the merger (subject to official notice of issuance), the expiration or earlier termination of any applicable waiting period under U.S. antitrust and competition laws, the absence of governmental restraints or prohibitions preventing the consummation of the merger, the effectiveness of the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, and the absence of any stop order by the SEC with respect thereto. The obligation of each of Axcelis and Veeco to consummate the merger is also conditioned on, among other things, the absence of a material adverse effect on the other party, the truth and correctness of the representations and warranties made by the other party on the date of the merger agreement and on the closing date (subject to certain materiality qualifiers), and the performance by the other party in all material respects of its obligations under the merger agreement. No assurance can be given that the required consents and approvals will be obtained or that the required conditions to closing will be satisfied, and, if all required consents and approvals are obtained and the conditions are satisfied, no assurance can be given as to the terms, conditions and timing of such consents and approvals. Any delay in completing the merger could cause the combined company not to realize, or to be delayed in realizing, some or all of the benefits that Axcelis and Veeco expect to achieve if the merger is successfully completed within its expected time frame. Additionally, Axcelis and Veeco may incur significant additional costs in connection with any delay in completing the merger or termination of the Merger Agreement, in addition to significant transaction costs, including legal, financial advisory, accounting and other costs Axcelis and Veeco have already incurred. For a more complete summary of the conditions that must be satisfied or waived prior to completion of the merger, see the section entitled “**The Merger Agreement — Conditions to the Completion of the Merger**” beginning on page 131 of this joint proxy statement/prospectus.

Additionally, either Axcelis or Veeco may terminate the merger agreement under certain circumstances, including, among other reasons, if the merger is not completed by the initial outside date (unless such date has been extended to the first extended outside date or the second extended outside date). In addition, if the merger agreement is terminated under certain circumstances specified in the merger agreement, Axcelis may be required to pay Veeco a termination fee of \$108,700,000 or Veeco may be required to pay Axcelis a termination fee of \$77,500,000. In addition, if the merger agreement is terminated under certain circumstances specified in the merger agreement, Axcelis may be required to pay Veeco, or Veeco may be required to pay Axcelis, a fixed expense reimbursement of \$15,000,000. See the section entitled “**The Merger Agreement — Termination of the Merger Agreement**” beginning on page 132 of this joint proxy statement/prospectus and the section entitled “**The Merger Agreement — Termination Fees**” beginning on page 133 of this joint proxy statement/prospectus for a more complete discussion of the circumstances under which the merger agreement could be terminated and when a termination fee or fixed expense reimbursement may be payable by Axcelis or Veeco.

If the merger is not completed for any reason, including as a result of a failure to obtain the required Axcelis stockholder vote to approve the Axcelis share issuance proposal or the required Veeco stockholder vote to approve the Veeco merger agreement proposal, the ongoing businesses of Axcelis and Veeco may be adversely affected and, without realizing any of the benefits of having completed the merger, Axcelis and Veeco would be subject to a number of risks, including the following:

- each company may experience negative reactions from the financial markets, including negative impacts on its stock price;
- each company may experience negative reactions from its suppliers, customers and employees;
- each company will be required to pay their respective costs relating to the merger, such as financial advisory, legal and accounting costs and associated fees and expenses, including, if applicable, a termination fee (with certain exceptions), whether or not the merger is completed;

- matters relating to the merger (including integration planning) will require substantial commitments of time and resources by Axcelis management and Veeco management, which could otherwise have been devoted to day-to-day operations, other strategic opportunities or to other opportunities that may have been beneficial to Axcelis or Veeco, as applicable, as an independent company.

The market price for shares of common stock of the combined company following the completion of the merger may be affected by factors different from, or in addition to, those that historically have affected or currently affect the market prices of shares of Axcelis common stock and Veeco common stock.

Upon consummation of the merger, Axcelis stockholders and Veeco stockholders will both hold shares of common stock in the combined company. The businesses of Axcelis and Veeco differ from each other, and, accordingly, the results of operations of the combined company will be affected by some factors that are different from those currently or historically affecting the separate results of operations, as well as the market price of the common stock, of Axcelis and Veeco. Additionally, the market price of the combined company's common stock may fluctuate significantly following completion of the merger. For a discussion of the businesses of each of Axcelis and Veeco and some important factors to consider in connection with those businesses, please see the section entitled "**Summary — The Parties to the Merger**" beginning on page 15 of this joint proxy statement/prospectus and the documents and information included elsewhere in this joint proxy statement/prospectus or incorporated by reference into this joint proxy statement/prospectus and listed under the section entitled "**Where You Can Find More Information**" beginning on page 189 of this joint proxy statement/prospectus.

Regulatory approvals may not be received, may take longer than expected or may impose conditions that are not presently anticipated or that cannot be met.

Consummation of the merger is conditioned upon, among other things, the expiration or termination of the waiting period (and any extensions thereof) applicable to the merger under the HSR Act and the approval of the merger by the State Administration for Market Regulation in the People's Republic of China. In addition, the merger is conditioned on the approval of filings as these relate to foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom, with respect to transactions contemplated by the merger agreement. Any such requirements or restrictions may prevent or delay completion of the merger or may reduce the anticipated benefits of the merger, which could also have a material adverse effect on the combined company's business and cash flows, financial condition and results of operations. The regulatory approvals are described in more detail in the section entitled "**The Merger Agreement — Cooperation; Efforts to Consummate**" beginning on page 126 of this joint proxy statement/prospectus.

Holders of shares of common stock of the combined company to be received by Veeco stockholders as a result of the merger will have rights different from the shares of Veeco common stock.

Upon consummation of the merger, the rights of Veeco stockholders, who will become stockholders of the combined company, will be governed by the amended and restated Axcelis charter and the Axcelis bylaws. The rights associated with Veeco common stock are different from the rights which will be associated with the common stock of the combined company. See the section entitled "**Comparison of Stockholders' Rights**" beginning on page 168 of this joint proxy statement/prospectus for a discussion of these rights.

Axcelis stockholders and Veeco stockholders will each have reduced ownership and voting interest in the combined company as compared to ownership and voting interest in each of Axcelis and Veeco on a standalone basis.

Upon consummation of the merger, each Axcelis stockholder and each Veeco stockholder will become a stockholder of the combined company with a percentage ownership of the combined company that is smaller than such stockholder's percentage ownership of Axcelis or Veeco, as applicable, immediately prior to the effective time of the merger. As of the date of this joint proxy statement/prospectus, based on the exchange ratio and the fully diluted number of shares of Axcelis common stock and Veeco common stock as of September 29, 2025, Axcelis stockholders will own approximately 58.1% and Veeco stockholders will own approximately 41.9% of the issued and outstanding shares of the combined company (based on fully diluted shares outstanding of the combined company) immediately following the completion of the merger.

Because of this, each share of Axcelis common stock and each share of Veeco common stock will represent a smaller percentage ownership of the combined company than it represented in Axcelis or Veeco, respectively. Accordingly, Axcelis stockholders and Veeco stockholders will have less voting power in the combined company than they now have in Axcelis or Veeco and will be able to exercise less influence over the management and policies of the combined company following the consummation of the merger than they are able to exercise over Axcelis or Veeco, as applicable, immediately prior to the consummation of the merger.

The merger agreement may prevent Axcelis and Veeco from entering into certain transactions and taking certain actions that might otherwise be beneficial to Axcelis or Veeco and their respective stockholders

Until the completion of the merger or the termination of the merger agreement in accordance with its terms, Axcelis and Veeco are each prohibited from entering into certain transactions and taking certain actions that might otherwise be beneficial to Axcelis or Veeco and their respective stockholders.

From and after the date of the merger agreement and prior to completion of the merger, the merger agreement restricts Axcelis and Veeco from taking specified actions without the consent of the other party and requires that the business of each company and its respective subsidiaries be conducted in all material respects in the ordinary course of business consistent with past practice. These restrictions, which could be in place for an extended period of time if the completion of the merger is delayed, may prevent Axcelis or Veeco from making appropriate changes to their respective businesses or organizational structures or from pursuing attractive business opportunities that may arise prior to the completion of the merger, and could have the effect of delaying or preventing other strategic transactions. Adverse effects arising from the pendency of the merger could be exacerbated by any delays in consummation of the merger or termination of the merger agreement. See the section entitled **“The Merger Agreement — Conduct of Business Prior to the Effective Time”** beginning on page 119 of this joint proxy statement/prospectus.

Litigation against Axcelis and Veeco, could prevent or delay the completion of the merger or result in the payment of damages following completion of the merger.

Axcelis and Veeco have received several demand letters from purported Axcelis and Veeco stockholders regarding alleged disclosure deficiencies in the preliminary joint proxy statement/prospectus filed on December 8, 2025 with the SEC. In the future, Axcelis stockholders and Veeco stockholders may file additional lawsuits challenging the merger or the other transactions contemplated by the merger agreement, which may name Axcelis, Veeco and/or members of their respective boards of directors as defendants. The results of any such potential legal proceedings are difficult to predict, and could delay or prevent the merger from becoming effective in a timely manner. The existence of litigation related to the merger could affect the likelihood of obtaining the required approval from Axcelis stockholders or Veeco stockholders. Further, one of the conditions to the completion of the merger is that no law or order by any governmental entity of competent jurisdiction, such as a court, is in effect that prohibits, restrains or makes illegal the consummation of the merger. As such, if any future legal actions result in a law or order prohibiting the consummation of the merger, then such law or order may prevent the consummation of the merger on the agreed terms, within the expected timeframe or at all, any of which could substantially harm Axcelis' and Veeco's respective businesses. Moreover, any litigation could be time consuming and expensive, could divert Axcelis and Veeco's management's attention away from their regular business and, if any lawsuit is adversely resolved against either Axcelis, Veeco, Veeco, or members of their respective boards of directors (each of whom Axcelis and Veeco is required to indemnify pursuant to indemnification agreements), could have a material adverse effect on Axcelis or Veeco's financial condition.

Failure to attract, motivate and retain executives and other key employees could diminish the anticipated benefits of the merger.

The success of the merger will depend in part on the retention of personnel critical to the business and operations of the combined company due to, for example, their technical skills or management expertise. Current and prospective employees of Axcelis and Veeco may experience uncertainty about their future role with Axcelis and Veeco until strategies with regard to these employees' roles in the combined company are announced or executed, which may impair Axcelis' and Veeco's ability to attract, retain and motivate key

management, sales, marketing, technical and other personnel prior to and following the merger. If Axcelis and Veeco are unable to retain personnel, including Axcelis' and Veeco's key management, who are critical to the successful integration and future operations of the companies, Axcelis and Veeco could face disruptions in their respective operations, loss of existing customers or loss of sales to existing customers, loss of key information, expertise or know-how, and unanticipated additional recruitment and training costs. In addition, the loss of key personnel could diminish the anticipated benefits of the merger.

If key employees of Axcelis or Veeco depart, the integration of the companies may be more difficult and the combined company's business following the merger may be harmed. Furthermore, the combined company may have to incur significant costs in identifying, hiring and retaining replacements for departing employees and may lose significant expertise and talent relating to the business of each of Axcelis or Veeco, and the combined company's ability to realize the anticipated benefits of the merger may be adversely affected. In addition, there could be disruptions to or distractions for the workforce and management associated with activities of labor unions or integrating employees into the combined company. No assurance can be given that the combined company will be able to attract or retain key employees of Axcelis and Veeco to the same extent that those companies have been able to attract or retain their own employees in the past.

The merger, and uncertainty regarding the merger, may cause customers, suppliers or strategic partners to delay or defer decisions concerning Axcelis and Veeco and materially and adversely affect each company's ability to effectively manage their respective businesses.

The merger will happen only if the stated conditions are met, including the relevant stockholder approvals, among other conditions. Many of the conditions are outside the control of Axcelis and Veeco, and both parties also have certain rights to terminate the merger agreement. Accordingly, there may be uncertainty regarding the completion of the merger. This uncertainty may cause customers, suppliers, vendors, strategic partners or others that deal with Axcelis or Veeco to delay or defer entering into contracts with Axcelis or Veeco or making other decisions concerning Axcelis or Veeco or could cause such customers, suppliers, vendors, strategic partners or others to seek to change or cancel existing business relationships with Axcelis or Veeco, which could negatively affect their respective businesses. Any delay or deferral of those decisions or changes in existing agreements could have a material adverse impact on the respective businesses of Axcelis and Veeco, regardless of whether the merger is ultimately completed.

Whether or not the merger is completed, the announcement and pendency of the merger will divert significant management resources to complete the merger, which could have a material adverse effect on Axcelis' and Veeco's respective businesses, financial results, and/or market prices.

Whether or not the merger is completed, the announcement and pendency of the merger could cause disruptions in the businesses of Axcelis and Veeco by directing the attention of management of each of Axcelis and Veeco toward the completion of the merger. Axcelis and Veeco have each diverted significant management resources in an effort to complete the merger and are each subject to restrictions contained in the merger agreement on the conduct of their respective businesses in the period prior to the completion of the merger. If the merger is not completed, Axcelis and Veeco will have incurred significant costs, including the diversion of management resources, for which they will have received little or no benefit.

The merger agreement contains provisions that may discourage other companies from trying to enter into a strategic transaction with either Axcelis and Veeco's for greater consideration.

The merger agreement contains provisions that may discourage other companies from trying to enter into a strategic transaction with either Axcelis or Veeco for a greater consideration. The Merger Agreement contains provisions that preclude Axcelis and Veeco from pursuing alternatives to the merger and requires Axcelis and Veeco to refrain from soliciting, initiating or knowingly encouraging or knowingly inducing, or taking any other action intentionally designed to facilitate, any inquiries or the making of any competing proposals from third parties or to engage in discussions or negotiations with third parties regarding any competing proposals, subject to certain exceptions. With respect to any unsolicited written, bona fide acquisition proposal that Axcelis or Veeco receives, if it is deemed to be a superior proposal, the other party generally has an opportunity to offer to modify the terms of the merger agreement in response to such

proposal before the Axcelis board of directors or Veeco board of directors, as applicable, may withdraw or modify its recommendation to stockholders in response to such acquisition proposal. Further, upon termination of the merger agreement under certain circumstances, Axcelis may be required to pay Veeco, and Veeco may be required to pay Axcelis, a termination fee of \$108,700,000 and \$77,500,000, respectively, depending on the circumstances giving rise to the termination, which may discourage a potential third-party merger partner from making an alternative transaction proposal, even if it were prepared to pay consideration with a higher value than implied in the merger, or cause such third-party to propose to pay a lower price than it might otherwise have proposed to pay because of the added expense of the termination fee. For further information, please see the section entitled “**The Merger Agreement — Permitted Change of Recommendation**” beginning on page 124 of this joint proxy statement/prospectus.

The market price of the combined company’s common stock may be volatile, and holders of the combined company’s common stock could lose a significant portion of their investment due to decreases in the market price of the combined company’s common stock following completion of the merger.

The market price of the combined company’s common stock may be volatile, and following completion of the merger, stockholders may not be able to resell their Axcelis common stock at or above the price at which they acquired the common stock pursuant to the merger agreement or otherwise due to fluctuations in its market price, including changes in price caused by factors unrelated to the combined company’s operating performance or prospects.

Specific factors that may have a significant effect on the market price for the combined company’s common stock include, among others, the following:

- changes in stock market analyst recommendations or earnings estimates regarding the combined company’s common stock, other companies comparable to it or companies in the industries they serve;
- actual or anticipated fluctuations in the combined company’s operating results or future prospects;
- reaction to public announcements by the combined company;
- strategic actions taken by the combined company or its competitors, such as any contemplated business separation, acquisitions or restructurings;
- failure of the combined company to achieve the perceived benefits of the transactions, including financial results and anticipated cost synergies, as rapidly as or to the extent anticipated by financial or industry analysts;
- adverse conditions in the financial market or general U.S. or international economic conditions, including those resulting from war, incidents of terrorism and responses to such events; and
- sales of common stock by the combined company, members of its management team or significant stockholders.

The directors and executive officers of Axcelis and Veeco have interests and arrangements that may be different from, or in addition to, those of Axcelis and Veeco stockholders generally.

When considering the recommendations of the boards of directors of Axcelis or Veeco, as applicable, with respect to the proposals described in this joint proxy statement/prospectus, stockholders should be aware that the directors and executive officers of each of Axcelis and Veeco have interests in the merger that are different from, or in addition to, those of Axcelis stockholders and Veeco stockholders generally. These interests include the continued employment of certain executive officers of Axcelis and Veeco by the combined company, the continued service of certain directors of Axcelis and Veeco as directors of the combined company, the treatment in the merger of outstanding equity, equity-based and incentive awards, severance arrangements, and other compensation and benefit arrangements, and the right to continued indemnification of former Axcelis and Veeco directors and officers by the combined company.

Axcelis stockholders and Veeco stockholders should be aware of these interests when they consider the recommendations of the respective Axcelis and Veeco boards of directors that they vote in favor of the Axcelis share issuance proposal, in the case of Axcelis, or the Veeco merger agreement proposal, in the case of Veeco. The interests of Axcelis’ directors and executive officers are described in more detail in the section

entitled “**Interests of Axcelis’ Directors and Executive Officers in the Merger**” beginning on page 156 of this joint proxy statement/prospectus, and the interests of Veeco’s directors and executive officers are described in more detail in the section entitled “**Interests of Veeco’s Directors and Executive Officers in the Merger**” beginning on page 157 of this joint proxy statement/prospectus.

Axcelis or Veeco may waive one or more of the closing conditions without re-soliciting stockholder approval.

Axcelis or Veeco may determine to waive, in whole or part, one or more of the conditions to its obligations to consummate the merger. Axcelis and Veeco currently expect to evaluate the materiality of any waiver and its effect on Axcelis and Veeco stockholders, as applicable, in light of the facts and circumstances at the time to determine whether any amendment of this joint proxy statement/prospectus or any re-solicitation of proxies or voting cards is required in light of such waiver. Any determination whether to waive any condition to the merger or as to re-soliciting stockholder approval or amending this joint proxy statement/prospectus as a result of a waiver will be made by Axcelis and Veeco, as applicable, at the time of such waiver based on the facts and circumstances as they exist at that time.

Each of Axcelis and Veeco will incur significant transaction, merger-related and restructuring costs in connection with the merger.

Axcelis and Veeco have each incurred and expect to incur a number of non-recurring costs associated with combining the operations of the two companies, as well as transaction fees and other costs related to the merger. These costs and expenses include fees paid to financial, legal and accounting advisors, facilities and systems consolidation costs, severance and other potential employment-related costs, including retention and severance payments that may be made to certain Axcelis employees and Veeco employees, filing fees, printing expenses and other related charges. Some of these costs are payable by Axcelis or Veeco regardless of whether the merger is completed.

The combined company will also incur restructuring and integration costs in connection with the merger. The costs related to restructuring will be expensed as a cost of the ongoing results of operations of either Axcelis or Veeco or the combined company. There are a large number of processes, policies, procedures, operations, technologies and systems that must be integrated in connection with the merger and the integration of the two companies’ businesses. Although Axcelis and Veeco expect that the elimination of duplicative costs, strategic benefits, additional income and the realization of other efficiencies related to the integration of the businesses may offset incremental transaction, merger-related and restructuring costs over time, any net benefit may not be achieved in the near term or at all. While both Axcelis and Veeco have assumed that certain expenses would be incurred in connection with the merger and the other transactions contemplated by the merger agreement, there are many factors beyond their control that could affect the total amount or the timing of the integration and implementation expenses.

Axcelis stockholders and Veeco stockholders will not be entitled to appraisal rights in the merger.

Appraisal rights are statutory rights that, if applicable under law, enable stockholders of a corporation to dissent from an extraordinary transaction, such as a merger, and to demand that such corporation pay the fair value for their shares as determined by a court in a judicial proceeding instead of receiving the consideration offered to such stockholders in connection with the transaction. Under the DGCL, stockholders do not have appraisal rights if the shares of stock they hold are either listed on a national securities exchange or held of record by more than 2,000 holders. Notwithstanding the foregoing, appraisal rights are available if stockholders are required by the terms of the merger agreement to accept for their shares anything other than (i) shares of stock of the surviving corporation, (ii) shares of stock of another corporation that will either be listed on a national securities exchange or held of record by more than 2,000 holders, (iii) cash in lieu of fractional shares or (iv) any combination of the foregoing.

Because the merger is of Merger Sub with and into Veeco and holders of Axcelis common stock may continue to hold their shares following completion of the merger, holders of Axcelis common stock are not entitled to appraisal rights in the merger.

Because shares of Axcelis common stock are listed on Nasdaq, a national securities exchange, and because Veeco stockholders are not required by the terms of the merger agreement to accept for their shares

anything other than shares of Axcelis common stock and cash in lieu of fractional shares, holders of Veeco common stock will not be entitled to appraisal rights in the merger. See the section entitled “**No Appraisal Rights**” beginning on page 181 of this joint proxy statement/prospectus.

Risks Relating to the Combined Company

Combining the businesses of Axcelis and Veeco may be more difficult, costly or time-consuming than expected, and the combined company may fail to realize the anticipated benefits of the merger, which may materially and adversely affect the combined company’s business results and the value of the common stock of the combined company following the merger.

The success of the merger will depend on, among other things, the ability of Axcelis and Veeco to combine their businesses in a manner that realizes cost savings and facilitates growth opportunities.

Axcelis and Veeco must successfully combine their respective businesses in a manner that permits these benefits to be realized. For example, the combined company may not have sufficient capital on hand or generated from operations to continue funding operations as anticipated. In addition, the combined company must achieve the anticipated growth and cost savings without adversely affecting current revenues and investments in future growth. If the combined company is not able to successfully achieve these objectives, the anticipated benefits of the merger may not be realized fully, or at all, or may take longer to realize than expected.

An inability to realize the full extent of the anticipated benefits of the merger and the other transactions contemplated by the merger agreement, as well as any delays encountered in the integration process, could have an adverse effect upon the revenues, level of expenses and operating results of the combined company, which may materially and adversely affect the value of the common stock of the combined company after the completion of the merger.

In addition, the actual integration may result in additional and unforeseen expenses, and the anticipated benefits of the integration plan may not be realized. Actual growth and cost savings, if achieved, may be lower than what Axcelis and Veeco expect and may take longer to achieve than anticipated. If Axcelis and Veeco are not able to adequately address integration challenges, they may be unable to realize the anticipated benefits of the integration of the two companies.

The failure to successfully integrate the businesses and operations of Axcelis and Veeco in the expected time frame may adversely affect the combined company’s future results.

Axcelis and Veeco have operated and, until the completion of the merger, will continue to operate independently. There can be no assurances that their businesses can be integrated successfully. It is possible that the integration process could result in the loss of key Axcelis employees or key Veeco employees, the loss of customers, the disruption of either company’s or both companies’ ongoing businesses, inconsistencies in standards, controls, procedures and policies, unexpected integration issues, higher-than-expected integration costs and an overall post-completion integration process that takes longer than originally anticipated. Specifically, the following issues, among others, must be addressed in integrating the operations of Axcelis and Veeco in order to realize the anticipated benefits of the merger so the combined company performs as expected:

- combining the companies’ operations and corporate functions;
- combining the businesses of Axcelis and Veeco and meeting the capital requirements of the combined company in a manner that permits the combined company to achieve any cost synergies and revenue growth of the combined company anticipated to result from the merger, the failure of which would result in the anticipated benefits of the merger not being realized in the time frame currently anticipated or at all;
- integrating personnel from the two companies;
- integrating and unifying the offerings and services available to customers;

- harmonizing the companies' operating practices, employee development and compensation programs, internal controls and other policies, procedures and processes;
- maintaining existing agreements with customers, distributors, providers and vendors and avoiding delays in entering into new agreements with prospective customers, distributors, providers and vendors;
- addressing possible differences in business backgrounds, corporate cultures and management philosophies;
- consolidating the companies' administrative and information technology infrastructure;
- coordinating distribution and marketing efforts; and
- coordinating geographically dispersed operations.

In addition, at times the attention of certain members of either company's or both companies' management and resources may be focused on completion of the merger and the integration of the businesses of the two companies and diverted from day-to-day business operations or other opportunities that may have been beneficial to such company, which may disrupt each company's ongoing business and the business of the combined company.

The combined company may not be able to retain customers or suppliers or customers or suppliers may seek to modify contractual obligations with the combined company, which could have a material adverse effect on the combined company's business and operations. Third parties may terminate or alter existing contracts or relationships with Axcelis or Veeco.

As a result of the merger, the combined company may experience impacts on relationships with customers and suppliers that may harm the combined company's business and results of operations. Certain customers, licensors, business partners or suppliers may seek to terminate or modify contractual obligations following the merger whether or not contractual rights are triggered as a result of the merger. There can be no guarantee that customers and suppliers will remain with or continue to have a relationship with the combined company or do so on the same or similar contractual terms following the merger. If any customers or suppliers seek to terminate or modify contractual obligations or discontinue the relationship with the combined company, then the combined company's business and results of operations may be harmed. Furthermore, the combined company will not have long-term arrangements with many of its significant suppliers. If the combined company's suppliers were to seek to terminate or modify an arrangement with the combined company, then the combined company may be unable to procure necessary supplies from other suppliers in a timely and efficient manner and on acceptable terms, or at all. Any of the aforementioned disruptions could limit the combined company's ability to achieve the anticipated benefits of the merger. The adverse effect of any such disruptions could be material and could be exacerbated by a delay in the completion of the merger or by a termination of the merger agreement.

The combined company may be exposed to increased litigation, which could have a material adverse effect on the combined company's business and operations.

The combined company may be exposed to increased litigation from stockholders, customers, suppliers, consumers and other third parties due to the combination of Axcelis' business and Veeco's business following the merger. Such litigation may have a material adverse impact on the combined company's business and results of operations or may cause disruptions to the combined company's operations.

The unaudited pro forma condensed combined financial information and certain financial forecasts included in this joint proxy statement/prospectus may not be indicative of the combined company's actual financial position or results of operations.

The unaudited pro forma condensed combined financial information included in this joint proxy statement/prospectus is presented solely for illustrative purposes and is not necessarily indicative of what the combined company's actual financial position or results of operations would have been had the merger been completed on the dates indicated. This unaudited pro forma condensed combined financial information reflects adjustments that were developed using preliminary estimates based on available information and

various assumptions, and may be revised as additional information becomes available. Accordingly, the final acquisition accounting adjustments may differ materially from the pro forma adjustments reflected in this joint proxy statement/prospectus.

While presented with numeric specificity, the Axcelis and Veeco unaudited projected financial forecasts provided in this joint proxy statement/prospectus are based on numerous variables and assumptions (including, but not limited to, those related to industry performance and competition, general business, the semiconductor and related industries, and economic, market and financial conditions and additional matters specific to Axcelis' or Veeco's respective businesses) that are inherently subjective and uncertain and are beyond the control of the respective management teams of Axcelis and Veeco. As a result, actual results may differ materially from the unaudited projected financial forecasts. Important factors that may affect actual results and cause these unaudited projected financial forecasts to not be achieved include, but are not limited to, risks and uncertainties relating to Axcelis' or Veeco's respective businesses (including each company's ability to achieve strategic goals, objectives and targets over applicable periods), industry performance, general business and economic conditions. See "**The Merger — Certain Financial Forecasts Utilized in Connection with the Merger**" beginning on page 104 of this joint proxy statement/prospectus.

Axcelis and Veeco will incur significant costs in connection with the integration of the combined company.

There are a large number of processes, policies, procedures, operations, technologies and systems that must be integrated in connection with the merger. While both Axcelis and Veeco have assumed that a certain level of expenses would be incurred in connection with the merger and the other transactions contemplated by the merger agreement, there are many factors beyond their control that could affect the total amount of, or the timing of, anticipated expenses with respect to the integration and implementation of the combined businesses.

There may also be additional unanticipated significant costs in connection with the merger that the combined company may not recoup. These costs and expenses could reduce the benefits and additional income the combined company expects to achieve from the merger. Although Axcelis and Veeco expect that these benefits will offset the transaction expenses and implementation costs over time, this net benefit may not be achieved in the near term or at all.

The combined company will be exposed to the risks related to international sales and operations.

Axcelis and Veeco each derive a large portion of their total revenue from operations outside of the United States. Therefore, the combined company will have exposure to risks of operating in many foreign countries, including:

- difficulties and costs associated with complying with a wide variety of complex laws, treaties and regulations;
- difficulties in obtaining required export licenses and other regulatory approvals;
- unexpected changes in political or regulatory environments;
- labor compliance and costs associated with a global workforce;
- earnings and cash flows that may be subject to tax withholding requirements or the imposition of tariffs;
- exchange controls or other restrictions; and
- restrictions on, or difficulties and costs associated with, the repatriation of cash from foreign countries to the United States.

Third parties may terminate or alter existing contracts or relationships with Axcelis or Veeco.

Veeco has contracts with customers, suppliers, distributors, vendors, landlords, licensors and other business partners which may require Veeco to obtain consent from these other parties in connection with the merger. If these consents cannot be obtained, the combined company may suffer a loss of potential future revenue and may lose rights that are material to Veeco's business and the business of the combined company.

In addition, third parties with whom Axcelis or Veeco currently have relationships may terminate or otherwise reduce the scope of their relationship with either party in anticipation of the merger. Any such disruptions could limit the combined company's ability to achieve the anticipated benefits of the merger. The adverse effect of such disruptions could be material and could be exacerbated by a delay in the completion of the merger or the termination of the merger agreement.

Risks Relating to Axcelis' Business

Axcelis' business will continue to be subject to the risks described in the sections entitled "Risk Factors" in Axcelis' Annual Report on Form 10-K for the fiscal year ended December 31, 2024, in Axcelis' Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2025 and September 30, 2025, and in other documents incorporated by reference into this joint proxy statement/prospectus. See the section entitled "**Where You Can Find More Information**" beginning on page 189 of this joint proxy statement/prospectus for the location of information incorporated by reference into this joint proxy statement/prospectus.

Risks Relating to Veeco's Business

Veeco's business will continue to be subject to the risks described in the sections entitled "Risk Factors" in Veeco's Annual Report on Form 10-K for the fiscal year ended December 31, 2024, in Veeco's Quarterly Report on Form 10-Q for the quarterly periods ended March 31, 2025 and September 30, 2025, and in other documents incorporated by reference into this joint proxy statement/prospectus. See the section entitled "**Where You Can Find More Information**" beginning on page 189 of this joint proxy statement/prospectus for the location of information incorporated by reference into this joint proxy statement/prospectus.

THE PARTIES TO THE MERGER

Axcelis Technologies, Inc.

*108 Cherry Hill Drive
Beverly, Massachusetts 01915
(978) 787-4000*

Axcelis designs, manufactures and services ion implantation and other processing equipment used in the fabrication of semiconductor chips. In addition to equipment, Axcelis provides extensive aftermarket lifecycle products and services, including used tools, spare parts, equipment upgrades, maintenance services and customer training. Axcelis' principal executive office is located at 108 Cherry Hill Drive, Beverly, MA 01915. Its telephone number is (978) 787-4000.

Axcelis common stock is listed on Nasdaq under the ticker symbol "ACLS."

Additional information about Axcelis is included in the documents incorporated by reference into this joint proxy statement/prospectus. See the section entitled "**Where You Can Find More Information**" beginning on page 189 of this joint proxy statement/prospectus.

Victory Merger Sub, Inc.

*1209 Orange Street
Wilmington, New Castle County, Delaware 19801*

Merger Sub, a newly formed and wholly owned subsidiary of Axcelis, is a Delaware corporation that was formed on September 29, 2025, for the sole purpose of effecting the merger. Under the merger agreement, Merger Sub will merge with and into Veeco as of the effective time, and Veeco will continue as the surviving corporation and a wholly owned subsidiary of Axcelis.

Veeco Instruments Inc.

*1 Terminal Drive
Plainview, NY 11803*

Veeco is a manufacturer of advanced semiconductor process equipment that solves an array of challenging materials engineering problems for their customers. Veeco's comprehensive collection of ion beam, laser annealing, metal organic chemical vapor deposition, chemical vapor deposition, advanced packaging lithography, single wafer wet processing, molecular beam epitaxy, and atomic layer deposition technologies play an integral role in the fabrication of key devices. Veeco's principal executive office is located at 1 Terminal Drive Plainview, NY 11803. Its telephone number is (516) 677-0200.

Veeco's common stock is listed on Nasdaq under the ticker symbol "VECO."

Additional information about Veeco is included in the documents incorporated by reference into this joint proxy statement/prospectus. See the section entitled "**Where You Can Find More Information**" beginning on page 189 of this joint proxy statement/prospectus.

THE AXCELIS SPECIAL MEETING

This joint proxy statement/prospectus is being mailed on or about December 31, 2025 to holders of record of Axcelis common stock as of the close of business on December 26, 2025 and constitutes notice of the Axcelis special meeting in conformity with the requirements of the DGCL and the Axcelis bylaws.

This joint proxy statement/prospectus is being provided to Axcelis stockholders as part of a solicitation of proxies by the Axcelis board of directors for use at the Axcelis special meeting and at any adjournments or postponements of the Axcelis special meeting. Axcelis stockholders are encouraged to read this entire document carefully, including the annexes to and documents incorporated by reference into this document, for more detailed information regarding the merger agreement and the transactions contemplated by the merger agreement.

Date, Time and Place of the Axcelis Special Meeting

The Axcelis special meeting is scheduled to be held at the offices of Axcelis at 108 Cherry Hill Drive, Beverly, Massachusetts, on February 6, 2026, beginning at 11:00 a.m., Eastern Time, unless adjourned or postponed to a later date and/or time.

Matters to be Considered at the Axcelis Special Meeting

The purposes of the Axcelis special meeting are as follows, each as further described in this joint proxy statement/prospectus:

- *Axcelis Proposal #1: Axcelis Share Issuance Proposal.* To consider and vote on the Axcelis share issuance proposal; and
- *Axcelis Proposal #2: Axcelis Adjournment Proposal.* To consider and vote on the Axcelis adjournment proposal.

Recommendation of the Axcelis Board of Directors

The Axcelis board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Axcelis stockholders vote:

- *Axcelis Proposal #1: “FOR” the Axcelis share issuance proposal; and*
- *Axcelis Proposal #2: “FOR” the Axcelis adjournment proposal.*

After careful consideration, the Axcelis board of directors (1) adopted and approved the merger agreement and the consummation of the transactions upon the terms and conditions set forth in the merger agreement, (2) determined that the terms of the merger agreement, the merger and the other transactions are fair to, and in the best interests of, Axcelis and its stockholders, (3) directed that the Axcelis share issuance proposal be submitted to the stockholders of Axcelis for approval, (4) recommended that the stockholders of Axcelis approve the Axcelis share issuance proposal and (5) declared that the Axcelis share issuance proposal is advisable.

See also the section entitled “**The Merger — Recommendation of the Axcelis Board of Directors; Axcelis’ Reasons for the Merger**” beginning on page 83 of this joint proxy statement/prospectus.

Record Date for the Axcelis Special Meeting and Voting Rights

The record date to determine who is entitled to receive notice of and to vote at the Axcelis special meeting is December 26, 2025. As of the close of business on the Axcelis record date, there were 30,699,201 shares of Axcelis common stock issued and outstanding, each entitled to vote at the Axcelis special meeting. Each Axcelis stockholder will have one vote for any matter properly brought before the Axcelis special meeting for each share of Axcelis common stock such holder held at the close of business on the Axcelis record date. Only Axcelis stockholders of record at the close of business on the Axcelis record date are entitled to receive notice of and to vote at the Axcelis special meeting.

Quorum; Abstentions and Broker Non-Votes

A quorum of stockholders is necessary to conduct the Axcelis special meeting. The holders of a majority in voting power of the shares of Axcelis common stock issued and outstanding and entitled to vote at the meeting must be represented at the Axcelis special meeting in person or by proxy in order to constitute a quorum. Abstentions will be counted for purposes of determining whether a quorum exists. If a quorum is not present, the Axcelis special meeting will be adjourned until the holders of the number of shares of Axcelis common stock required to constitute a quorum attend, whether in person or by proxy.

Banks, brokers or other nominees who hold shares in “street name” for a beneficial owner of those shares may have the authority to vote in their discretion on “routine” proposals when they have not received instructions from beneficial owners. However, banks, brokers or other nominees are not allowed to exercise their voting discretion with respect to the approval of matters that are “non-routine.” Generally, a broker non-vote occurs on an item when (i) a bank, broker or other nominee has discretionary authority to vote on one or more “routine” proposals to be voted on at a meeting of stockholders, but is not permitted to vote on other “non-routine” proposals without instructions from the beneficial owner of the shares and (ii) the beneficial owner fails to provide the bank, broker or other nominee with such instructions. “Non-routine” matters include the Axcelis share issuance proposal (Axcelis Proposal #1) and the Axcelis adjournment proposal (Axcelis Proposal #2). If you hold your shares of Axcelis common stock in “street name,” your shares will not be voted on any matter unless you affirmatively instruct your bank, broker or other nominee how to vote your shares in one of the ways indicated by your bank, broker or other nominee. It is therefore critical that you cast your vote by instructing your bank, broker or other nominee on how to vote. **The rules governing brokers’ discretionary authority will not permit brokers to exercise discretionary authority regarding the Axcelis share issuance proposal or the Axcelis adjournment proposal, to be voted on at the Axcelis special meeting.**

If you submit a properly executed proxy card, even if you abstain from voting or vote against the adoption of the Axcelis share issuance proposal or the Axcelis adjournment proposal, your shares of Axcelis common stock will be counted for purposes of calculating whether a quorum is present at the Axcelis special meeting. Validly executed proxies without voting instructions for a proposal(s) will be voted in accordance with the recommendations of the Axcelis board of directors. If additional votes must be solicited to adopt the Axcelis share issuance proposal, it is expected that the meeting will be adjourned to solicit additional proxies.

Required Votes; Vote of Axcelis’ Directors and Executive Officers

Proposal	Votes Necessary
Axcelis Proposal #1	Axcelis share issuance proposal Assuming the presence of a quorum, approval requires the affirmative vote of the holders of a majority in voting power of the votes cast (excluding abstentions and broker non-votes) at the Axcelis special meeting on the Axcelis share issuance proposal. Assuming a quorum is present, an abstention, a broker non-vote or other failure to vote will have no effect on the outcome of the Axcelis share issuance proposal. The approval of the Axcelis share issuance proposal is a condition to the closing of the merger.
Axcelis Proposal #2	Axcelis adjournment proposal Whether or not a quorum is present, approval of the Axcelis adjournment proposal requires the affirmative vote of the holders of a majority in voting power of the votes cast (excluding abstentions and broker non-votes) at the Axcelis special meeting on the Axcelis adjournment proposal. In that case, an abstention, a broker non-vote or the failure of an Axcelis stockholder not present at the meeting to vote will

Proposal	Votes Necessary
	have no effect on the outcome of the Axcelis adjournment proposal.
	If a quorum is not present, then either (i) the person presiding over the meeting or (ii) a majority in voting power of the stockholders entitled to vote at the meeting, present in person or represented by proxy, will have power to adjourn the Axcelis special meeting.

The approval of the Axcelis adjournment proposal is not a condition to the closing of the merger.

As of the Axcelis record date, Axcelis directors and executive officers, and their affiliates, as a group, owned and were entitled to vote 136,925 shares of Axcelis common stock, collectively representing less than 1% of the total outstanding shares of Axcelis common stock. See also the section entitled “**Interests of Axcelis’ Directors and Executive Officers in the Merger**” beginning on page 156 of this joint proxy statement/prospectus.

Methods of Voting

If you are a stockholder of record as of the record date for the Axcelis special meeting, you may vote by proxy through the Internet, by telephone, or by mail, or by voting in person at the Axcelis special meeting. For shares held through a bank, broker or other nominee in “street name” instead of as a registered holder, you may vote by submitting your voting instructions to your bank, broker or other nominee. In most instances, you will be able to do this over the Internet, by telephone or by mail as indicated below. Please refer to the information from your bank, broker or other nominee on how to submit voting instructions. If you do not provide voting instructions to your bank, broker or other nominee, your shares of Axcelis common stock will not be voted on the Axcelis share issuance proposal or the Axcelis adjournment proposal as your bank, broker or other nominee does not have discretionary authority to vote on such proposals at the Axcelis special meeting; see the section entitled “**— Quorum; Abstentions and Broker Non-Votes**” beginning on page 46 of this joint proxy statement/prospectus.

- *By Internet:* If you are a stockholder of record, you can submit a proxy on the website listed on your enclosed proxy card by following the instructions, 24 hours a day, seven days a week. You will need the control number included on your proxy card.
- *By Telephone:* If you are a stockholder of record, you can submit a proxy to vote using a touch-tone telephone by calling the number set forth on your enclosed proxy card and following the recorded instructions, 24 hours a day, seven days a week. You will need the control number included on your proxy card.
- *By Mail:* If you have received a paper copy of the proxy materials by mail, you may complete, sign, date and return by mail the paper proxy card sent to you in the postage-paid envelope provided to you with your proxy materials.
- *At the Meeting:* All stockholders of record as of the Axcelis record date may vote at the Axcelis special meeting in person. For more information on how to attend in person, see the section entitled “**— Attending the Axcelis Special Meeting**” beginning on page 49 of this joint proxy statement/prospectus.

If you are a stockholder of record, proxies submitted over the Internet or by telephone as described above should be received by 11:59 p.m., Eastern Time, on February 5, 2026. To reduce administrative costs and help the environment by conserving natural resources, Axcelis asks that you submit a proxy to vote through the Internet, which is available 24 hours a day.

Notwithstanding the above, if your shares are held in “street name” by a bank, broker or other nominee, you should follow the instructions you receive from your bank, broker or other nominee on how to vote your shares. Registered stockholders who attend the Axcelis special meeting may vote their shares in person even if they previously have submitted a proxy to vote their shares.

If you deliver a proxy pursuant to this joint proxy statement/prospectus, but do not specify a choice with respect to any proposal set forth in this joint proxy statement/prospectus, your underlying shares of Axcelis common stock will be voted on such uninstructed proposal in accordance with the recommendation of the Axcelis board of directors. No matters other than the proposals listed above will be brought before the Axcelis special meeting and the Axcelis bylaws provide that the only business that may be conducted at the Axcelis special meeting are those proposals brought before the meeting pursuant to this joint proxy statement/prospectus.

Revocability of Proxies

Any stockholder giving a proxy has the right to revoke it before the proxy is exercised at the Axcelis special meeting by:

- delivering a written notice of revocation prior to the Axcelis special meeting, which should be delivered to the Corporate Secretary of Axcelis at Axcelis' principal executive offices;
- submitting a timely and validly executed, later dated proxy by mail, via the Internet or by telephone;
- calling the number set forth on your enclosed proxy card or voting instruction form and following the recorded instructions; or
- attending the Axcelis special meeting and voting in person.

Execution or revocation of a proxy will not in any way affect the stockholder's right to attend the special meeting and vote in person. Note that if you are a beneficial holder of Axcelis stock and hold your shares through a bank, broker or other nominee, you must obtain and submit a "legal proxy" from such bank, broker or other nominee in order to vote in person at the Axcelis special meeting.

Written notices of revocation and other communications with respect to the revocation of proxies should be addressed to:

Axcelis Technologies, Inc.
Attn: Corporate Secretary
108 Cherry Hill Drive
Beverly, Massachusetts 01915

If your shares are held in "street name" and you previously provided voting instructions to your broker, bank or other nominee, you should follow the instructions provided by your broker, bank or other nominee to revoke or change your voting instructions.

Proxy Solicitation Costs

Axcelis is soliciting proxies to provide an opportunity to all Axcelis stockholders to vote on agenda items, whether or not the stockholders are able to attend the Axcelis special meeting or an adjournment or postponement thereof. Axcelis will bear the entire cost of soliciting proxies from its stockholders, except that Axcelis and Veeco have agreed to each pay one half of the costs and expenses of filing, printing and mailing this joint proxy statement/prospectus and all filing and other similar fees payable to the SEC in connection with this joint proxy statement/prospectus. In addition to the solicitation of proxies by mail, Axcelis will ask banks, brokers and other custodians, nominees and fiduciaries to forward the proxy solicitation materials to the beneficial owners of shares of Axcelis common stock held of record by such nominee holders. Axcelis may be required to reimburse these nominee holders for their customary clerical and mailing expenses incurred in forwarding the proxy solicitation materials to the beneficial owners.

Axcelis has retained Innisfree to assist in the solicitation process. Axcelis estimates that it will pay Innisfree a fee of approximately \$75,000, plus reimbursement of reasonable expenses. Axcelis also has agreed to indemnify Innisfree against various liabilities and expenses that relate to or arise out of its solicitation of proxies (subject to certain exceptions). Proxies may be solicited on behalf of Axcelis or by Axcelis directors, officers and other employees in person, by mail, by telephone, by facsimile, by messenger, via the Internet or by other means of communication, including electronic communication. Directors, officers and employees of Axcelis will not be paid any additional amounts for their services or solicitation in this regard.

Attending the Axcelis Special Meeting

You are entitled to attend the Axcelis special meeting only if you are a stockholder of record of Axcelis at the close of business on December 26, 2025 (the Axcelis record date) or you hold your shares of Axcelis beneficially in the name of a broker, bank or other nominee as of the Axcelis record date, or you hold a valid proxy for the Axcelis special meeting.

If you plan to attend the Axcelis special meeting and vote in person, Axcelis still encourages you to submit a proxy to vote in advance by the Internet, by telephone or by mail so that your vote will be counted even if you later decide not to attend the Axcelis special meeting. Submitting your proxy by the Internet, by telephone or by mail will not limit your right to vote at the Axcelis special meeting if you later decide to attend in person.

Attending In Person

If you are a stockholder of record of Axcelis at the close of business on December 26, 2025 and wish to attend the Axcelis special meeting in person, please so indicate on the appropriate proxy card or as prompted by the Internet system. Your name will be verified against the list of stockholders of record prior to your being admitted to the Axcelis special meeting.

If a broker, bank or other nominee is the record owner of your shares of Axcelis common stock, you will need to have proof that you are the beneficial owner as of the Axcelis record date to be admitted to the Axcelis special meeting. A recent statement or letter from your broker, bank or other nominee confirming your ownership as of the Axcelis record date, or presentation of a valid proxy from a broker, bank or other nominee that is the record owner of your shares, would be acceptable proof of your beneficial ownership. If a broker, bank or other nominee is the record owner of your shares of Axcelis common stock, you will need to obtain and present a “legal proxy” in order to vote in person at the Axcelis special meeting.

You should be prepared to present photo identification for admittance. If you do not provide photo identification or comply with the other procedures outlined above upon request, you might not be admitted to the Axcelis special meeting. To obtain directions to attend the Axcelis special meeting and vote in person, please contact Investor Relations by email at Investor-Relations@axcelis.com or by phone at 978-787-2352.

Householding

The SEC's rules permit us to deliver a single set of proxy materials to one address shared by two or more of our stockholders. This delivery method is referred to as “householding” and can result in significant cost savings. To take advantage of this opportunity, we have delivered only one set of proxy materials to multiple stockholders who share an address, unless we received contrary instructions from the impacted stockholders prior to the mailing date. We agree to deliver promptly, upon written or oral request, a separate set of proxy materials, as requested, to any stockholder at the shared address to which a single set of those documents was delivered. If you prefer to receive separate copies of the proxy materials, contact Innisfree, at (888) 750-5835 or in writing at 501 Madison Avenue, 20th Floor, New York, New York 10022.

If you are currently a stockholder sharing an address with another stockholder and wish to receive only one set of future proxy materials for your household, please contact Innisfree at the above phone number or address.

Tabulation of Votes

The Axcelis board of directors will appoint an independent inspector of election for the Axcelis special meeting. The inspector of election will, among other matters, determine the number of shares of Axcelis common stock represented electronically or by proxy at the Axcelis special meeting to confirm the existence of a quorum, determine the validity of all proxies and ballots and certify the results of voting on all proposals submitted to Axcelis stockholders.

Adjournments

If a quorum is present at the Axcelis special meeting but there are not sufficient votes at the time of the Axcelis special meeting to approve the Axcelis share issuance proposal, or, if additional time is necessary to

ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Axcelis stockholders, then Axcelis stockholders may be asked to vote on the Axcelis adjournment proposal.

At any subsequent reconvening of the Axcelis special meeting at which a quorum is present, any business may be transacted that might have been transacted at the original meeting and all proxies will be voted in the same manner as they would have been voted at the original convening of the Axcelis special meeting, except for any proxies that have been effectively revoked or withdrawn prior to the time the proxy is exercised at the reconvened meeting.

Assistance

If you need assistance voting or in completing your proxy card or have questions regarding the Axcelis special meeting or the merger, please contact Innisfree, the proxy solicitation agent for Axcelis:

Innisfree M&A Incorporated
501 Madison Avenue, 20th Floor
New York, New York 10022
Stockholders May Call Toll Free: (888) 750-5835
Banks and Brokerage Firms May Call Collect: (212) 750-5833

AXCELIS STOCKHOLDERS SHOULD CAREFULLY READ THIS JOINT PROXY STATEMENT/PROSPECTUS IN ITS ENTIRETY FOR MORE DETAILED INFORMATION CONCERNING THE MERGER AGREEMENT AND THE MERGER. IN PARTICULAR, AXCELIS STOCKHOLDERS ARE DIRECTED TO THE MERGER AGREEMENT, WHICH IS ATTACHED AS ANNEX A HERETO.

AXCELIS PROPOSAL #1: AXCELIS SHARE ISSUANCE PROPOSAL

This joint proxy statement/prospectus is being furnished to you as a stockholder of Axcelis as part of the solicitation of proxies by the Axcelis board of directors for use at the Axcelis special meeting to consider and vote upon a proposal to approve the issuance of shares of Axcelis common stock in the merger pursuant to the merger agreement, which is attached as Annex A to this joint proxy statement/prospectus.

The Axcelis board of directors, after due and careful discussion and consideration, adopted and approved the merger agreement and the consummation of the transactions upon the terms and conditions set forth in the merger agreement, including the issuance of Axcelis common stock, and determined that the terms of the merger agreement, the merger and the other transactions, including the issuance of Axcelis common stock, are fair to, and in the best interests of, Axcelis and its stockholders.

It is a condition to the completion of the merger that Axcelis stockholders approve the issuance of shares of Axcelis common stock (including all securities convertible into or exercisable for shares of Axcelis common stock) in the merger. In the merger, each Veeco stockholder will receive, for each eligible share of Veeco common stock that is issued and outstanding as of immediately prior to the effective time of the merger, the merger consideration of 0.3575 shares of Axcelis common stock, further described in the sections entitled **“The Merger — Exchange Ratio”** and **“The Merger Agreement — Merger Consideration.”**

Under Nasdaq rules, a company is required to obtain stockholder approval prior to the issuance of shares of common stock if the number of shares of common stock to be issued is, or will be upon issuance, equal to or in excess of 20% of the number of shares of common stock outstanding before the issuance of the shares of common stock. If the merger is completed pursuant to the merger agreement, Axcelis expects to issue up to approximately 25,959,880 shares of Axcelis common stock in connection with the merger based on the number of shares of Veeco common stock outstanding as of December 26, 2025 at the closing of the merger. Additionally, following the closing of the merger and in accordance with the terms of the merger agreement, Axcelis may issue additional shares of Axcelis common stock in connection with Veeco’s outstanding equity awards that will be assumed by Axcelis as a result of the merger. Accordingly, the aggregate number of shares of Axcelis common stock that Axcelis will issue as a result of the merger will exceed 20% of the shares of Axcelis common stock outstanding before such issuance, and for this reason, Axcelis is seeking the approval of Axcelis stockholders for the issuance of shares of Axcelis common stock pursuant to the merger agreement. In the event the Axcelis share issuance proposal is not approved by Axcelis stockholders, the merger will not be completed.

In the event the Axcelis share issuance proposal is approved by Axcelis stockholders, but the merger agreement is terminated (without the merger being completed) prior to the issuance of shares of Axcelis common stock pursuant to the merger agreement, Axcelis will not issue any shares of Axcelis common stock as a result of the approval of the Axcelis share issuance proposal.

The Axcelis board of directors accordingly unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Axcelis stockholders approve the Axcelis share issuance proposal.

Assuming a quorum is present at the Axcelis special meeting, approval of the Axcelis share issuance proposal requires the affirmative vote of the holders of a majority in voting power of the votes cast (excluding abstentions and broker non-votes) at the Axcelis special meeting on the Axcelis share issuance proposal. An abstention, a broker non-vote or the failure of an Axcelis stockholder not present at the meeting to vote will have no effect on the outcome of the Axcelis share issuance proposal.

IF YOU ARE AN AXCELIS STOCKHOLDER, THE AXCELIS BOARD OF DIRECTORS UNANIMOUSLY (EXCEPT FOR ONE INDEPENDENT DIRECTOR, WHO SERVES ON BOTH THE AXCELIS BOARD OF DIRECTORS AND THE VEECO BOARD OF DIRECTORS, WHO RECUSED HIMSELF) RECOMMENDS THAT YOU VOTE “FOR” THE AXCELIS SHARE ISSUANCE PROPOSAL (AXCELIS PROPOSAL #1)

AXCELIS PROPOSAL #2: AXCELIS ADJOURNMENT PROPOSAL

The Axcelis special meeting may be adjourned to another time and place if necessary to permit solicitation of additional proxies if there are not sufficient votes to approve the Axcelis share issuance proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Axcelis stockholders.

Axcelis is asking its stockholders to authorize the holder of any proxy solicited by the Axcelis board of directors to vote in favor of any adjournment to the Axcelis special meeting to solicit additional proxies if there are not sufficient votes to approve the Axcelis share issuance proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Axcelis stockholders.

The Axcelis board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Axcelis stockholders approve the proposal to adjourn the Axcelis special meeting, if necessary.

If there is a quorum present, approval of the Axcelis adjournment proposal requires the affirmative vote of the holders of a majority in voting power of the votes cast (excluding abstentions and broker non-votes) at the Axcelis special meeting on the Axcelis adjournment proposal. In that case, an abstention, a broker non-vote or the failure of an Axcelis stockholder not present at the meeting to vote (including the failure of an Axcelis stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Axcelis adjournment proposal.

Whether or not a quorum is present, either (i) the person presiding over the meeting or (ii) a majority in voting power of the stockholders entitled to vote at the meeting, in person or represented by proxy, will have power to adjourn the Axcelis special meeting.

IF YOU ARE AN AXCELIS STOCKHOLDER, THE AXCELIS BOARD OF DIRECTORS UNANIMOUSLY (EXCEPT FOR ONE INDEPENDENT DIRECTOR, WHO SERVES ON BOTH THE AXCELIS BOARD OF DIRECTORS AND THE VEECO BOARD OF DIRECTORS, WHO RECUSED HIMSELF) RECOMMENDS THAT YOU VOTE “FOR” THE AXCELIS ADJOURNMENT PROPOSAL (AXCELIS PROPOSAL #2)

THE VEECO SPECIAL MEETING

This joint proxy statement/prospectus is being mailed on or about December 31, 2025 to holders of record of Veeco common stock as of the close of business on December 26, 2025 and constitutes notice of the Veeco special meeting in conformity with the requirements of the DGCL and the Veeco bylaws.

This joint proxy statement/prospectus is being provided to Veeco stockholders as part of a solicitation of proxies by the Veeco board of directors for use at the Veeco special meeting and at any adjournments or postponements of the Veeco special meeting. Veeco stockholders are encouraged to read this entire document carefully, including the annexes to and documents incorporated by reference into this document, for more detailed information regarding the merger agreement and the transactions contemplated by the merger agreement.

Date, Time and Place of the Veeco Special Meeting

The Veeco special meeting will be held on February 6, 2026, beginning at 10:00 a.m., Eastern Time. The Veeco special meeting will be a “hybrid” stockholder meeting, meaning that stockholders will be able to attend the meeting (i) virtually via the Internet on the Veeco special meeting website, at www.virtualshareholdermeeting.com/VECO2026SM, or (ii) in person at Veeco’s headquarter offices located at 1 Terminal Drive, Plainview, New York 11803.

Matters to be Considered at the Veeco Special Meeting

The purposes of the Veeco special meeting are as follows, each as further described in this joint proxy statement/prospectus:

- *Veeco Proposal #1: Adoption of the Merger Agreement.* To consider and vote on the Veeco merger agreement proposal;
- *Veeco Proposal #2: Veeco Compensation Proposal.* To consider and vote on the Veeco compensation proposal; and
- *Veeco Proposal #3: Adjournment of the Veeco Special Meeting.* To adjourn the Veeco special meeting to a later date or dates, if necessary or appropriate, to allow time to solicit additional proxies if there are insufficient votes to adopt the merger agreement at the time of the Veeco special meeting.

Recommendation of the Veeco Board of Directors

The Veeco board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Veeco stockholders vote:

- *Veeco Proposal #1:* “**FOR**” the Veeco merger agreement proposal;
- *Veeco Proposal #2:* “**FOR**” the Veeco compensation proposal; and
- *Veeco Proposal #3:* “**FOR**” the Veeco adjournment proposal.

After careful consideration, the Veeco board of directors (1) determined that the merger agreement, the merger and the other transactions contemplated by the merger agreement are fair to, and in the best interests of, Veeco and its stockholders; (2) approved and declared advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement; (3) directed that the merger agreement be submitted for approval and adoption at a meeting of Veeco stockholders; and (4) resolved to recommend that Veeco stockholders vote in favor of the adoption of the Veeco merger agreement proposal.

See also the section entitled “**The Merger — Recommendation of the Veeco Board of Directors; Veeco’s Reasons for the Merger**” beginning on page 88 of this joint proxy statement/prospectus.

Record Date for the Veeco Special Meeting and Voting Rights

The record date to determine who is entitled to receive notice of and to vote at the Veeco special meeting is December 26, 2025. As of the close of business on the Veeco record date, there were

60,297,087 shares of Veeco common stock issued and outstanding, each entitled to vote at the Veeco special meeting. Each Veeco stockholder will have one vote for any matter properly brought before the Veeco special meeting for each share of Veeco common stock such holder held at the close of business on the Veeco record date. Only Veeco stockholders of record at the close of business on the Veeco record date are entitled to receive notice of and to vote at the Veeco special meeting.

Quorum; Abstentions and Broker Non-Votes

A quorum of stockholders is necessary to conduct the Veeco special meeting. A quorum will be present if the holders of a majority in voting power of the shares of Veeco common stock issued and outstanding as of December 26, 2025 (the Veeco record date) and entitled to vote at the Veeco special meeting are represented at the Veeco special meeting in person, virtually or by proxy. On the record date, there were in the aggregate 60,297,087 shares of Veeco common stock outstanding and entitled to vote. Thus, approximately 30,148,544 shares must be represented by Veeco stockholders present at the Veeco special meeting or by proxy to have a quorum. Your shares will be counted towards the quorum only if you submit a valid proxy vote or vote in person or virtually at the Veeco special meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If a quorum is not present, the Veeco special meeting will be adjourned until the holders of the number of shares of Veeco common stock required to constitute a quorum are in attendance.

If your shares are held by your bank or broker as your nominee (that is, in “street name”), you will need to obtain a voting instruction form from the institution that holds your shares and follow the instructions included on that form regarding how to instruct your broker to vote your shares. If you do not give instructions to your broker, your broker can vote your shares with respect to “discretionary” items, but not with respect to “non-discretionary” items. Discretionary items are proposals considered routine under applicable rules on which your broker may vote shares held in street name without your voting instructions. On non-discretionary (that is, non-routine) items for which you do not give your broker instructions, the shares will be treated as broker non-votes. All of the proposals at the Veeco special meeting are “non-discretionary,” and, therefore, if you hold your shares through a broker, nominee, fiduciary or other custodian, your shares will not be voted on those proposals unless you provide voting instructions to your broker, nominee, fiduciary or other custodian. It is therefore critical that you cast your vote by instructing your bank, broker or other nominee on how to vote.

If you submit a properly executed proxy card, even if you abstain or vote against any or all of the proposals presented at the Veeco stockholder meeting, your shares of Veeco common stock will be counted as present for purposes of determining whether a quorum is present at the Veeco special meeting.

Required Votes; Vote of Veeco’s Directors and Executive Officers

Except for the Veeco’s adjournment proposal, the vote required to approve all of the proposals listed herein assumes the presence of a quorum.

Proposal	Votes Necessary
Veeco Proposal #1 Veeco merger agreement proposal	Assuming the presence of a quorum, approval requires the affirmative vote of the holders of a majority of the issued and outstanding shares of Veeco common stock entitled to vote at the Veeco special meeting on the Veeco merger agreement proposal. An abstention, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote will have the same effect as a vote “ AGAINST ” the Veeco merger agreement proposal. The approval of the Veeco merger agreement proposal is a condition to the closing of the merger.

Proposal	Votes Necessary
Veeco Proposal #2 Veeco compensation proposal	<p>Assuming the presence of a quorum, the affirmative vote of the holders of a majority of the votes cast at the Veeco special meeting on the Veeco compensation proposal is required to approve, on an advisory, non-binding basis, the compensation of Veeco's named executive officers that is based on or otherwise relates to the transactions contemplated by the merger agreement. An abstention, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote will have no effect on the outcome of the Veeco compensation proposal.</p> <p>The approval of the Veeco compensation proposal is not a condition to the closing of the merger.</p>
Veeco Proposal #3 Veeco adjournment proposal	<p>Whether or not there is a quorum, approval of the Veeco adjournment proposal requires the affirmative vote of the holders of a majority of the votes cast at the Veeco special meeting on the Veeco adjournment proposal, and the chairman of the Veeco special meeting also has the power to adjourn the Veeco special meeting from time to time, whether or not Veeco stockholders have approved the Veeco adjournment proposal. An abstention, a broker non-vote or other failure to vote will have no effect on the outcome of the Veeco adjournment proposal.</p> <p>The approval of the Veeco adjournment proposal is not a condition to the closing of the merger.</p>

As of the Veeco record date, Veeco directors and executive officers, and their affiliates, as a group, owned and were entitled to vote 1,352,038 shares of Veeco common stock, or approximately 2.24% of the total outstanding shares of Veeco common stock. Veeco currently expects that all of its directors and executive officers will vote their shares “**FOR**” the Veeco merger agreement proposal, “**FOR**” the Veeco compensation proposal and “**FOR**” the Veeco adjournment proposal. See also the section entitled “**Interests of Veeco’s Directors and Executive Officers in the Merger**” beginning on page 157 of this joint proxy statement/prospectus.

Methods of Voting

If you are a stockholder of record as of the Veeco record date, you may vote by proxy through the Internet, by telephone, by mail or by voting at the Veeco special meeting, in person or through the Veeco special meeting website. For shares held through a bank, broker or other nominee in “street name” instead of as a registered holder, you may vote by submitting your voting instructions to your bank, broker or other nominee. Please refer to the information from your bank, broker or other nominee on how to submit voting instructions. If you do not provide voting instructions to your bank, broker or other nominee, your shares of Veeco common stock will not be voted on any proposal as your bank, broker or other nominee does not have discretionary authority to vote on any of the proposals to be voted on at the Veeco special meeting; see the section entitled “— **Quorum; Abstentions and Broker Non-Votes**” beginning on page 54 of this joint proxy statement/prospectus.

- *By Internet:* You may vote by using the Internet at www.proxyvote.com by following the instructions for Internet voting on the Proxy Card mailed to you. Internet voting is available 24 hours a day and will be accessible until 11:59 p.m. Eastern Time on February 5, 2026. Easy-to-follow instructions allow you to vote your shares and confirm that your instructions have been properly recorded.
- *By Telephone:* If you are a stockholder of record, you can submit a proxy to vote using a touch-tone telephone by calling 1-800-690-6903 and follow the recorded instructions, 24 hours a day, seven days a week. You will need the control number included on your proxy card or your paper voting instruction form (if you received a paper copy of the proxy materials).
- *By Mail:* You may vote by mail by completing and mailing a proxy card.
- *At the Special Meeting:* All stockholders of record as of the Veeco record date may vote at the Veeco special meeting, in person or via the Veeco special meeting website. For more information on how to attend in person, see the section entitled “— **Attending the Veeco Special Meeting**” beginning on page 57 of this joint proxy statement/prospectus.

Even if you plan to attend the Veeco special meeting, we recommend that you also submit your proxy or voting instructions by Internet, telephone or mail so that your vote will be counted if you later decide not to attend the Veeco special meeting. If you are a stockholder of record, proxies submitted over the Internet, by telephone or by mail as described above should be received by 11:59 p.m., Eastern Time, on February 5, 2026.

Notwithstanding the above, if your shares are held in “street name” by a bank, broker or other nominee, you should follow the instructions you receive from your bank, broker or other nominee on how to vote your shares. Registered stockholders who attend the Veeco special meeting may vote their shares personally even if they previously have voted their shares.

If you deliver a proxy pursuant to this joint proxy statement/prospectus, but do not specify a choice with respect to any proposal set forth in this joint proxy statement/prospectus, your underlying shares of Veeco common stock will be voted on such uninstructed proposal in accordance with the recommendation of the Veeco board of directors. No matters other than the proposals listed above will be brought before the Veeco special meeting, and the Veeco bylaws provide that the only business that may be conducted at the Veeco special meeting are those proposals brought before the meeting pursuant to this joint proxy statement/prospectus.

Revocability of Proxies

Any stockholder giving a proxy has the right to revoke it before the proxy is voted at the Veeco special meeting by:

- submitting a timely and valid later proxy to vote online at www.proxyvote.com;
- a written notice that you are revoking your proxy to the Corporate Secretary of Veeco at 1 Terminal Drive, Plainview, New York 11803;
- calling 1-800-690-6903 and following the recorded instructions; or
- attending the Veeco special meeting and voting in person or via the Veeco special meeting website.

Simply attending the meeting will not, by itself, revoke your proxy.

Execution or revocation of a proxy will not in any way affect the stockholder’s right to attend the special meeting and vote in person.

Written notices of revocation and other communications with respect to the revocation of proxies should be addressed to:

Veeco Instruments Inc.
Attn: Corporate Secretary
1 Terminal Drive
Plainview, New York 11803

If your shares are held in “street name” and you previously provided voting instructions to your broker, bank or other nominee, you should follow the instructions provided by your broker, bank or other nominee to revoke or change your voting instructions.

Proxy Solicitation Costs

Veeco is soliciting proxies to provide an opportunity to all Veeco stockholders to vote on agenda items, whether or not the stockholders are able to attend the Veeco special meeting or an adjournment or postponement thereof. Veeco will bear the entire cost of soliciting proxies from its stockholders, except that Veeco and Axcelis have agreed to each pay one half of the costs and expenses of filing, printing and mailing this joint proxy statement/prospectus and all filing and other similar fees payable to the SEC in connection with this joint proxy statement/prospectus. In addition to the solicitation of proxies by mail, Veeco will ask banks, brokers and other custodians, nominees and fiduciaries to forward the proxy solicitation materials to the beneficial owners of shares of Veeco common stock held of record by such nominee holders. Veeco may be required to reimburse these nominee holders for their customary clerical and mailing expenses incurred in forwarding the proxy solicitation materials to the beneficial owners.

Veeco has retained D.F. King & Co., Inc. to assist in the solicitation process. Veeco estimates that it will pay D.F. King a fee of approximately \$25,000, plus reimbursement of reasonable expenses. Veeco also has agreed to indemnify D.F. King against various liabilities and expenses that relate to or arise out of its solicitation of proxies (subject to certain exceptions). Proxies may be solicited on behalf of Veeco or by Veeco directors, officers and other employees in person, by mail, by telephone, by facsimile, by messenger, via the Internet or by other means of communication, including electronic communication. Directors, officers and employees of Veeco will not be paid any additional amounts for their services or solicitation in this regard.

Attending the Veeco Special Meeting

You are entitled to attend the Veeco special meeting only if you are a stockholder of record of Veeco at the close of business on December 26, 2025 (the Veeco record date) or you hold your shares of Veeco beneficially in the name of a broker, bank or other nominee as of the Veeco record date, or you hold a valid proxy for the Veeco special meeting.

If you plan to attend the Veeco special meeting and vote in person or via the Veeco special meeting website, Veeco still encourages you to submit a proxy to vote in advance by the Internet, by telephone or (if you received a paper copy of the proxy materials) by mail so that your vote will be counted even if you later decide not to attend the Veeco special meeting. Submitting your proxy by the Internet, by telephone or by mail will not limit your right to vote at the Veeco special meeting if you later decide to attend in person or via the Veeco special meeting website.

Attending In Person

If you are a stockholder of record of Veeco at the close of business on December 26, 2025 and wish to attend the Veeco special meeting in person, please so indicate on the appropriate proxy card or as prompted by the Internet system. Your name will be verified against the list of stockholders of record prior to your being admitted to the Veeco special meeting.

If a broker, bank or other nominee is the record owner of your shares of Veeco common stock, you will need to have proof that you are the beneficial owner as of the Veeco record date to be admitted to the Veeco special meeting. A recent statement or letter from your broker, bank or other nominee confirming your ownership as of the Veeco record date, or presentation of a valid proxy from a broker, bank or other nominee that is the record owner of your shares, would be acceptable proof of your beneficial ownership.

You should be prepared to present photo identification for admittance. If you do not provide photo identification or comply with the other procedures outlined above upon request, you might not be admitted to the Veeco special meeting. To obtain directions to attend the Veeco special meeting and vote in person, please contact Investor Relations by email at investorrelations@veeco.com or by phone at (516) 677-0200.

Attending via the Veeco Special Meeting Website

To participate in the Veeco special meeting via the Veeco special meeting website, you will need the 16-digit control number included on your proxy card or on the instructions that accompanied your proxy materials. The meeting webcast will begin promptly at 10:00 a.m., Eastern Time. We encourage you to access the meeting prior to the start time. Online check-in will begin at 9:45 a.m., Eastern Time, and you should allow ample time for check-in procedures. If you hold your shares through a bank or broker, instructions should also be provided on the voting instruction card provided by your bank or brokerage firm. If you lose your 16-digit control number, you may join the Veeco special meeting as a “*Guest*,” but you will not be able to vote, ask questions, or access the list of stockholders as of the record date.

Householding

In a further effort to reduce printing costs and postage fees, Veeco has adopted a practice approved by the SEC called “householding.” Under this practice, stockholders who have the same address and last name and who request printed copies of proxy materials will receive only one copy of proxy materials, unless one or more of these stockholders notifies Veeco that he or she wishes to continue receiving individual copies. Stockholders who participate in householding will continue to receive separate proxy cards.

If you share an address with another stockholder and received only one set of proxy materials, and would like to request a separate paper copy of these materials, please: (1) go to www.proxyvote.com and follow the instructions provided; (2) send an e-mail message to investorrelations@veeco.com with “Request for Proxy Materials” in the subject line and provide your name, address and the control number that appears in the box on the Stockholders Meeting Notice; or (3) call Veeco’s Investor Relations department at (516) 677-0200.

Tabulation of Votes

The Veeco board of directors will appoint an inspector of election for the Veeco special meeting. The inspector of election will, among other matters, determine the number of shares of Veeco common stock represented at the Veeco special meeting to confirm the existence of a quorum, determine the validity of all proxies and ballots and certify the results of voting on all proposals submitted to Veeco stockholders.

Adjournments

If there are not sufficient votes at the time of the Veeco special meeting to approve the merger agreement proposal, or, if additional time is necessary, to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Veeco stockholders, then Veeco stockholders may be asked to vote on the Veeco adjournment proposal.

The chairman of the Veeco special meeting also has the power to adjourn the Veeco special meeting from time to time, whether or not Veeco stockholders have approved the Veeco adjournment proposal.

At any subsequent reconvening of the Veeco special meeting at which a quorum is present, any business may be transacted that might have been transacted at the original meeting and all proxies will be voted in the same manner as they would have been voted at the original convening of the Veeco special meeting, except for any proxies that have been effectively revoked or withdrawn prior to the time the proxy is voted at the reconvened meeting.

Assistance

If you need assistance voting or in completing your proxy card or have questions regarding the Veeco special meeting or the merger, please contact D.F. King, the proxy solicitation agent for Veeco:

D.F. King & Co., Inc.
28 Liberty Street, Floor 53
New York, NY 10005
Call Collect: (646) 787-3500
Call Toll-Free: (866) 356-6140
veeco@dfking.com

VEECO STOCKHOLDERS SHOULD CAREFULLY READ THIS JOINT PROXY STATEMENT/PROSPECTUS IN ITS ENTIRETY FOR MORE DETAILED INFORMATION CONCERNING THE MERGER AGREEMENT AND THE MERGER. IN PARTICULAR, VEECO STOCKHOLDERS ARE DIRECTED TO THE MERGER AGREEMENT, WHICH IS ATTACHED AS ANNEX A HERETO.

VEECO PROPOSAL #1: VEECO MERGER AGREEMENT PROPOSAL

This joint proxy statement/prospectus is being furnished to you as a Veeco stockholder in connection with the solicitation of proxies by the Veeco board of directors for use at the Veeco special meeting. At the Veeco special meeting, Veeco is asking Veeco stockholders to consider and vote upon a proposal to adopt the merger agreement, which is attached as Annex A to this joint proxy statement/prospectus, and approve the transactions contemplated thereby, including the merger, pursuant to which Merger Sub will be merged with and into Veeco, with Veeco surviving as a wholly-owned subsidiary of Axcelis. Upon completion of the merger, Veeco stockholders will be entitled to receive 0.3575 newly issued shares of Axcelis common stock for each share of Veeco common stock held immediately prior to the effective time. No fractional shares of Axcelis will be issued in the merger, and Veeco stockholders will receive cash in lieu of fractional shares as part of the merger consideration.

The Veeco board of directors, after careful consideration, unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) determined that the merger is fair to and in the best interests of Veeco and its stockholders and approved and declared advisable the merger agreement and the transactions contemplated thereby, including the merger.

The merger and a summary of the terms of the merger agreement are described in more detail under **“The Merger”** and **“The Merger Agreement,”** and Veeco stockholders are encouraged to read the full text of the merger agreement, which is attached as Annex A hereto.

It is a condition to the completion of the merger that Veeco stockholders approve the Veeco merger agreement proposal.

The Veeco board of directors accordingly unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Veeco stockholders approve the Veeco merger agreement proposal.

Assuming a quorum is present at the Veeco special meeting, the approval of the merger agreement proposal by Veeco stockholders requires the affirmative vote of the holders of a majority of the issued and outstanding shares of Veeco common stock entitled to vote at the Veeco special meeting on the Veeco merger agreement proposal. An abstention, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including the failure of a Veeco stockholder who holds shares in “street name” through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have the same effect as a vote cast **“AGAINST”** the Veeco merger agreement proposal.

IF YOU ARE A VEECO STOCKHOLDER, THE VEECO BOARD OF DIRECTORS UNANIMOUSLY (EXCEPT FOR ONE INDEPENDENT DIRECTOR, WHO SERVES ON BOTH THE AXCELIS BOARD OF DIRECTORS AND THE VEECO BOARD OF DIRECTORS, WHO RECUSED HIMSELF) RECOMMENDS THAT YOU VOTE “FOR” THE VEECO MERGER AGREEMENT PROPOSAL (VEECO PROPOSAL #1)

VEECO PROPOSAL #2: VEECO COMPENSATION PROPOSAL

Pursuant to Section 14A of the Exchange Act and Rule 14a-21(c) thereunder, Veeco is required to submit to a non-binding, advisory stockholder vote certain compensation that will be paid or become payable to Veeco's named executive officers that is based on or otherwise relates to the merger as disclosed under "**Interests of Veeco's Directors and Executive Officers in the Merger**" (including the disclosure under the section entitled "— Quantification of Payments and Benefits to Veeco Named Executive Officers" and the related tables and associated narrative discussion and descriptions of the agreements or understandings pursuant to which such compensation may be paid or become payable). The Veeco compensation proposal gives Veeco stockholders the opportunity to express their views on the merger-related compensation of Veeco's named executive officers.

Accordingly, Veeco is asking Veeco stockholders to vote "**FOR**" the adoption of the following resolution, on a non-binding, advisory basis:

"RESOLVED, that the compensation that will be paid or become payable to Veeco's named executive officers that is based on or otherwise relates to the merger, as disclosed pursuant to Item 402(t) of Regulation S-K under the heading "**Interests of Veeco's Directors and Executive Officers in the Merger**," including the associated narrative discussion and the agreements, plans, arrangements or understandings pursuant to which such compensation will be paid or become payable, are hereby **APPROVED**."

The vote on the Veeco compensation proposal is a vote separate and apart from the vote on the proposal to adopt the merger agreement. Accordingly, if you are a Veeco stockholder, you may vote to approve the Veeco merger agreement proposal and vote not to approve the Veeco compensation proposal, and vice versa. The vote on the Veeco compensation proposal is advisory and not binding on Veeco, Axcelis, their respective boards of directors or the combined company. Further, the underlying plans and arrangements are contractual in nature and not subject to stockholder approval. As a result, if the merger is completed, the merger-related compensation will be paid to Veeco's named executive officers to the extent payable in accordance with the terms of the compensation agreements and arrangements even if Veeco stockholders do not approve the Veeco compensation proposal.

The Veeco board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Veeco stockholders approve the Veeco compensation proposal.

Assuming a quorum is present at the Veeco special meeting, approval of the Veeco compensation proposal requires the affirmative vote of the holders of a majority of the votes cast at the Veeco special meeting on the Veeco compensation proposal. An abstention, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including a failure to instruct your bank, broker or other nominee to vote) will have no effect on the outcome of the Veeco compensation proposal.

IF YOU ARE A VEECO STOCKHOLDER, THE VEECO BOARD OF DIRECTORS UNANIMOUSLY (EXCEPT FOR ONE INDEPENDENT DIRECTOR, WHO SERVES ON BOTH THE AXCELIS BOARD OF DIRECTORS AND THE VEECO BOARD OF DIRECTORS, WHO RECUSED HIMSELF) RECOMMENDS THAT YOU VOTE "FOR" THE VEECO COMPENSATION PROPOSAL (VEECO PROPOSAL #2)

VEECO PROPOSAL #3: VEECO ADJOURNMENT PROPOSAL

The Veeco special meeting may be adjourned to another time and place if necessary to permit solicitation of additional proxies if there are not sufficient votes to approve the Veeco merger agreement proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Veeco stockholders.

Veeco is asking its stockholders to authorize the holder of any proxy solicited by the Veeco board of directors to vote in favor of any adjournment to the Veeco special meeting to solicit additional proxies if there are not sufficient votes to approve the Veeco merger agreement proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Veeco stockholders.

The Veeco board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Veeco stockholders approve the proposal to adjourn the Veeco special meeting, if necessary.

Whether or not there is a quorum, approval of the Veeco adjournment proposal requires the affirmative vote of the holders of a majority of the votes cast at the Veeco special meeting on the Veeco adjournment proposal, and the chairman of the Veeco special meeting also has the power to adjourn the Veeco special meeting from time to time, whether or not Veeco stockholders have approved the Veeco adjournment proposal. An abstention, a broker non-vote or the failure of a Veeco stockholder not present at the meeting to vote (including the failure of a Veeco stockholder who holds shares in "street name" through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Veeco adjournment proposal.

IF YOU ARE A VEECO STOCKHOLDER, THE VEECO BOARD OF DIRECTORS UNANIMOUSLY (EXCEPT FOR ONE INDEPENDENT DIRECTOR, WHO SERVES ON BOTH THE AXCELIS BOARD OF DIRECTORS AND THE VEECO BOARD OF DIRECTORS, WHO RECUSED HIMSELF) RECOMMENDS THAT YOU VOTE "FOR" THE VEECO ADJOURNMENT PROPOSAL

(VEECO PROPOSAL #3)

THE MERGER

*The following is a description of material aspects of the merger. While Axcelis and Veeco believe that the following description covers the material terms of the merger, the description may not contain all of the information that is important to you. You are encouraged to read carefully this entire joint proxy statement/prospectus, including the text of the merger agreement attached to this joint proxy statement/prospectus as Annex A, for a more complete understanding of the merger. In addition, important business and financial information about each of Axcelis and Veeco is included in or incorporated by reference into this joint proxy statement/prospectus. See the section entitled “**Where You Can Find More Information**” beginning on page 189 of this joint proxy statement/prospectus.*

General

Axcelis, Veeco and Merger Sub have entered into the merger agreement. Pursuant to the terms of the merger agreement, Merger Sub will merge with and into Veeco, with Veeco surviving as a wholly owned subsidiary of Axcelis. As a result of the merger, the separate existence of Merger Sub will cease and Veeco will continue its existence under the laws of the State of Delaware as the surviving corporation and as a wholly owned subsidiary of Axcelis. The combined company will assume a new name, ticker symbol and brand following the closing of the merger to be mutually agreed by Axcelis and Veeco.

Exchange Ratio

At the effective time, by virtue of the merger and without any further action on the part of the parties, holders of any securities of Veeco, Merger Sub or any other person, each share of Veeco common stock that is issued and outstanding immediately prior to the effective time will be converted into the right to receive 0.3575 shares of Axcelis common stock and cash in lieu of any fractional shares of Axcelis common stock any former holder of Veeco common stock would otherwise be entitled to receive.

The exchange ratio is fixed, which means that it will not change between now and the effective time, regardless of whether the market price of either Axcelis common stock or Veeco common stock changes. Therefore, the value of the merger consideration will depend on the market price of Axcelis common stock at the effective time. The market price of Axcelis common stock has fluctuated since the date of the announcement of the merger agreement and may continue to fluctuate from the date of this joint proxy statement/prospectus to the date of the special meetings, the date the merger is completed and thereafter. The market price of Axcelis common stock, when received by Veeco stockholders after the merger is completed, could be greater than, less than or the same as the market price of Axcelis common stock on the date of this joint proxy statement/prospectus or at the time of the respective special meetings. You should obtain current market quotations for Axcelis common stock and Veeco common stock before deciding how to vote with respect to any of the proposals described in this joint proxy statement/prospectus. Axcelis common stock is listed on Nasdaq under the ticker symbol “ACLS,” and Veeco common stock is listed on Nasdaq under the ticker symbol “VECO.”

At the effective time, all shares of Veeco common stock owned by Axcelis, Veeco and Merger Sub will be canceled and will cease to exist, and no consideration will be delivered in exchange for such shares.

Background of the Merger

The terms of the merger agreement are the result of arm’s-length negotiations between representatives of Axcelis and Veeco. The following is a summary of the key events leading up to the signing of the merger agreement and key meetings, negotiations, discussions and actions by and between Axcelis and Veeco and their respective advisors that preceded the public announcement of the transaction; it does not purport to catalogue every conversation or interaction among representatives of Axcelis, Veeco and other parties.

In the ordinary course of business, the boards of directors and senior management teams of each of Axcelis and Veeco regularly review and assess their respective company’s strategic objectives, performance, competitive positioning, financial position, and potential opportunities to enhance stockholder value in light of current business and economic conditions and overall industry trends. These reviews include consideration

of various strategic alternatives, such as remaining independent, pursuing acquisitions and divestitures or engaging in strategic combinations with other industry participants.

On an on-going basis, senior executives of Axcelis and Veeco maintained familiarity with each other's business and met periodically at industry conferences and events to discuss trends and developments in the semiconductor equipment sector. Thomas St. Dennis serves as an independent director on both the Axcelis board of directors and the Veeco board of directors. Mr. St. Dennis recused himself from each of the meetings (or portions thereof) of the Axcelis board of directors and the Veeco board of directors at which the proposed transaction between Axcelis and Veeco was discussed. In addition, Dr. Russell Low, the Chief Executive Officer of Axcelis, was employed at Veeco as Vice President of Engineering from 2012 to 2016.

At various times during the period beginning March 2021 through March 2023, Dr. William Miller, the Chief Executive Officer of Veeco, and Mary Puma, the Chief Executive Officer of Axcelis at the time, had discussions regarding a range of matters affecting the semiconductor equipment sector generally and potential strategic commercial initiatives between Veeco and Axcelis.

On December 20, 2022, in connection with ordinary course commercial arrangements, Veeco and Axcelis entered into a customary non-disclosure agreement for the sharing of confidential information to facilitate certain joint research initiatives that had been discussed by the two companies' management teams. This non-disclosure agreement did not obligate either party to undertake these initiatives, which were voluntarily explored in the subsequent months without material results. A combination of the companies was not in discussion at the time of this non-disclosure agreement.

On March 27, 2023, Axcelis announced that Dr. Low would be succeeding Ms. Puma as Chief Executive Officer, effective May 11, 2023. On May 11, 2023, Dr. Low became Chief Executive Officer of Axcelis.

On March 22, 2024, Mr. Richard A. D'Amore, the Chairperson of the Veeco board of directors, met with Jorge Titinger, Chairperson of the Axcelis board of directors to discuss potential synergies that could arise from a potential business combination of Veeco and Axcelis.

In June 2024, the Axcelis board of directors determined that a group of directors would work with Axcelis' management to support and guide the discussions with Veeco and provide input to the full Axcelis board of directors on the process. Gregory Graves, John Kurtzweil, and Jeanne Quirk were appointed to serve as members of this informal "Axcelis Transaction Committee." The decision to form the Axcelis Transaction Committee was not the result of any actual or potential conflict of interest of any member of the Axcelis board of directors, and was formed as a committee of convenience to enable expeditious responses to the day-to-day aspects of the discussions with Veeco.

On April 3, 2024, Mr. D'Amore and Mr. Titinger held a call to further discuss potential synergies that could arise from a business combination of Veeco and Axcelis and next steps for any potential transaction.

On April 8, 2024, Dr. Miller held a call with Dr. Low to discuss potential synergies that could arise from a potential business combination of Veeco and Axcelis.

On April 23, 2024, Dr. Miller contacted Dr. Low to schedule a meeting for the purpose of exploring a potential business combination of Axcelis and Veeco, including a discussion of potential synergies.

On May 1, 2024, a meeting of the Veeco board of directors was held, which was also attended by members of Veeco's management and representatives of Veeco's financial advisor, UBS, and Veeco's outside legal counsel, Morrison Foerster. Dr. Miller updated the Veeco board of directors on his recent conversations with Dr. Low, including that meetings had been scheduled between Dr. Miller and Dr. Low on May 13 and May 14, 2024. Dr. Miller and representatives of UBS then reviewed with the Veeco board of directors (other than Mr. St. Dennis, who recused himself for the portion of the meeting relating to Axcelis) two potential transaction structures for a potential business combination of Axcelis and Veeco — a company sale transaction and a merger of equals transaction — and preliminary financial analyses with respect to the proposed transaction with Axcelis. The Veeco board of directors and representatives of UBS discussed Veeco's and Axcelis' respective businesses, including that Axcelis had scaled a highly profitable single product line in a growing industry and had significant exposure to the China market. Representatives

of UBS also reviewed potential strategic alternatives for Veeco's consideration at such time. The Veeco board of directors asked questions regarding Acelis' business and financial position, the preliminary financial analyses and the potential transaction structures. A representative of Morrison Foerster reviewed the Veeco board of directors' fiduciary duties under Delaware law in connection with a potential transaction with Acelis. Following discussion, and after taking into consideration the information reviewed by and discussed with Veeco's management and advisors, the Veeco board of directors directed Veeco's management to explore a potential transaction with Acelis.

On May 13 and 14, 2024, Dr. Low and Dr. Miller met and discussed potential synergies that could arise from a potential business combination of Veeco and Acelis, including with respect to each party's respective core competencies, technologies and product expertise. They did not discuss any terms of a potential transaction.

On May 17, 2024, a meeting of the Veeco board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by Kirk Mackey, Veeco's General Counsel. During the meeting, Dr. Miller provided an update on his meetings on May 13 and May 14, 2024 with Dr. Low. Following discussion, the Veeco board of directors directed Veeco's management to schedule a meeting with management of both companies. The Veeco board of directors then discussed the potential benefits of forming a strategic planning committee of the Veeco board of directors (the "Veeco Strategic Planning Committee"), as a committee of convenience, to explore and evaluate strategic alternatives available to Veeco. Following discussion, the Veeco board of directors concluded that it would be in the best interest of Veeco and its stockholders to form the Veeco Strategic Planning Committee (as a committee of convenience); however, the Veeco Strategic Planning Committee was not empowered to make decisions regarding whether to approve any potential transaction. The Veeco board of directors appointed Mr. D'Amore, Dr. Miller, Keith D. Jackson and Gordon Hunter as the initial members of the Veeco Strategic Planning Committee. These directors were selected for the committee based on their relevant experience and qualifications to serve on such a committee. The decision to form the Strategic Transaction Committee was not the result of any actual or potential conflict of interest of any member of the Veeco board of directors, and was formed as a committee of convenience to enable expeditious responses to the day-to-day aspects of the exploration and evaluation of strategic alternatives.

On May 29, 2024, a meeting of the Veeco Strategic Planning Committee was held, which was also attended by members of Veeco's management, representatives of UBS and a representative of Morrison Foerster. Representatives of UBS reviewed its preliminary financial analyses with respect to a proposed transaction with Acelis and an overview of certain key considerations with respect to a potential company sale transaction and a potential merger-of-equals transaction. Following discussion, the Veeco Strategic Planning Committee directed Veeco's management and advisors to continue progressing and evaluating a potential transaction with Acelis.

On May 30, 2024, the management teams of each of Acelis and Veeco met, during which they discussed potential synergies that could arise from a potential business combination of Veeco and Acelis. Terms of a potential transaction were not discussed at this meeting.

On May 31, 2024, Dr. Low, Dr. Miller and members of each of Acelis' and Veeco's respective management teams attended a meeting, during which the parties discussed product and marketing opportunities for their respective companies, but no financial information was otherwise shared.

On June 4, 2024, Dr. Low and Dr. Miller held a call during which they agreed to exchange due diligence questions.

On June 14, 2024, Veeco received due diligence questions from Acelis, including a request for a long-term financial forecast. On the same day, Dr. Miller called Dr. Low to inform him that the approval of the Veeco board of directors would be required to share Veeco's long-term financial forecast, which approval would not be sought without further indications that Acelis intends to pursue a potential transaction. In addition, Dr. Miller noted that due diligence questions from Veeco would be forthcoming.

On June 24, 2024, members of each of Acelis' and Veeco's management teams met to discuss Acelis' due diligence requests and Veeco's responses.

On June 28, 2024, a meeting of the Axcelis board of directors was held, which was also attended by James G. Coogan, Axcelis' Chief Financial Officer, Lynnette C. Fallon, Axcelis' General Counsel at that time, and members of Axcelis management, Gregory F. Redinbo and Atul Gupta. A potential transaction with Veeco was on the agenda. After it was confirmed, for the benefit of the full Axcelis board of directors, that Mr. St. Dennis served on the Veeco board of directors, Mr. St. Dennis recused himself from further discussions and deliberations on the subject. During the meeting, Dr. Redinbo updated the Axcelis board of directors with respect to the market for Veeco's products and the potential for growth in those markets. Following that discussion, Dr. Low reviewed with the Axcelis board of directors an executive summary of Axcelis management's current assessment of a potential transaction with Veeco. Mr. Coogan provided preliminary financial forecasts and discussed an illustrative exchange ratio and various transaction structures that could be considered. The Axcelis board of directors also discussed alternatives to the potential transaction with Veeco, including Axcelis' prospects as a standalone business, as well as regulatory considerations and anticipated required regulatory filings for a transaction with Veeco. The Axcelis board of directors asked questions regarding Veeco's business and financial position, and, following discussion, the Axcelis board of directors directed Axcelis' management to continue to explore a potential transaction with Veeco.

Later that day, Dr. Low and Dr. Miller held a call during which Dr. Low indicated that Axcelis was considering a potential transaction involving a mix of cash and stock consideration, with a significant amount of the consideration in cash and Veeco stockholders would receive approximately 30% of the ownership of the combined company. Dr. Miller then directed Veeco management to schedule meetings of the Veeco Strategic Planning Committee and the Veeco board of directors for the purpose of discussing Axcelis' interest in acquiring Veeco and to prepare Veeco's long-term financial forecasts to be reviewed with the Veeco board of directors and, if approved by the Veeco board of directors, shared with Axcelis.

On July 1, 2024, a meeting of the Veeco Strategic Planning Committee was held, which was also attended by members of Veeco's management and representatives of UBS. Dr. Miller and John Kiernan, Chief Financial Officer of Veeco, provided an overview of Veeco's financial forecasts prepared by management and an update on recent discussions with Axcelis. The Veeco Strategic Planning Committee asked questions regarding the financial forecasts. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis, and provided an overview of other potential bidders for Veeco. The Veeco Strategic Planning Committee asked questions regarding the preliminary financial analyses and other potential bidders. Following discussion, and after taking into consideration the information reviewed by and discussed with Veeco's management and representatives of UBS, the Veeco Strategic Planning Committee noted that Dr. Low and Dr. Miller would have the opportunity to meet at the upcoming 2024 Semicon West Conference and directed Dr. Miller to inform Dr. Low at the conference that Veeco was open to a potential transaction with Axcelis. In addition, the Veeco Strategic Planning Committee directed Veeco management to continue to engage in mutual due diligence, to finalize the financial forecasts for the Veeco board of directors' review and to determine, with the assistance of UBS, an appropriate list of other potential bidders to contact as part of a potential market check in the event a company sale transaction was pursued.

On July 8, 2024, a meeting of the Veeco board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by members of Veeco's management, representatives of UBS and a representative of Morrison Foerster. Dr. Miller provided an update on the recent discussions held with Axcelis, including an overview of the preliminary potential transaction structure communicated by Dr. Low to Dr. Miller on June 28, 2024. In addition, Dr. Miller reviewed the potential synergies that could arise from a potential business combination of Axcelis and Veeco and discussed the pros and cons of a potential business combination with Axcelis, including Axcelis' reliance on a single product and risks surrounding Axcelis' exposure to the China market. Following discussion, Mr. Kiernan presented an overview of Veeco's 2025 financial forecasts prepared by Veeco management, Veeco's long-term growth strategy and Veeco's long-term financial forecasts through 2029. Following questions from the Veeco board of directors and discussion regarding the financial forecasts, representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis. Representatives of UBS also discussed various potential strategic alternatives for Veeco, including potential alternative bidders. The Veeco board of directors asked questions regarding UBS' preliminary financial analyses and discussion of strategic alternatives for Veeco. Following discussion, and after taking into consideration the information

reviewed by and discussed with Veeco's management and representatives of UBS, the Veeco board of directors noted that Dr. Low and Dr. Miller would have the opportunity to meet at the upcoming 2024 Semicon West Conference and directed Dr. Miller to inform Dr. Low at the conference that Veeco was open to a potential transaction with Axcelis. In addition, the Veeco board of directors directed Veeco's management to monitor Axcelis' earnings guidance, which was scheduled to be released in the next few days.

On July 9, 2024, Dr. Low and Dr. Miller held a meeting, during which Dr. Miller confirmed Veeco was open to a potential transaction with Axcelis and Dr. Low and Dr. Miller discussed the status of the ongoing mutual due diligence process and the potential benefits of a business combination between Veeco and Axcelis.

On July 11, 2024, Mr. Titinger and Mr. D'Amore held a call during which they discussed the current landscape of the semiconductor equipment sector and potential forms of collaboration between Veeco and Axcelis.

On July 29, 2024, Dr. Miller sent Veeco's due diligence questions to Dr. Low.

On July 30, 2024, a meeting of the Veeco board of directors was held, which was also attended by members of Veeco's management (and Mr. St. Dennis recused himself for the portion of the meeting relating to Axcelis). Dr. Miller provided an update on recent discussions with Axcelis and an overview of the potential synergies that could arise from a potential business combination of Axcelis and Veeco. Following discussion of Axcelis' investor presentation from the 2024 Semicon West conference and the potential merits of a business combination with Axcelis, the Veeco board of directors reviewed and approved Veeco's long-term financial forecasts that would be shared with Axcelis at a management meeting with representatives of both companies scheduled to be held on August 1, 2024. The Veeco board of directors directed Veeco management to work towards alignment with Axcelis on a potential transaction structure.

On August 1, 2024, Dr. Low, Dr. Miller and members of Axcelis' and Veeco's respective management teams attended a meeting, during which the parties reviewed Veeco's long-term financial forecasts, and discussed Axcelis' long-term financial forecasts, Axcelis' responses to Veeco's due diligence questions and other mutual due diligence matters.

On August 7, 2024, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by members of Axcelis' management and representatives of Axcelis' financial advisor, J.P. Morgan. Mr. Coogan provided an update on the recent discussions held with Veeco and financial information shared with Veeco. Mr. Coogan also summarized the long-term financial forecasts provided by Veeco. Following discussion, J.P. Morgan discussed with the Axcelis board of directors an overview of Veeco's market and financial performance based on publicly available information and certain implied financial metrics for Axcelis and Veeco at various illustrative exchange ratios and cash / stock consideration mix. Following discussion, the Axcelis board of directors directed Axcelis' management to continue to explore a potential transaction with Veeco.

On August 8, 2024, the Axcelis board of directors met in executive session to discuss the synergistic nature of a potential transaction with Veeco.

On August 12, 2024, Mr. Titinger and Mr. D'Amore held a call during which they agreed to continue to discuss and assess the potential benefits of a potential transaction.

On August 15, 2024, Mr. Coogan sent Axcelis' additional due diligence questions to Mr. Kiernan.

On August 26, 2024, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by members of Axcelis' management. Dr. Low updated the Axcelis board of directors on the status of a potential business combination with Veeco. Dr. Low then reviewed with the Axcelis board of directors materials that discussed the history of Veeco's business development programs and Axcelis' current due diligence review of Veeco. Mr. Coogan added that a third-party consulting firm had been retained by Axcelis to review potential areas for development of Axcelis' business. Following discussion, Dr. Redinbo reviewed Axcelis' management's assessment of Veeco's intellectual property, and Dr. Gupta provided details on Veeco's product lines. After additional discussion,

Mr. Coogan shared Veeco's long-term financial forecast, as provided by Veeco's management. Mr. Coogan provided further details on Axcelis' management's views on Veeco's valuation, and the potential exchange ratios for a potential transaction with Veeco. The Axcelis board of directors also discussed alternatives to the potential transaction with Veeco, including Axcelis' prospects as a standalone business. Following discussion, the Axcelis board of directors expressed support for Axcelis' management's continued exploration of a potential business combination with Veeco.

On September 4, 2024, Dr. Miller and Mr. Titinger held a call during which they discussed the backgrounds and prior experiences of Veeco's and Axcelis' leadership teams.

Also on September 4, 2024, the Axcelis Transaction Committee held a meeting with Dr. Low, Mr. Titinger, other members of Axcelis management and J.P. Morgan to discuss the current status of a potential transaction with Veeco. The Axcelis Transaction Committee discussed the latest developments and next steps. The Axcelis Transaction Committee kept the full Axcelis board of directors updated on the process and the Axcelis Transaction Committee's discussions.

On September 9, 2024, Dr. Miller and members of each of Axcelis' and Veeco's respective management teams met, during which the parties discussed Veeco's responses to the additional due diligence questions shared by Axcelis on August 15, 2024.

On September 19, 2024, Mr. Coogan and Mr. Kiernan held a call during which they discussed both companies' respective stock compensation programs.

On each of September 23, 2024 and September 26, 2024, the Axcelis Transaction Committee held a meeting with Dr. Low, Mr. Titinger, other members of Axcelis management and J.P. Morgan to discuss the current status of a potential transaction with Veeco. The Axcelis Transaction Committee discussed, among other things, alternatives to the potential transaction with Veeco, including Axcelis' prospects as a standalone business, the latest developments in the discussions with Veeco and next steps. The Axcelis Transaction Committee kept the full Axcelis board of directors updated on the process and the Axcelis Transaction Committee's discussions.

On September 27, 2024, Dr. Low and Dr. Miller held a call during which Dr. Low informed Dr. Miller that the Axcelis board of directors was scheduled to meet on October 1, 2024 to consider submitting a potential non-binding indication of interest to acquire Veeco.

On October 1, 2024, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by members of Axcelis' management, representatives of J.P. Morgan and representatives of Axcelis' outside legal counsel at the time. Mr. Coogan provided an updated proposed timeline and key transaction structure considerations, discussing both potential business synergies and the long-term financial forecasts for Veeco. The discussion included review of Axcelis' prospects as a standalone business. Following discussion, J.P. Morgan discussed with the Axcelis board of directors certain preliminary financial information relating to Axcelis and Veeco. Axcelis' outside legal counsel at the time then advised the Axcelis board of directors on potential litigation risks and regulatory requirements for a potential transaction with Veeco. Following discussion, the Axcelis board of directors directed Axcelis management to submit to Veeco a non-binding verbal proposal for Axcelis to acquire Veeco at an exchange ratio of 0.265x of a share of Axcelis common stock for each outstanding share of Veeco common stock and \$10.15 per share in cash.

On October 3, 2024, Dr. Low called Dr. Miller and presented a non-binding verbal proposal for Axcelis to acquire Veeco in exchange for a combination of stock, using a fixed exchange ratio of 0.265x of a share of Axcelis common stock for each outstanding share of Veeco common stock, and \$10.15 in cash per share of Veeco common stock (the "October 3 Axcelis Proposal"). This implied a 72% stock and 28% cash consideration mix and a one-day premium of 13% based upon closing stock prices on October 2, 2024, and would result in Veeco stockholders receiving approximately 34% of the ownership of the combined company. The October 3 Axcelis Proposal also provided for board representation commensurate with the proposed ownership split and implied that Axcelis' management would manage the combined company's operations. Dr. Miller updated the Veeco Strategic Planning Committee regarding the proposal in advance of the Veeco Strategic Planning Committee meeting held on October 10, 2024.

On October 4, 2024, Mr. Titinger and Mr. D'Amore held a call during which they discussed the possibility of scheduling a meeting between the Axcelis Transaction Committee and Veeco's leadership.

On October 9, 2024, Dr. Low and Dr. Miller held a call during which Dr. Miller indicated that the October 3 Axcelis Proposal would be discussed at a meeting of the Veeco Strategic Planning Committee scheduled to occur the next day.

On October 10, 2024, a meeting of the Veeco Strategic Planning Committee was held, which was also attended by Mr. Kiernan, Mr. Mackey and representatives of UBS. Dr. Miller provided an update on recent discussions with representatives of Axcelis and the potential synergies that could arise from a potential business combination with Axcelis. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis, including the October 3 Axcelis Proposal. Following discussion of the October 3 Axcelis Proposal, and after taking into consideration the information reviewed by and discussed with Veeco's management and representatives of UBS, the Veeco Strategic Planning Committee determined that the October 3 Axcelis Proposal and possible responses to the proposal would be discussed at the upcoming Veeco board of directors meeting scheduled to be held on October 30, 2024.

On October 11, 2024, Dr. Low and Dr. Miller held a call during which Dr. Miller informed Dr. Low that a meeting of the Veeco board of directors to discuss the October 3 Axcelis Proposal was scheduled to occur on October 30, 2024.

On October 18, 2024 and October 28, 2024, representatives of Veeco and representatives of Axcelis held calls during which they discussed the proposed agenda for the upcoming meeting between Dr. Miller, members of Veeco's management team and members of Axcelis' board scheduled to occur on November 1, 2024.

On October 30, 2024, the Axcelis Transaction Committee held a meeting with Dr. Low, Mr. Titinger, other members of Axcelis management and J.P. Morgan to discuss the current status of a potential transaction with Veeco. The Axcelis Transaction Committee discussed the latest developments and next steps. The Axcelis Transaction Committee kept the full Axcelis board of directors updated on the process and the Axcelis Transaction Committee's discussions.

On October 30, 2024, the Veeco board of directors held a meeting, which was also attended by members of Veeco management and representatives of UBS (and Mr. St. Dennis recused himself for the portion of the meeting relating to Axcelis). Dr. Miller, Mr. Kiernan and representatives of UBS reviewed the October 3 Axcelis Proposal and representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis, including the October 3 Axcelis Proposal. The Veeco board of directors, together with Veeco's management and representatives of UBS, then discussed the pros and cons of a sale transaction for a mix of cash and stock with a higher premium and less favorable post-closing governance terms versus an all-stock merger of equals with a lower premium and more equitable post-closing governance. Following discussion, and after taking into consideration the information reviewed by and discussed with Veeco's management and representatives UBS, the Veeco board of directors determined that an all-stock merger of equals transaction that could achieve 40%+ ownership of the combined company for Veeco stockholders could be in the best interest of Veeco and its stockholders, so long as appropriate post-closing governance provisions were included to maximize the value of the Axcelis stock to be received by Veeco stockholders in the combination. The Veeco board of directors, together with Veeco's management and representatives of UBS, discussed potential responses to the October 3 Axcelis Proposal. Dr. Miller addressed an upcoming meeting scheduled to occur on November 1, 2024 between Dr. Miller and members of Veeco's management team and members of the Axcelis board of directors. Following discussion, the Veeco board of directors authorized Dr. Miller to continue to discuss the possible combination with Axcelis, but directed Dr. Miller to reject the October 3 Axcelis Proposal and to inform Axcelis that an all-stock transaction or a company sale transaction with significant cash consideration and a higher premium would be more attractive to Veeco and its stockholders.

On November 1, 2024, Dr. Miller and members of Veeco's management team met with Dr. Low, Mr. Titinger, and the Axcelis Transaction Committee. During the meeting, Dr. Miller and Veeco's management team presented Veeco's business and growth strategy, as well as the merits of a potential business combination between the parties.

Later that day, Dr. Miller and Dr. Low held a meeting during which Dr. Miller rejected the October 3 Axcelis Proposal and informed Dr. Low that an all-stock transaction or a company sale transaction with significant cash consideration and a higher premium would be more attractive to Veeco and its stockholders.

On November 5, 2024, a meeting of the Veeco Strategic Planning Committee was held, which was also attended by Mr. Kiernan and Mr. Mackey. Dr. Miller updated the Veeco Strategic Planning Committee on the November 1, 2024 meeting with certain members of the Axcelis board of directors and his later meeting with Dr. Low on that same day. The Veeco Strategic Planning Committee discussed possible synergies that could arise from a potential business combination with Axcelis, the complementary nature of the parties' businesses, and potential next steps in discussions between the parties, including the possibility of a meeting between certain members of the Veeco board of directors and certain members of Axcelis management in order for Axcelis management to present Axcelis' growth strategy, financial forecast and the strategic rationale for the transaction. Following discussion, the Veeco Strategic Planning Committee approved the scheduling of the meeting.

On November 7, 2024, Mr. Titinger and Mr. D'Amore held a call to discuss potential next steps and Mr. D'Amore provided Mr. Titinger with additional feedback that he had received from the Veeco board of directors.

On November 12, 2024, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by members of Axcelis' management. Mr. Coogan explained that Veeco had rejected the October 3 Axcelis Proposal. Dr. Low then updated the Axcelis board of directors on the November 1, 2024 meetings with Dr. Miller and members of Veeco's management. Following discussion, the Axcelis board of directors directed Axcelis' management to present Veeco with a proposed schedule for completing the due diligence and resolving open deal terms.

On November 13, 2024, Mr. Titinger contacted Mr. D'Amore to discuss next steps, including a meeting of the Axcelis executive team and the Veeco board of directors to discuss a potential transaction.

On November 14, 2024, Dr. Low and Dr. Miller held a call during which they discussed next steps and agreed to propose to each of their respective boards a meeting of the Axcelis executive team and the Veeco board of directors to discuss a potential transaction.

On November 18, 2024, Axcelis and J.P. Morgan executed a written engagement letter to memorialize J.P. Morgan's engagement effective in June 2024 as Axcelis' financial advisor in connection with a potential transaction with Veeco. Axcelis selected J.P. Morgan as financial advisor with respect to the potential transaction with Veeco on the basis of, among other things, J.P. Morgan's experience, qualifications and reputation and familiarity with the industries in which Axcelis and Veeco operate.

Also on November 18, 2024, a meeting of the Veeco Strategic Planning Committee was held, which was also attended by Mr. Kiernan, Mr. Mackey and representatives of UBS. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis. Following discussion, the Veeco Strategic Planning Committee discussed further due diligence to be performed by Veeco on Axcelis, in particular its China business, and directed Veeco's management to engage a third-party consultant to review Axcelis' China business. The Veeco Strategic Planning Committee further discussed the proposed meeting to be scheduled (and which was held on January 17, 2025) between certain members of the Veeco board of directors and certain members of Axcelis management in order for Axcelis management to present Axcelis' growth strategy, financial forecast and the strategic rationale for the transaction and determined that the Veeco Strategic Planning Committee members and Dr. Nicolaides would attend the proposed meeting.

On November 19, 2024, Dr. Low and Dr. Miller held a call during which they discussed the process for progressing mutual due diligence and agreed to schedule a meeting between certain members of the Veeco board of directors and certain members of Axcelis' management in order for Axcelis management to present Axcelis' growth strategy, financial forecast and strategic rationale for the transaction.

On December 10, 2024, Veeco and UBS entered into an engagement letter, dated as of December 6, 2024, formally retaining UBS as Veeco's financial advisor in connection with a potential transaction with Axcelis. Veeco engaged UBS as its financial advisor based on UBS' qualifications, experience and familiarity

with Veeco, its industry and similar transactions. At the same time, a representative of UBS delivered a relationship disclosure letter to Mr. Mackey.

On December 16, 2024, Dr. Low, Mr. Coogan and other members of Axcelis management met with Dr. Miller, Mr. Kiernan and other members of Veeco management. During the meeting, the parties reviewed Axcelis' responses to Veeco's due diligence requests, which had been shared with members of Axcelis' management in advance of the meeting, including review of Axcelis' growth opportunities and financial forecasts. During the meeting, members of Axcelis' management indicated that Axcelis was contemplating an all-stock proposal to acquire Veeco.

On December 17, 2024, the Axcelis Transaction Committee held a meeting with Dr. Low, Mr. Titinger, other members of Axcelis management and J.P. Morgan to discuss the current status of a potential transaction with Veeco. The Axcelis Transaction Committee discussed the latest developments and next steps. The Axcelis Transaction Committee kept the full Axcelis board of directors updated on the process and the Axcelis Transaction Committee's discussions.

Also on December 17, 2024, Dr. Low and Dr. Miller held a call during which they discussed the meeting that had occurred the day prior, and Dr. Low indicated that Mr. Titinger would be calling Mr. D'Amore to discuss scheduling a formal meeting regarding the potential exchange ratio and composition of the board of directors and management team of the combined company.

On December 18, 2024, Mr. Titinger and Mr. D'Amore held a call, during which they agreed that a formal meeting would be scheduled to discuss matters such as the potential exchange ratio and composition of the board of directors and management team of the combined company.

On December 20, 2024, Dr. Low and Dr. Miller held a call where they reviewed a presentation prepared by Axcelis regarding Axcelis' China business.

Also on December 20, 2024, a meeting of the Veeco Strategic Planning Committee was held, which was also attended by Mr. Kiernan, Mr. Mackey and representatives of UBS. Dr. Miller provided an update on recent discussions with representatives of Axcelis, including Axcelis' indication that it would make an all-stock proposal and the scheduling of the January 17, 2025 due diligence session among the Veeco Strategic Planning Committee and Axcelis management. Dr. Miller also informed the Veeco Strategic Planning Committee that a third-party consultant had been retained to review Axcelis' China business. Following discussion, the Veeco Strategic Planning Committee determined not to engage with Axcelis on value until after both companies' Q4 2024 earnings announcements. Dr. Miller then discussed Axcelis' anticipated growth in the ion implant industry and Axcelis' device segments, and Mr. Kiernan reviewed related Axcelis revenue projections. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis.

On December 26, 2024 and December 30, 2024, Dr. Low and Dr. Miller engaged in multiple conversations during which they discussed the status of discussions regarding a potential transaction and the mutual due diligence process. Dr. Low also reiterated that Axcelis planned to make an all-stock proposal to acquire Veeco.

On January 2, 2025, Mr. Titinger and Mr. D'Amore held a call during which Mr. Titinger informed Mr. D'Amore that an all-stock proposal for Axcelis to acquire Veeco was forthcoming.

On January 3, 2025, Dr. Low called Dr. Miller and provided a non-binding verbal proposal to combine Veeco with Axcelis in an all-stock transaction using a fixed exchange ratio of 0.380x shares of Axcelis common stock for each outstanding share of Veeco common stock (the "January 3 Axcelis Proposal"). This exchange ratio reflected the market exchange ratio, with effectively no premium, and would result in Veeco stockholders receiving approximately 41.9% of the ownership of the combined company. Dr. Low and Dr. Miller did not discuss, and the January 3 Axcelis Proposal was silent with respect to, post-transaction governance matters, including the composition of the board of directors and management team of the combined company. Dr. Miller promptly updated the Veeco Strategic Planning Committee regarding the proposal.

Also on January 3, 2025, Mr. D'Amore and Mr. Titinger held a call during which they discussed the January 3 Axcelis Proposal and agreed to continue progressing the mutual due diligence process.

On January 9, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Dr. Nicolaides, members of Veeco management and representatives of UBS. Dr. Miller reviewed the details of the January 3 Axcelis Proposal. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis, including the January 3 Axcelis Proposal. Representatives of UBS also reviewed post-closing governance items customarily negotiated in merger of equals transactions. Following discussion, and after taking into consideration the information reviewed by and discussed with Veeco's management and advisors, the Veeco Strategic Planning Committee concluded that continuing to pursue a potential transaction with Axcelis was merited, despite concerns that the exchange ratio included in the January 3 Axcelis Proposal reflected no premium. The Veeco Strategic Planning Committee directed management to continue progressing the mutual due diligence process and to continue exchange ratio negotiations after both companies' Q4 2024 earnings were announced. The Veeco Strategic Planning Committee then reviewed a proposed agenda for a planned meeting with Axcelis management scheduled for January 17, 2025.

Later that day, Dr. Miller and Dr. Low held a call during which they discussed the process for progressing mutual due diligence, including the planned meeting scheduled for January 17, 2025. They also agreed to meet again ahead of the meeting.

Also on January 9, 2025, Mr. Kiernan and Mr. Coogan held a call during which they discussed each party's Q4 2024 financial performance and the process for progressing mutual due diligence.

On January 14, 2025, Dr. Low, Dr. Miller and other members of Veeco's and Axcelis' respective management teams met and discussed the potential benefits of a potential transaction and mutual due diligence matters.

On January 17, 2025, the Veeco Strategic Planning Committee and Dr. Nicolaides met with Dr. Low and members of Axcelis management. Axcelis management presented an overview of Axcelis' business, growth strategy, global operations, research, development and evaluation programs, and human resources, reviewed the financial information previously shared at the December 16, 2024 meeting and discussed the merits of a potential business combination between the parties. Dr. Low and Dr. Miller held a meeting earlier that same day to discuss the meeting details and proposed outcomes for such meeting.

On January 20, 2025, Mr. Coogan and Mr. Kiernan held a call during which they presented and discussed updates to each party's 2025 financial forecast and discussed the process for progressing mutual due diligence.

On January 22, 2025, Dr. Low and Dr. Miller held a call during which they discussed scheduling a meeting to review updates to each party's financial forecasts, which was later scheduled to occur on January 24, 2025. Dr. Miller also provided an update on the status of Veeco's third-party consultant's due diligence review of Axcelis' China business.

On January 24, 2025, Dr. Low, Mr. Coogan, Dr. Miller and Mr. Kiernan held a meeting during which Veeco presented an updated financial forecast for the period from 2025 to 2027 and Axcelis presented a further update to its 2025 financial forecast. The parties also discussed the process for progressing mutual due diligence.

On January 29, 2025, members of Veeco management attended a meeting with members of Axcelis management and the third-party consultant retained by Veeco to review Axcelis' China business, during which the group discussed Axcelis' revenue forecast as relates to China.

On February 4, 2025, Dr. Low, Mr. Coogan and other members of Axcelis management held a meeting with Dr. Miller, Mr. Kiernan and other members of Veeco management, during which Axcelis management presented details on Axcelis' projected revenue with respect to customers in China for the period from 2025 to 2027.

On February 5, 2025, the Veeco board of directors held a meeting, which was also attended by members of Veeco management, representatives of the third-party consultant retained by Veeco to review Axcelis' China business, representatives of UBS and a representative of Morrison Foerster (and Mr. St. Dennis recused himself for the portion of the meeting relating to Axcelis). Representatives of the third-party

consultant reviewed its findings pertaining to an analysis of the silicon and silicon carbide industry in China performed with respect to Axcelis. Following discussion, representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis, certain post-closing governance considerations, possible next steps and an illustrative transaction timeline. Following discussion, the Veeco board of directors concluded that both companies should be well represented on the board of directors and management team of the combined company, including the Veeco board of directors' preference for Dr. Miller to be the Chief Executive Officer of the combined company, given the importance of the post-closing board of directors and management team in driving the value of the combined company. A representative of Morrison Foerster reviewed the current China regulatory environment for business combinations involving United States companies in the semiconductor industry, including possible regulatory filing requirements as well as geopolitical risk considerations. Following discussion, the Veeco board of directors directed the Veeco Strategic Planning Committee and Veeco management to continue progressing and evaluating a potential transaction with Axcelis.

On February 6, 2025, Dr. Low and Dr. Miller held a call during which Dr. Miller informed Dr. Low that the Veeco board of directors held a meeting the day prior and noted that certain post-closing governance matters, including the composition of the board of directors of the combined company, would require further discussion between the parties.

On February 13, 2025, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the portion of the meeting regarding a potential transaction with Veeco) was held, which was also attended by members of Axcelis' management and representatives of J.P. Morgan. David Ryzhik, Axcelis Senior Vice President of Investor Relations and Corporate Strategy, provided an update on Axcelis' evaluation of certain possible target companies, and Dr. Low and Mr. Coogan responded to questions from the Axcelis board of directors with respect to such possible target companies. Mr. Coogan then provided an updated financial forecast and process timeline for a potential business combination with Veeco. The Axcelis board of directors' discussion of process timeline included discussion of the regulatory considerations and possible timeline for anticipated required regulatory approvals. Mr. Coogan then presented updated financial forecasts for Veeco through 2027, which included Axcelis management's analysis of the forecasts developed by Veeco after Axcelis management assessed the potential in Veeco's targeted markets and products. J.P. Morgan provided a summary comparison of management forecasts as prepared by the respective managements of Axcelis and Veeco. Following discussion, the Axcelis board of directors agreed that Mr. Titinger would further discuss with Mr. D'Amore the January 3 Axcelis Proposal.

On February 14, 2025, Dr. Low and Dr. Miller held a call during which Dr. Low informed Dr. Miller that the Axcelis board of directors remained interested in pursuing a potential transaction with Veeco, but stated that the exchange ratio and post-closing governance terms, including the proposed composition of the board of directors and management team of the combined company, would require further discussion.

On February 17, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Mr. Kiernan, Mr. Mackey and representatives of UBS. Mr. D'Amore informed the Veeco Strategic Planning Committee that he had requested a phone call with Mr. Titinger, which had been scheduled for the following day. Dr. Miller provided an update on the status of negotiations with Axcelis and informed the Veeco Strategic Planning Committee that the third-party consultant retained by Veeco to review Axcelis' China business would soon provide an assessment of the non-China ion implant industry and Axcelis' relative positioning. Representatives of UBS reviewed Axcelis' Q4 2024 earnings, UBS' preliminary financial analyses with respect to the proposed transaction with Axcelis, certain post-closing governance considerations, possible next steps and an illustrative transaction timeline. The Veeco Strategic Planning Committee then discussed potential exchange ratios and certain post-closing governance matters, including the importance of ensuring that both companies were well represented on the board of directors and management team of the combined company and the Veeco board of directors' preference for Dr. Miller to be the Chief Executive Officer of the combined company. Following further discussion, it was agreed that the Veeco Strategic Planning Committee would reconvene following Mr. D'Amore's call with Mr. Titinger.

On February 18, 2025, Mr. Titinger and Mr. D'Amore held a call during which they discussed the exchange ratio and certain post-closing governance terms, including the proposed composition of the board of directors of the combined company and the proposed Chief Executive Officer of the combined company. Mr. Titinger and Mr. D'Amore did not come to agreement on any terms and no further discussions were

scheduled between the parties. After the call, Mr. Titinger instructed Axcelis management to pause negotiations as there were material gaps on post-closing governance terms.

On February 20, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Mr. Kiernan and Mr. Mackey. Mr. D'Amore updated the Veeco Strategic Planning Committee on his February 18, 2025 phone call with Mr. Titinger, including the disconnect between the two parties on the exchange ratio and key post-closing governance terms, including the composition of the board of directors and Chief Executive Officer of the combined company. Following discussion, the Veeco Strategic Planning Committee determined that further discussions with Axcelis were not warranted, given the significant disconnect on the exchange ratio and certain post-closing governance terms. As a result, the Veeco Strategic Planning Committee determined to terminate discussions between Axcelis and Veeco, but to allow Veeco's third-party consultant's due diligence review of Axcelis' China business to continue.

On February, 24, 2025, Mr. Titinger sent Mr. D'Amore a message stating that given disagreements on post-closing governance terms, Axcelis would have to pause the negotiation conversations and revisit the governance terms at a later point.

On March 24, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Dr. Nicolaides, Mr. Kiernan, Mr. Mackey, representatives of UBS and representatives of the third-party consulting firm retained by Veeco to review Axcelis' China business. Representatives of the third-party consulting firm reviewed their findings pertaining to the non-China ion implant industry, Axcelis' relative positioning and Axcelis' revenue projections. Following discussion, representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis. Following further discussion, and after taking into consideration the information reviewed by and discussed with Veeco's management and advisors, the Veeco Strategic Planning Committee determined that there had been no material change that would warrant re-engagement with Axcelis regarding a potential transaction.

On May 7, 2025, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the portion of the meeting regarding a potential transaction with Veeco) was held, which was also attended by members of Axcelis' management. Mr. Ryzhik reviewed the prior interactions in exploring a potential transaction with Veeco and approach going forward in re-engaging in discussions with Veeco regarding a proposed transaction. Mr. Ryzhik also provided an update on Axcelis' assessment of certain other target companies, which the Axcelis board of directors then discussed. Dr. Low, Mr. Coogan and Mr. Ryzhik then responded to inquiries from members of the Axcelis board of directors regarding the economics of a potential transaction with Veeco.

On May 8, 2025, following discussions with Axcelis, representatives of J.P. Morgan indicated to representatives of UBS that Axcelis was interested in re-engaging regarding a potential business combination of Veeco and Axcelis, but was not yet ready to resume discussions with Veeco. A representative of UBS promptly updated Dr. Miller and Mr. Kiernan regarding the call.

Also on May 8, 2025, Mr. St. Dennis communicated to Dr. Miller and Mr. D'Amore that recent discussions with Axcelis indicated that discussions about the potential transaction remained on hold, but that Mr. St. Dennis was hopeful that the companies would consider reengaging if and when the circumstances would warrant.

On June 9, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Dr. Nicolaides, Mr. Kiernan, Mr. Mackey, and representatives of UBS. Dr. Miller noted that Veeco's stock was underperforming relative to other mid-capitalization semiconductor equipment companies and discussed potential strategic alternatives for Veeco, including continuing to pursue its stand-alone plan, engaging in a merger of equals transaction with Axcelis or pursuing a sale of the company. He also informed the Veeco Strategic Planning Committee that Axcelis' board of directors had discussed potential re-engagement regarding a potential business combination, but had not determined to re-start discussions with Veeco. Dr. Miller noted that the strategic merits of a merger with Axcelis remained strong, including because of Axcelis' semiconductor and ion beam expertise. Representatives of UBS also reviewed with the committee its preliminary financial analyses with respect to the proposed transaction with Axcelis. Following discussion, and after taking into consideration the information reviewed by and discussed with Veeco's management and representatives of UBS, the Veeco Strategic Planning Committee concluded that re-engagement with

Axcelis regarding a potential transaction was merited. In addition, the Veeco Strategic Planning Committee directed UBS to consider alternative transactions with other potential strategic buyers.

On June 18, 2025, Mr. D'Amore contacted Mr. Titinger and requested a call to discuss a potential transaction. Mr. Titinger agreed to a call on June 23, 2025.

On June 23, 2025, Mr. Titinger and Mr. D'Amore held a call in which they discussed the potential transaction. Mr. Titinger indicated that the Axcelis board of directors remained interested in pursuing a potential transaction with Veeco, but noted that Axcelis maintained the same views on board governance. Mr. Titinger and Mr. D'Amore agreed that Dr. Miller and Dr. Low would re-engage in conversations.

On June 26, 2025, Dr. Low and Dr. Miller held a call to discuss resuming discussions regarding a potential business combination of Veeco and Axcelis.

On July 8, 2025, Dr. Low and Dr. Miller held a call to discuss restarting mutual due diligence and the potential benefits of a business combination between Veeco and Axcelis.

On July 10, 2025, Mr. Coogan and Mr. Kiernan held a call to discuss updates on each party's respective businesses, their respective 2025 financial forecasts, and their preliminary views for their 2026 financial forecasts.

On July 15, 2025, Dr. Low and Dr. Miller held a call regarding certain post-closing governance terms, including the proposed composition of the board of directors of the combined company. Dr. Low suggested that the Veeco board of directors would receive the right to appoint the chairperson of a new committee of the combined company's board of directors to oversee the integration and realization of synergies for the proposed transaction, which Dr. Miller indicated he would present to the Veeco Strategic Planning Committee.

On July 18, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Mr. Kiernan, Mr. Mackey and representatives of UBS. Dr. Miller provided an update on his recent conversations with Dr. Low and reviewed other potential strategic alternatives. Representatives of UBS then reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis and a preliminary analysis of other potential bidders for Veeco, including their respective potential levels of interest in and ability to pursue an alternative transaction with Veeco. Following discussion, the Veeco Strategic Planning Committee determined that a potential all-stock transaction with Axcelis offered unique strategic benefits and the likelihood was low of other potential parties offering compelling value. The Veeco Strategic Planning Committee directed management to continue discussions with Axcelis regarding a potential all-stock transaction and concluded not to contact other potential bidders at that time.

On July 21, 2025, Dr. Low and Dr. Miller held a call during which they discussed certain post-closing governance matters and the possibility of a meeting among members of the Axcelis board of directors and the Veeco board of directors to further discuss such matters.

On July 22, 2025, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by employees of Axcelis and representatives of J.P. Morgan. Dr. Low noted that Axcelis recently had reengaged in conversations with Veeco, in which they also had discussed potential post-closing governance terms. Following a discussion on governance and projected financials, the Axcelis board of directors agreed that Mr. Titinger would inform Mr. D'Amore that (i) if Axcelis decided to make a non-binding proposal, it would not be until after its upcoming board meeting, and (ii) the Axcelis board of directors was aligned that Dr. Low would be the Chief Executive Officer of any potential combined company.

On July 30, 2025, the Veeco board of directors held a meeting, which was also attended by members of Veeco management, representatives of UBS and a representative of Morrison Foerster (and Mr. St. Dennis recused himself for the portion of the meeting relating to Axcelis). Dr. Miller and Mr. D'Amore reviewed the status of discussions with Axcelis and Mr. Kiernan provided an update on Axcelis' business. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis and certain post-closing governance considerations. The representative of Morrison Foerster reviewed certain regulatory timing considerations and geopolitical risks relating to a potential transaction

with Axcelis. Following discussion, and after taking into consideration the information reviewed by and discussed with Veeco's management and advisors, the Veeco board of directors determined that further consideration of a potential transaction with Axcelis was merited.

On August 6, 2025, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by Axcelis' management and representatives of J.P. Morgan. Mr. Coogan provided a business update on Veeco, including a detailed report on stock price fluctuations, first half financial performance relative to competitors and outlook for the remainder of 2025. The Axcelis board of directors asked questions and provided feedback, including with respect to the exchange ratio considerations and stock price and financial performance. The Axcelis board of directors then reviewed the Axcelis Financial Forecasts, as further described in the section of this proxy statement titled "— Certain Financial Forecasts Utilized in Connection with the Merger — Axcelis Financial Forecasts." The Axcelis board of directors asked questions regarding the Axcelis Financial Forecasts, including the assumptions underlying such projections. Following discussion, the Axcelis board of directors authorized J.P. Morgan to utilize and rely on such Axcelis Financial Forecasts in connection with its financial analyses and opinion summarized in the section of this proxy statement titled "— Opinion of Financial Advisor to Axcelis." The Axcelis board of directors engaged in a discussion regarding the terms of a potential non-binding proposal to acquire Veeco. Following discussion, the Axcelis board of directors approved the submission of a non-binding indication of interest to combine Axcelis with Veeco in an all-stock transaction using a fixed exchange ratio of 0.340x of a share of Axcelis common stock for each outstanding share of Veeco common stock.

On August 12, 2025, Mr. Titinger submitted to Mr. D'Amore a written non-binding indication of interest to combine Veeco with Axcelis in an all-stock transaction using a fixed exchange ratio of 0.340x of a share of Axcelis common stock for each outstanding share of Veeco common stock (the "August 12 Axcelis Proposal"). This exchange ratio represented a premium of 18% to the average exchange ratio over the one-month period prior to the submission of the August 12 Axcelis Proposal and would result in Veeco stockholders receiving 40% of the ownership of the combined company. With respect to post-closing governance matters, the August 12 Axcelis Proposal provided that three members of the board of directors of the combined company would be current Veeco directors, one of which would be Thomas St. Dennis, and indicated that the Veeco board of directors would receive the right to appoint the chairperson of a new committee of the combined company's board of directors to oversee the integration and realization of synergies for the proposed transaction. In addition, the August 12 Axcelis Proposal attached a proposed exclusivity agreement that contained a 60-day exclusivity period; this exclusivity agreement was not further discussed or pursued by the parties. The August 12 Axcelis Proposal was promptly sent to the members of the Veeco Strategic Planning Committee.

On August 13, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Mr. Kiernan, Mr. Mackey, representatives of UBS and a representative of Morrison Foerster. Mr. D'Amore, Dr. Miller and representatives of UBS reviewed with the committee the terms of the August 12 Axcelis Proposal and representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis, including the August 12 Axcelis Proposal. Following discussion, the Veeco Strategic Planning Committee recognized that the proposed exchange ratio provided Veeco stockholders with 40% ownership of the combined company (in part given the fact that Veeco's share count had increased by more than Axcelis' during the period between the January 3 Axcelis Proposal and the August 12 Axcelis Proposal), but concluded that a higher exchange ratio taking into account longer-term trading averages for the period leading up to the August 12 Axcelis Proposal and Veeco's contribution to the pro forma combined company would be more appropriate than the exchange ratio proposed by Axcelis, that Veeco should push for equal representation with Axcelis on the board of directors of the combined company, and that it should push for Dr. Miller to be the Chairperson of the board of directors of the combined company. In addition, the Veeco Strategic Planning Committee determined to undertake efforts to arrange meetings between representatives of Veeco and representatives of Axcelis to discuss the August 12 Axcelis Proposal and Veeco's counterproposal, and directed Veeco management to draft a proposed response to the August 12 Axcelis Proposal, which would include a proposed exchange ratio of 0.375x of a share of Axcelis common stock for each outstanding share of Veeco common stock and propose for Veeco to have equal representation with Axcelis on, and for Dr. Miller to be the Chairperson of the board of directors of the combined company.

On August 14, 2025, Dr. Low and Dr. Miller held a call during which they discussed holding a meeting between members of the Axcelis board of directors and the Veeco board of directors to discuss post-closing governance matters.

On August 19, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Mr. Kiernan, Mr. Mackey, representatives of UBS and a representative of Morrison Foerster. Dr. Miller informed the Veeco Strategic Planning Committee that a meeting between representatives of Veeco and representatives of Axcelis to discuss the August 12 Axcelis Proposal and Veeco's counterproposal had been scheduled for August 25, 2025. Dr. Miller reviewed with the committee Veeco's draft counterproposal to the August 12 Axcelis Proposal, which had been shared with the Veeco Strategic Planning Committee in advance of the meeting, and which focused on the exchange ratio and post-closing governance matters. As had been agreed at the August 13, 2025 meeting of the Veeco Strategic Planning Committee, the draft counterproposal proposed for the exchange ratio to be increased to 0.375x of a share of Axcelis common stock for each outstanding share of Veeco common stock, for Veeco to have equal representation with Axcelis on the board of directors of the combined company and for Dr. Miller to be the Chairperson of the board of directors of the combined company. The Veeco Strategic Planning Committee also discussed a potential compromise with respect to the Chairperson role, whereby Mr. St. Dennis would be the Chairperson of the combined company board given his familiarity with both companies and the semiconductor industry, his prior experience, and that he was held in high regard by both companies, and Dr. Miller would be the Vice Chairperson of the combined company board. Following discussion, after taking into consideration the information provided by and discussed with Veeco's management and advisors, the Veeco Strategic Planning Committee determined that Veeco should continue to push for Dr. Miller to be the Chairperson of the board of directors of the combined company, but that it would be open to considering Mr. St. Dennis for that position. In addition, the Veeco Strategic Planning Committee directed Veeco management to submit the draft counterproposal to the Veeco board of directors. Later that day, Mr. Kiernan shared the draft counterproposal with the Veeco board of directors (other than Mr. St. Dennis) for its review and approval.

Also on August 19, 2025, Mr. Kiernan sent Mr. Coogan a draft mutual confidentiality agreement (the "NDA") prepared by Morrison Foerster, which was subsequently executed on August 22, 2025. The NDA contained a mutual standstill provision covering a 12-month period permitting either party to make confidential proposals to the other party's board of directors or Chief Executive Officer during the standstill period. The standstill provision also contained a "fall away" provision providing that the standstill obligations would terminate following, among other things, the other party entering into a definitive agreement providing for a change of control.

On August 20, 2025, Dr. Miller submitted Veeco's counterproposal to Mr. Titinger and Dr. Low via e-mail.

On August 21, 2025, the Veeco board of directors (other than Mr. St. Dennis, who recused himself) held a meeting, which was also attended by Mr. Kiernan, Mr. Mackey, representatives of UBS and a representative of Morrison Foerster. Dr. Miller reviewed with the Veeco board of directors the strategic rationale for a business combination with Axcelis, including the complementary nature of the businesses and the opportunity for significant value creation, and reviewed the August 12 Axcelis Proposal. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis, including the August 12 Axcelis Proposal. Following discussion and questions from the Veeco board of directors, the Veeco board of directors determined that continuing to pursue a potential transaction with Axcelis was merited, although further negotiation with Axcelis would be required to increase the proposed exchange ratio, to provide Veeco with equal representation with Axcelis on the combined company board of directors and to agree on the Chairperson of the combined company board of directors. Dr. Miller then reviewed Veeco's counterproposal, which had been sent to Axcelis on August 20, 2025. The Veeco board of directors discussed the possibility of proposing to Axcelis that Mr. St. Dennis and Dr. Miller serve as the Chairperson and Vice Chairperson, respectively, of the combined company board, but ultimately determined to propose Dr. Miller as Chairperson in the first instance. The Veeco board of directors also confirmed they would be amenable to Axcelis designating the Chief Executive Officer and Chief Financial Officer of the combined company. The Veeco board of directors discussed the benefits of holding the proposed August 25, 2025 meeting of certain members of the Veeco board of directors with certain members of the Axcelis board of directors to discuss the August 12 Axcelis Proposal and Veeco's counterproposal, and approved the holding of the meeting and attendance by Mr. D'Amore, Mr. Hunter and Mr. Jackson.

Also on August 21, 2025, Mr. Titinger and Mr. D'Amore held a call to discuss Veeco's counterproposal.

On August 22, 2025, the Axcelis Transaction Committee held a meeting with Dr. Low, Mr. Titinger, other members of Axcelis management and J.P. Morgan to discuss the current status of a potential transaction with Veeco. The Axcelis Transaction Committee discussed the latest developments and next steps. The Axcelis Transaction Committee kept the full Axcelis board of directors updated on the process and the Axcelis Transaction Committee's discussions.

On August 25, 2025, members of the Axcelis board of directors and the Veeco board of directors held a meeting to discuss Veeco's counterproposal, including the post-closing governance terms and the exchange ratio. During the meeting, the members of the Veeco board of directors proposed that they would also be open to Mr. St. Dennis serving as the Chairperson and Dr. Miller serving as the Vice Chairperson of the board of directors of the combined company. The members of the Axcelis board of directors agreed to present this proposal to the full Axcelis board of directors. Following discussion, no decision was made with respect to these items, but members of the Axcelis board of directors indicated that they would submit an updated proposal with respect to post-closing governance terms in a few days and the parties agreed that the exchange ratio would be further discussed following agreement on post-closing governance terms and following further due diligence.

On August 27, 2025, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which also was attended by members of Axcelis' management and representatives of J.P. Morgan and Skadden, Arps, Slate, Meagher & Flom LLP, outside legal counsel to Axcelis ("Skadden"). Mr. Titinger described the meeting that occurred on August 25, 2025, during which members of the Axcelis board of directors and the Veeco board of directors discussed certain governance matters in connection with the proposed transaction. The Axcelis board of directors then reviewed certain counterproposals to the August 12 Axcelis Proposal. Following discussion, the Axcelis board of directors unanimously approved an updated proposal for submission to Veeco the next day, which updated proposal provided for the board of directors of the combined company to be comprised of 10 members total, one of which would be Mr. St. Dennis, with Veeco having the right to appoint three additional directors (one of which would be Dr. Miller) and Axcelis having the right to appoint six additional directors (two of which would be Dr. Low and Mr. Titinger). In addition, the approved updated proposal provided for Mr. Titinger to serve as Chairperson of the board of directors of the combined company and Dr. Miller to serve as Vice Chairperson of the board of directors of the combined company and Chairperson of the Technology Committee. Instead of creating a new integration committee as set forth in the August 12 Axcelis Proposal, the updated proposal provided for the full board of the combined company to oversee integration matters.

On August 28, 2025, Mr. Titinger and Dr. Low submitted a revised proposal on behalf of Axcelis to Mr. D'Amore and Dr. Miller with respect to post-closing governance terms approved by the Axcelis board of directors at its meeting the prior day (the "August 28 Axcelis Governance Proposal"). The August 28 Axcelis Governance Proposal was promptly sent to the members of the Veeco Strategic Planning Committee.

On September 2, 2025, the Veeco Strategic Planning Committee held a meeting, which was also attended by Mr. Kiernan, Mr. Mackey and representatives of UBS. Dr. Miller reviewed with the committee the terms of the August 28 Axcelis Governance Proposal. In addition, Dr. Miller reviewed a proposed draft response to Axcelis (which had been sent to the members of the committee in advance of the meeting) that stated that Mr. St. Dennis would be named Chairperson of the combined company board and noted that Dr. Miller would be pleased to serve as Vice Chairperson of the combined company board and Chairperson of the Technology Committee. The proposed draft response to Axcelis also indicated that Veeco's preference would be for the combined company board to be comprised of 10 members total, consisting of Mr. St. Dennis, as Chairperson, four additional directors designated by Veeco and five additional directors designated by Axcelis. Following discussion, the committee agreed on the terms of Veeco's response and directed Mr. D'Amore to share it with Axcelis. Later that day, Mr. D'Amore shared the response with Axcelis.

On September 4, 2025, Mr. Coogan and Mr. Kiernan met ahead of previously planned investor events to discuss the respective results for each company for the third quarter of 2025 and the transaction process.

On September 5, 2025, Mr. Titinger submitted to Mr. D’Amore and Dr. Miller a revised non-binding proposal on behalf of Axcelis (the “September 5 Axcelis Proposal”). The September 5 Axcelis Proposal stated that Axcelis accepted Veeco’s proposal for Mr. St. Dennis to serve as the Chairperson of the board of directors of the combined company. In addition, the September 5 Axcelis Proposal proposed for there to be no Vice Chairperson of the board of directors of the combined company, but agreed that Dr. Miller would serve as Chairperson of the Technology Committee. The September 5 Axcelis Proposal also stated that, given the premium implied by the contemplated exchange ratio, Axcelis continued to believe the board composition set forth in the August 28 Axcelis Governance Proposal was appropriate.

Also on September 5, 2025, the Veeco Strategic Planning Committee held a meeting. Dr. Miller reviewed with the committee the terms of the September 5 Axcelis Proposal. Following discussion of various post-closing governance matters, the Veeco Strategic Planning Committee determined to accept Axcelis’ proposal for Dr. Miller to serve as Chairperson of the Technology Committee and determined that the combined company’s board of directors should be comprised of 11 directors, including Mr. St. Dennis, of which six additional directors would be from the current Axcelis board of directors and four additional directors would be from the current Veeco board of directors. The Veeco Strategic Planning Committee directed Dr. Miller to communicate this proposal to Dr. Low.

On September 6, 2025, Dr. Miller e-mailed Dr. Low regarding the board composition in the September 5 Axcelis Proposal. The e-mail also presented the counterproposal that had been approved by the Veeco Strategic Planning Committee on September 5, 2025. Following Dr. Miller’s e-mail, he and Dr. Low held a call during which they discussed Veeco’s counterproposal, which Dr. Low agreed to recommend to the Axcelis board of directors. Dr. Miller promptly updated the Veeco board of directors on his conversation with Dr. Low.

Later that day, after consulting with the Axcelis board of directors, Dr. Low confirmed via e-mail to Dr. Miller Axcelis’ agreement with Veeco’s governance proposals, which provided for the combined company board to be comprised of 11 members: Mr. St. Dennis, who would serve as Chairperson, four additional directors designated by the Veeco board of directors and six additional directors designated by the Axcelis board of directors. In addition, Dr. Miller would serve as Chairperson of the Technology Committee, Dr. Low and Mr. Coogan would serve as the combined company’s Chief Executive Officer and Chief Financial Officer, respectively. Dr. Miller promptly informed the Veeco board of directors of such confirmation.

From September 7, 2025 through September 11, 2025, members of Axcelis’ and Veeco’s management teams held multiple discussions regarding the transaction process and upcoming joint management meeting.

On September 9, 2025, representatives of Morrison Foerster and representatives of Skadden held a videoconference and discussed, among other items, the process to signing definitive agreements by October 1, 2025, which Veeco and Axcelis had agreed to target for signing definitive agreements, that the merger agreement should generally contain mutual representations and covenants, and the opening of the respective parties’ virtual data rooms.

On September 12, 2025, the Veeco board of directors (with the exception of Mr. St. Dennis, who recused himself, and Dr. Nicolaides) held a meeting, which was also attended by Mr. Kiernan, Mr. Mackey and a representative of Morrison Foerster. Dr. Miller re-reviewed with the Veeco board of directors the deal terms agreed with Axcelis and the proposed timeline for signing definitive agreements. In addition, Dr. Miller provided a business update on Veeco’s key growth strategies and the anticipated outlook for 2026. Mr. Kiernan then reviewed with the Veeco board of directors the financial forecasts for Veeco through 2028 which had been prepared by Veeco management (the “Veeco Projections”), as further described in the section of this proxy statement titled “— Certain Financial Forecasts Utilized in Connection with the Merger” under the heading “Veeco Financial Forecasts with Respect to Veeco.” The Veeco board of directors asked questions regarding the Veeco Projections, including the assumptions underlying such projections. Following discussion, the Veeco board of directors approved the Veeco Projections, subject only to a change to the assumption regarding 2026 bonus achievement, and then approved the Veeco Projections for use by UBS in connection with performing its financial analyses summarized in the section of this proxy statement titled “— Opinion of Financial Advisor to Veeco.”

Also on September 12, 2025, representatives of Skadden sent an initial draft of the merger agreement to representatives of Morrison Foerster. The initial draft reflected the agreed upon post-closing governance

terms. Additionally, the merger agreement reflected, among other provisions, reciprocal representations, warranties and interim operating covenants, a “force the vote” provision requiring each of Veeco and Acelis to hold their respective stockholder meetings relating to the merger regardless of a change in the respective board of directors’ recommendation, that Acelis would control the strategy to obtain antitrust regulatory approvals, a termination fee equal to 4% of the respective party’s transaction-based equity value payable by each party in certain situations, and a fixed expense reimbursement payable by each party in certain situations.

On September 15, 2025, Acelis and Veeco (and their respective advisors) were provided with access to a virtual data room containing confidential information regarding the other and its business. The due diligence information made available in the respective virtual data rooms continued to be supplemented and updated by Acelis and Veeco (as applicable) during the period beginning September 15, 2025 through September 30, 2025. During this period, representatives and advisors of Acelis and Veeco continued to engage in a mutual due diligence review, which included a number of discussions between representatives and advisors of each party.

On September 16, 2025, Dr. Low, Dr. Miller and other members of Veeco’s and Acelis’ management met to discuss at a high level the due diligence areas that would be covered during the joint management meetings the next day.

Also on September 16, 2025, representatives of UBS delivered an updated relationship disclosure letter to Morrison Foerster, which letter was shared with the Veeco board of directors. In its judgment, the Veeco board of directors determined that nothing in the relationship disclosure letter presented a risk to UBS’ ability to fulfill its responsibilities as financial advisor to Veeco.

On September 17, 2025, representatives of Acelis and Veeco held meetings, during which the parties exchanged their respective financial projections and discussed various due diligence matters, including potential synergies, each party’s technology and each party’s organizational structures.

On September 20, 2025, Mr. Titinger submitted a revised proposal on behalf of Acelis to Mr. D’Amore and Dr. Miller reiterating the previously proposed exchange ratio of 0.340x of a share of Acelis common stock for each outstanding share of Veeco common stock.

On September 22, 2025, the Veeco board of directors (other than Mr. St. Dennis, who recused himself) held a meeting, which was also attended by Mr. Kiernan, Mr. Mackey, representatives of UBS and representatives of Morrison Foerster. Dr. Miller reviewed the current deal terms, the proposed timeline for signing definitive transaction documents, and takeaways from the joint management meeting held on September 17, 2025, including that the strategic rationale for the deal remained overwhelmingly positive as the potential business combination would, among other things, unlock revenue growth opportunities, enable improved scale and resource leverage and alignment on cost synergies. Representatives of Morrison Foerster provided an update on the status of legal due diligence, including a focus on export controls due diligence given Acelis’ exposure to China, and the ongoing regulatory analysis. Morrison Foerster provided a summary of the draft merger agreement and discussed the key outstanding points in the draft merger agreement, including the “force the vote” provision requiring each of Veeco and Acelis to hold their respective stockholder meetings relating to the merger regardless of a change in the respective board of directors’ recommendation and Acelis’ position that Acelis should control the strategy to obtain antitrust regulatory approvals. Following discussion, the Veeco board of directors provided Morrison Foerster with direction on the key outstanding points in the merger agreement. Mr. Kiernan then reviewed the Acelis financial forecasts prepared by Acelis management, as further described in the section of this proxy statement titled “— Certain Financial Forecasts Utilized in Connection with the Merger” under the heading “Acelis Financial Forecasts with Respect to Acelis”, and the Acelis financial forecasts with certain adjustments prepared by Veeco’s management, as further described in the section of this proxy statement titled “— Certain Financial Forecasts Utilized in Connection with the Merger” under the heading “Veeco Financial Forecasts for Acelis”. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Acelis. Following discussion, and after taking into consideration the information reviewed by and discussed with Veeco’s management and advisors, the Veeco board of directors directed that the Acelis financial forecasts with certain adjustment prepared by Veeco’s management be provided to UBS for use by UBS in connection with performing its financial analyses summarized in

the section of this proxy statement titled “— Opinion of Financial Advisor to Veeco”, and directed Dr. Miller to submit a letter to Dr. Low again proposing a fixed exchange ratio of 0.375x of a share of Axcelis common stock for each outstanding share of Veeco common stock, which Dr. Miller promptly did.

Also on September 22, 2025, a representative of Morrison Foerster sent a revised draft of the merger agreement to representatives of Skadden. Among other terms, the revised agreement (i) accepted the “force the vote” provision requiring each of Veeco and Axcelis to hold their respective stockholder meetings relating to the merger regardless of a change in the respective board of directors’ recommendation, (ii) proposed a mutual framework for determining the strategy to obtain regulatory approvals and (iii) proposed a termination fee equal to 3% of the respective party’s transaction-based equity value payable by each party in certain situations. Between September 22, 2025, and September 30, 2025, representatives of Morrison Foerster and Skadden continued to exchange revised drafts of the merger agreement, and the parties and their representatives continued to discuss the potential terms of the merger agreement.

On September 23, 2025, Dr. Low and Dr. Miller held a call during which they discussed the proposed timeline for signing definitive transaction documents and completing the mutual due diligence review process, and coordination of joint communications regarding the potential transaction.

On September 24, 2025, Dr. Low and Dr. Miller held a call during which they agreed to recommend to their respective boards of directors a fixed exchange ratio of 0.3575x of a share of Axcelis common stock for each outstanding share of Veeco common stock. Following the call, Dr. Miller promptly updated the Veeco board of directors (other than Mr. St. Dennis) via e-mail.

On September 25, 2025, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by members of Axcelis’ management and representatives of J.P. Morgan and Skadden. Prior to this meeting, J.P. Morgan provided the Axcelis board of directors with certain information relating to J.P. Morgan’s material investment banking relationships with Axcelis and Veeco during the approximate prior two-year period, which information the Axcelis board of directors concluded did not present a conflict with respect to J.P. Morgan’s financial advisory services to Axcelis in connection with a potential transaction with Veeco. A representative of Skadden reviewed the Axcelis board of directors’ fiduciary duties under Delaware law in connection with a potential transaction with Veeco. Following a discussion, Dr. Low provided an update on the exchange ratio discussions, and the proposed timeline for seeking board approval for the transaction. Mr. Coogan and a representative of Skadden reviewed key diligence findings and summarized the key terms of the merger agreement. The Axcelis board of directors asked questions regarding the proposed structure of the combined company and the board unanimously resolved that Axcelis continue negotiating the terms of the merger agreement and that the consideration would be all stock, with each outstanding share of Veeco common stock to be exchanged for 0.3575x of a share of Axcelis common stock.

On September 26, 2025, members of Axcelis and Veeco management and their respective advisors held various confirmatory due diligence calls regarding human resources, intellectual property, information technology, environmental matters, facilities, operations, and legal matters.

Also on September 26, 2025, representatives of Morrison Foerster and Skadden exchanged initial drafts of Veeco’s and Axcelis’ confidential disclosure schedules to the merger agreement. Over the course of the next few days and through September 30, 2025, representatives of Morrison Foerster and Skadden continued to exchange revised drafts of the confidential disclosure schedules to the merger agreement, and the parties and their representatives continued to discuss the potential terms of each.

On September 29, 2025, the U.S. Department of Commerce issued new regulations addressing exports to certain entities in China, which potentially impacted Veeco’s and Axcelis’ sales to customers in China.

Also on September 29, 2025, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by members of Axcelis’ management and representatives of J.P. Morgan and Skadden. A representative of Skadden commenced the meeting with an overview of the Axcelis board of directors’ fiduciary duties under Delaware law. Dr. Redinbo and Dr. Gupta provided an update on Axcelis’ due diligence review. Mr. Coogan continued with an update of Veeco’s products and market positioning, including revenue projections. After Mr. Coogan provided further details on cost synergies, Eileen Evans, Axcelis General Counsel, summarized the material

legal due diligence findings, including the regulatory filing analysis, and Dr. Low and Mr. Coogan reviewed Veeco's near-term financial projections and the exchange ratio discussions to date. J.P. Morgan provided an overview of implied transaction metrics and reviewed its preliminary financial analyses of Axcelis and Veeco with the Axcelis board of directors. The Axcelis board of directors asked questions about Veeco's financial expectations, sensitivities and transaction mechanics. Following discussion, a representative from Skadden summarized the key terms of the merger agreement. The Axcelis board of directors discussed the different factors considered in determining whether to proceed with the proposed transaction, and discussed the proposed resolutions to approve the proposed transaction.

Additionally, on September 29, 2025, the Veeco board of directors (except for Mr. St. Dennis, who recused himself) held a meeting, which was also attended by Mr. Kiernan, Robert Bradshaw, Senior Vice President, Chief Administrative Officer, Mr. Mackey, representatives of UBS and representatives of Morrison Foerster. Dr. Miller reviewed the current deal terms, including the proposed fixed exchange ratio of 0.3575x of a share of Axcelis common stock for each outstanding share of Veeco common stock, which represented an implied premium of 16.7% to the current exchange ratio as of September 26, 2025 and an implied premium of 18.8% to the average exchange ratio over the past 30 trading days, and the anticipated timing for signing definitive agreements. Representatives of Morrison Foerster provided an update on the key discussion points in the draft merger agreement, including the resolution of the open points from the September 22 Veeco board meeting, and the regulatory filings analysis, and analyzed the recently issued U.S. Department of Commerce regulations addressing exports to certain entities in China and their potential applicability and effect on Axcelis. In addition, representatives of Morrison Foerster reviewed the Veeco board of directors' fiduciary duties under Delaware law and provided a summary of the proposed resolutions of the Veeco board of directors approving the merger. Representatives of UBS reviewed its preliminary financial analyses with respect to the proposed transaction with Axcelis. Following discussion, and after taking into consideration the information reviewed by and discussed with Veeco's management and advisors, the Veeco board of directors approved the proposed fixed exchange ratio of 0.3575x shares of Axcelis common stock for each outstanding share of Veeco common stock and directed Veeco management to proceed with finalizing definitive transaction documents for execution the following day, subject to final consideration and approval by the Veeco board of directors.

On September 30, 2025, a meeting of the Axcelis board of directors (other than Mr. St. Dennis, who recused himself from the meeting) was held, which was also attended by members of Axcelis' management and representatives of J.P. Morgan and Skadden. A representative of Skadden reviewed the key terms of the merger agreement and the Axcelis board of directors resolutions discussed during the September 29, 2025 Axcelis board meeting, and again reviewed with the Axcelis board of directors its fiduciary duties in the context of the proposed transaction. J.P. Morgan reviewed with the Axcelis board of directors J.P. Morgan's financial analysis of the exchange ratio provided for in the proposed merger and rendered an oral opinion confirmed by delivery of a written opinion dated September 30, 2025, to the effect that, as of such date and based upon and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by J.P. Morgan in connection with such opinion, the exchange ratio provided for in the proposed merger was fair, from a financial point of view, to Axcelis. Following further discussion and deliberation, including taking into account the factors described below in greater detail in the section of this proxy statement entitled "— Recommendation of the Axcelis' Board of Directors; Axcelis' Reasons for the Merger," the Axcelis board of directors, among other things, unanimously (except for Mr. St. Dennis, who recused himself) (i) adopted and approved the merger agreement and the consummation of the transactions contemplated thereby upon the terms and subject to the conditions set forth in the merger agreement, (ii) determined that the terms of the merger agreement and the transactions contemplated thereby, including the share issuance by Axcelis and the merger, are advisable, fair to, and in the best interests of, Axcelis and its stockholders, (iii) directed that the Axcelis share issuance proposal be submitted to the stockholders of Axcelis for approval and adoption and (iv) resolved to recommend, subject to the terms and conditions of the merger agreement, that Axcelis stockholders vote in favor of the Axcelis share issuance proposal.

Also on September 30, 2025, the Veeco board of directors (except for Mr. St. Dennis, who recused himself) held a meeting, which was also attended by Mr. Kiernan, Mr. Bradshaw, Mr. Mackey, representatives of UBS and representatives of Morrison Foerster. Representatives of UBS reviewed with the Veeco board of directors its financial analysis of the exchange ratio in the proposed transaction and delivered to the Veeco

board of directors its oral opinion, which was confirmed by delivery of a written opinion dated September 30, 2025, to the effect that, as of such date and based upon and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by UBS in connection with such opinion, the exchange ratio provided for in the proposed transaction was fair, from a financial point of view, to the holders of Veeco common stock (other than Axcelis and its affiliates), as more fully described in the section entitled “— Opinion of Financial Advisor to Veeco”. Representatives of Morrison Foerster then discussed the key terms of the merger agreement, including the resolution of the open points from the September 29, 2025 Veeco board meeting, and again presented to the Veeco board of directors on its fiduciary duties in the context of the proposed transaction and provided a summary of the proposed resolutions of the Veeco board of directors approving the merger. Following further discussion and deliberation, including taking into account the factors described below in greater detail in the section of this proxy statement entitled “— Recommendation of the Veeco Board of Directors; Veeco’s Reasons for the Merger,” the Veeco board of directors, among other things, unanimously (except for Mr. St. Dennis, who recused himself) (i) adopted and approved the merger agreement and the consummation of the transactions contemplated thereby upon the terms and subject to the conditions set forth in the merger agreement, (ii) determined that the terms of the merger agreement and the transactions contemplated thereby, including the Merger, are advisable, fair to, and in the best interests of, Veeco and its stockholders, (iii) directed that the merger agreement be submitted to the stockholders of Veeco for approval and adoption and (iv) resolved to recommend, subject to the terms and conditions of the merger agreement, that Veeco stockholders adopt the merger agreement.

Following the meetings of the Axcelis board of directors and the Veeco board of directors on September 30, 2025, the parties finalized the confidential disclosure schedules to the merger agreement and executed the merger agreement. Before the opening of stock market trading on October 1, 2025, Axcelis and Veeco issued a joint press release announcing the transaction and later that day held a joint investor call.

Recommendation of the Axcelis Board of Directors; Axcelis’ Reasons for the Merger

At a special meeting held on September 30, 2025, the board of directors of Axcelis, which is referred to as the Axcelis board of directors:

- determined that the merger agreement, the merger and the other transactions contemplated thereby, including but not limited to the share issuance in connection with the merger, are fair to, and in the best interests of, Axcelis and its stockholders;
- approved and declared advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement, on the terms and subject to the conditions set forth therein;
- directed that the share issuance be submitted to Axcelis stockholders for their approval; and
- resolved to recommend that Axcelis stockholders vote in favor of the Axcelis share issuance proposal.

Accordingly, the Axcelis board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Axcelis stockholders vote “FOR” the Axcelis share issuance proposal, and “FOR” the Axcelis adjournment proposal.

In evaluating the proposed merger, the Axcelis board of directors as described in the section entitled “— **Background of the Merger**” beginning on page 63 of this joint proxy statement/prospectus, held a number of meetings and consulted with Axcelis’ senior management and outside legal and financial advisors, and, in reaching its determinations and recommendations, considered a number of factors, including the following factors that weighed in favor of the merger (not necessarily presented in order of relative importance).

- *Compelling Strategic Rationale:* the attractive opportunity to combine two businesses with complementary product and technology portfolios to create a leading semiconductor capital equipment company, with a diversified, expanded portfolio, serving complementary end markets with a robust research and development and innovation engine;

- *Scale and Reach:* the importance of scale in the competitive market environments in which Axcelis and Veeco operate, and the potential for the merger to enhance the combined company's ability to invest, compete and provide innovative services in those environments;
- *Cost Synergies:* the expectation that the combined company would generate at least \$35 million of annual cost synergies within 24 months (with the majority achieved within the first 12 months) following the closing of the merger, as well as the expectation that the combined company would also realize revenue growth synergies from cross-selling opportunities;
- *Expanded Served Available Market:* the expectation that the combined company's served available market would be significantly expanded and that the combined company would be better positioned to increase its share within that expanded served available market;
- *Greater Ability to Invest:* the increased ability for both Axcelis and Veeco to invest in those areas that are more critical for the business;
- *Enhanced Ability to Serve Customers:* the opportunity to combine resources and expertise to better meet the evolving needs of customers of both companies, including by leveraging a broader customer support team, research and development team and intellectual property portfolio;
- *Cultural Fit:* the perceived cultural alignment between Axcelis and Veeco that would facilitate integration and implementation of the merger;
- *Product Mix/Diversification:* the expectation that the combined company would have a diversified product and technology portfolio and an established channel to both front-end and back-end markets and would be able to better collaborate with customers and accelerate the development of new technologies;
- *Stronger Balance Sheet:* the expectation that the combined company would be well-capitalized with a strong balance sheet without undue leverage that would enable strategic capital deployment to further increase stockholder value;
- *Geographic Diversification:* the combined company's potential to expand local presence in certain key geographies to better support a global customer base and to reduce any potential concentration risk in geography;
- *Exchange Ratio and Merger Consideration:* the favorability of the exchange ratio relative to the current assessment of the valuation of each company and of the expected cost synergies and other benefits of the merger;
- *Form of Consideration:* the structure of the transaction as all-stock consideration;
- *Best Terms Reasonably Available:* the belief that Axcelis had negotiated the transaction terms most favorable to Axcelis that Veeco would be willing to accept;
- *Loss of Opportunity:* the possibility that, if it declined to adopt the merger agreement, there may not be another opportunity for Axcelis stockholders to benefit from a comparably beneficial transaction;
- *Trusted CEO:* that Russell J. Low, Ph.D., the President and Chief Executive Officer of Axcelis, would become the President and Chief Executive Officer of the combined company as of the effective time and the Axcelis board of directors' view of Dr. Low's strong track record as President and Chief Executive Officer of Axcelis;
- *Trusted CFO:* that James Coogan, the Chief Financial Officer of Axcelis, would become the Chief Financial Officer of the combined company as of the effective time and the Axcelis board of directors' view of Mr. Coogan's strong track record as Chief Financial Officer of Axcelis;
- *Appropriate Board Governance:* the governance terms in the merger agreement provide that the board of directors of the combined company would include six designees from Axcelis, four from Veeco, and Thomas St. Dennis, who serves on both board of directors;
- *Exchange Ratio:* that the exchange ratio of each outstanding share of Veeco's common stock will be exchanged for 0.3575 of a share of Axcelis' common stock, with cash in lieu of fractional shares;

- *Axcelis' Standalone Prospects:* the historical and projected financial information concerning Axcelis' business, financial performance and condition, results of operations, earnings, competitive position and prospects as a standalone company;
- *Veeco's Future Prospects:* the information and discussions with Axcelis' senior management and outside advisors regarding Veeco's business, assets, financial condition, results of operations, current business strategy and prospects, including the projected long-term financial results of Axcelis' as a standalone company, the size and scale of the combined company and the expected pro forma effect of the proposed merger on the combined company;
- *Market Conditions:* the current and prospective business environment in which Axcelis and Veeco operate, including international, national and local economic conditions, the competitive and regulatory environment, and the likely effects of these factors on Axcelis and the combined company;
- *Geopolitical risks:* the current and any prospective geopolitical risks and any potential effects of an executive order;
- *Recommendation of Management:* the recommendation of Axcelis' senior management in favor of the merger;
- *Pro Forma Ownership:* that the merger and the all-stock consideration offered in connection therewith will provide Axcelis stockholders with ownership of approximately 58.1% of the combined company and, therefore, allow Axcelis' stockholders to participate in the equity value of the combined company, including future growth and the expected cost synergies and revenue synergies resulting from the merger;
- *Subject to Stockholder Vote:* the ability of Axcelis' stockholders to approve or reject the merger by voting on the share issuance in connection with the merger;
- *Likely to be Consummated:* the Axcelis board of directors' view, after consultation with Axcelis' senior management and legal counsel, concerning the likelihood of the conditions to closing, including the conditions as to stockholder vote and regulatory approvals, to be consummated;
- *Extensive Due Diligence:* the Axcelis board of directors' view that the due diligence performed by Axcelis had been thorough and extensive, and had not revealed any extraordinary or unacceptable commercial risks;
- *Opinion of Axcelis' Financial Advisor:* the written opinion, dated September 30, 2025, of J.P. Morgan delivered to the Axcelis board of directors to the effect that, as of such date and based upon and subject to the assumptions made, procedures followed, matters considered and limitations on the review undertaken by J.P. Morgan in preparing its opinion, the exchange ratio in the proposed merger was fair, from a financial point of view, to Axcelis, as more fully described below in the section entitled “— **Opinion of Financial Advisor to Axcelis**”; and
- *Merger Agreement Terms:* the review by the Axcelis board of directors with Axcelis' management and advisors of the structure of the proposed merger and the financial and other terms of the merger agreement, including the parties' representations, warranties and covenants, the conditions to their respective obligations and the termination provisions as well as the likelihood of consummation of the proposed transactions and the evaluation of the Axcelis board of directors of the likely period necessary to complete the merger. The Axcelis board of directors also considered the following specific aspects of the merger agreement:
 - the nature of the closing conditions included in the merger agreement, including the reciprocal exceptions to the events that would constitute a material adverse effect on either Axcelis or Veeco for purposes of the merger agreement, as well as the likelihood of satisfaction of all conditions to completion of the transactions;
 - that the representations and warranties of Axcelis or Veeco as well as the interim operating covenants requiring the parties to conduct their respective businesses in the ordinary course prior to completion of the merger, subject to specific limitations, are generally reciprocal;
 - the requirement to use certain efforts to obtain certain regulatory approvals;

- the restrictions in the merger agreement on Veeco's ability to respond to and negotiate certain alternative transaction proposals from third parties and the requirement that Veeco pay Axcelis a termination fee of \$77,500,000; a 'force the vote' provision that applies even if the Veeco board of directors makes an adverse recommendation change, that Veeco must submit the proposal to a stockholder vote, unless Axcelis decides to terminate the merger agreement upon such recommendation change and collect a termination fee instead; and
- a fixed expense reimbursement to be paid by Veeco if Veeco's stockholders do not approve the Veeco merger agreement proposal or Axcelis validly terminates the merger agreement for Veeco's breach resulting in the failure of conditions.

The Axcelis board of directors weighed these advantages and opportunities against a number of potentially negative factors in its deliberations concerning the merger agreement and the merger, including:

- *Risk of Veeco's Underperformance:* the risk that Veeco's financial performance may not meet Axcelis' expectations;
- *Transaction Execution/Synergy Realization Risk:* the difficulties and management challenges inherent in completing the merger and integrating the business, operations and workforces of Axcelis and Veeco and the risk of not capturing all of the anticipated cost synergies and the risk that other anticipated benefits of the merger might not be realized;
- *Challenges to Integration:* the challenges of integrating Axcelis and Veeco, given the size of the businesses;
- *Risk of Delay:* the amount of time it could take to complete the merger, including that completion of the merger depends on factors beyond Axcelis' or Veeco's control, and the risk that the pendency of the merger for an extended period following announcement of the execution of the merger agreement could have an adverse impact on Axcelis or Veeco, including their respective customers, suppliers and other business relationships;
- *Risk of Culture Clash:* the risk that the cultures of the two companies may not be as compatible as anticipated;
- *Management Distraction:* the possible diversion of management attention for an extended period during the pendency of the merger;
- *Risk of Loss of Personnel:* the risk that, despite the retention efforts of Axcelis or Veeco prior to the consummation of the merger, the combined company may lose key personnel;
- *Risk of Market Changes Eroding Benefits:* the risk that changes in the regulatory landscape or new industry developments, including changes in customer preferences, may adversely affect the business benefits anticipated to result from the merger;
- *Non-Solicitation Obligation and Termination Fee:* the provisions of the merger agreement which prohibit Axcelis from soliciting or entertaining other acquisition offers, the potential payment to Veeco by Axcelis of a termination fee of \$108,700,000, as described in the section entitled "**The Merger Agreement — Termination Fees**" beginning on page 133 of this joint proxy statement/prospectus and the inability of Axcelis to terminate the merger agreement in connection with a change of recommendation by the Axcelis board of directors;
- *Termination Fees May Be Inadequate:* the risk that the \$77,500,000 termination fee or the \$15,000,000 expense reimbursement amount to which Axcelis may be entitled, subject to the terms and conditions of the merger agreement, in connection with termination of the merger agreement in certain circumstances may not be sufficient to compensate Axcelis for the harm that it might suffer as a result of such termination;
- *Risk of Litigation:* the potential for litigation relating to the proposed merger and the associated costs, burden and inconvenience involved in defending those proceedings;
- *Deterring Alternatives:* that certain provisions of the merger agreement, although reciprocal, may have the effect of discouraging alternative proposals involving Axcelis;

- *Burden of Interim Operating Covenants:* the restrictions in the merger agreement on the conduct of Axcelis' business during the period between execution of the merger agreement and the consummation of the merger, including that Axcelis must conduct its business only in the ordinary course, subject to specific limitations, which (although reciprocal to those limitations imposed on Veeco) could negatively impact Axcelis' ability to pursue certain business opportunities or strategic transactions;
- *Employees, Customers and Suppliers:* the potential impact on Axcelis' business of any negative reaction by employees, customers, suppliers or other Axcelis constituencies after the announcement of the merger;
- *Risk of Failed Stockholder Vote:* the risk that Axcelis stockholders or Veeco stockholders, as applicable, may not approve the proposal at Axcelis' special meeting or Veeco's special meeting and the fact that if Axcelis' stockholders fail to approve the proposals at Axcelis' special meeting Axcelis will be obligated to pay a \$15,000,000 expense reimbursement amount to Veeco;
- *Risk of Regulatory Delay:* the risk that regulatory agencies may delay, object to and challenge the merger or may impose terms and conditions in order to resolve those objections that adversely affect the financial results of Axcelis, Veeco or the combined company; see the section entitled “**Regulatory Approvals**” beginning on page 110 of this joint proxy statement/prospectus;
- *Risk of Any Geopolitical Changes:* the risks of any prospective geopolitical changes and any potential effects of an executive order that could delay or challenge the merger and the terms and conditions set forth in the merger agreement;
- *Adverse Effect of Unconsummated Transaction:* the potential adverse effect on Axcelis' business, stock price and ability to attract and retain key employees if the merger agreement was entered into and publicly announced but not completed, including substantial costs incurred and damage to Axcelis' reputation;
- *Paying a Premium:* the fact that the exchange ratio is fixed under the merger agreement, which represents a premium of approximately 14.7% based on Veeco's closing stock price of \$30.43 and Axcelis' closing stock price of \$97.64 on September 30, 2025, the last trading day prior to the announcement of the merger, means that the trading value of the merger consideration, consisting of 0.3575 of a share of Axcelis common stock for each outstanding share of Veeco common stock, upon consummation of the merger might be more or less than the trading value of such consideration on the date of the execution of the merger agreement;
- *Merger Agreement:* the following specific aspects of the merger agreement:
 - the restrictions in the merger agreement on Axcelis' ability to respond to and negotiate certain alternative transaction proposals from third parties and the requirement that Axcelis pay Veeco a termination fee of \$108,700,000; a ‘force the vote’ provision that applies even if the Axcelis board of directors makes an adverse recommendation change, that Axcelis must submit the proposal to a stockholder vote, unless Veeco decides to terminate upon such recommendation change and collect a termination fee instead; and
 - a fixed expense reimbursement to be paid by Axcelis if Axcelis' stockholders vote down the Axcelis share issuance proposal or Veeco validly terminates the merger agreement for Axcelis' breach resulting in the failure of conditions;
- *Transaction Costs:* the substantial transaction costs to be incurred in connection with the proposed merger; and
- *Risk Factors:* the risks of the type and nature described in the section entitled “**Risk Factors**” beginning on page 33 of this joint proxy statement/prospectus and the matters described in the section entitled “**Cautionary Statement Regarding Forward-Looking Statements**” beginning on page 31 of this joint proxy statement/prospectus.

The Axcelis board of directors considered all of these factors as a whole and, on balance, concluded that the potential benefits of the merger outweighed the risks and uncertainties of the merger. Accordingly, the Axcelis board of directors approved the merger agreement, and the other transactions contemplated by the merger agreement.

In addition, the Axcelis board of directors was aware of and considered the interests of its directors and executive officers that are different from, or in addition to, the interests of Axcelis stockholders generally, including the treatment of equity awards held by such directors and executive officers in the merger described in the section entitled **“Interests of Axcelis’ Directors and Executive Officers in the Merger”** beginning on page 156 of this joint proxy statement/prospectus and the obligation of the combined company to indemnify Axcelis directors and officers against certain claims and liabilities.

The foregoing discussion of the information and factors that the Axcelis board of directors considered is not intended to be exhaustive, but rather is meant to include the material factors that the Axcelis board of directors considered. The Axcelis board of directors collectively reached the conclusion to approve the merger agreement, the merger and the other transactions contemplated by the merger agreement in light of the various factors described above and other factors that the members of the Axcelis board of directors believed were appropriate. In view of the complexity and wide variety of factors, both positive and negative, that the Axcelis board of directors considered in connection with its evaluation of the merger, the Axcelis board of directors did not find it practical, and did not attempt, to quantify, rank or otherwise assign relative or specific weights or values to any of the factors it considered in reaching its decision and did not undertake to make any specific determination as to whether any particular factor, or any aspect of any particular factor, was favorable or unfavorable to the ultimate determination of the Axcelis board of directors. In considering the factors discussed above, individual directors may have given different weights to different factors.

The foregoing description of Axcelis’ consideration of the factors supporting the merger is forward-looking in nature. This information should be read in light of the factors discussed in the section entitled **“Cautionary Statement Regarding Forward-Looking Statements”** beginning on page 31 of this joint proxy statement/prospectus.

Recommendation of the Veeco Board of Directors; Veeco’s Reasons for the Merger

At a meeting held on September 30, 2025, the Veeco board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself): (i) adopted and approved the merger agreement and the consummation of the transactions contemplated thereby upon the terms and subject to the conditions set forth in the merger agreement; (ii) determined that the terms of the merger agreement and the transactions contemplated thereby, including the merger, are advisable, fair to, and in the best interests of, Veeco and Veeco stockholders; (iii) directed that the merger agreement be submitted to the Veeco stockholders for approval and adoption; and (iv) resolved to recommend, subject to the terms and conditions of the merger agreement, that Veeco stockholders adopt the merger agreement.

Accordingly, the Veeco board of directors unanimously (except for one independent director, who serves on both the Axcelis board of directors and the Veeco board of directors, who recused himself) recommends that Veeco stockholders vote “FOR” the Veeco merger agreement proposal, “FOR” the Veeco compensation proposal and “FOR” the Veeco adjournment proposal.

As described under **“— Background of the Merger,”** in evaluating the merger agreement and the transactions contemplated thereby, including the merger, the Veeco board of directors held a number of meetings and consulted with Veeco’s senior management, outside legal counsel and financial advisor. In reaching its determination to approve the merger agreement and to recommend that Veeco stockholders vote to adopt the merger agreement, the Veeco board of directors considered a number of factors, many of which support the Veeco board of directors’ determination and recommendation with respect to the merger agreement, including the following (which are not necessarily presented in order of relative importance to the Veeco board of directors):

- that the strategic combination with Axcelis would create an industry-leading semiconductor equipment company serving complementary and expanding end markets with a broader and more diversified product and technology portfolio and increased research and development scale;
- that by integrating complementary technologies, solutions and offerings, the combined company would expand its total addressable market opportunity to more than \$5 billion, with greater exposure

to end markets that are expected to experience significant growth driven by artificial intelligence and the corresponding demand for power solutions;

- that the merger would result in a combined company with a differentiated and comprehensive product portfolio spanning ion implantation, laser annealing, ion beam deposition, advanced packaging solutions and MOCVD, supported by robust aftermarket services, and would create the fourth largest U.S. wafer fabrication equipment supplier by revenue, which combined capabilities would be expected to deliver meaningful scale and resources, allow the combined company to better compete throughout the global semiconductor equipment value chain, and provide revenue synergies through the integration of technology expertise, cross-selling and platform optimization;
- that the combined company's technical expertise, capabilities and teams would result in increased research and development scale, acceleration of innovation and new opportunities across end markets and key geographies;
- that the combination of Veeco and Aixcelis would bolster the global scale of the combined company's research and development, manufacturing and services infrastructure, while strengthening the combined company's position across key geographies;
- the expectation that the merger would result in cost and operational synergies that could drive approximately \$35 million of projected savings within 24 months after the closing of the merger;
- the fact that the combined company would have pro forma cash, cash equivalents and marketable securities of over \$900 million upon the closing of the merger, and its strong balance sheet is expected to support the organic growth of the combined businesses while providing a robust financial foundation from which to deliver returns to stockholders and evaluate selected potential inorganic growth opportunities;
- the fact that (i) the combined company's board of directors would be comprised of six designees from Aixcelis, four from Veeco and Mr. St. Dennis, who serves on both boards of directors, (ii) Mr. St. Dennis, who is very familiar with Veeco's business, prospects and strategy, would serve as Chairperson of the combined company's board of directors, (iii) Dr. Miller would serve as Chairperson of the Technology Committee of the combined company's board of directors, (iv) Dr. Low would serve as Chief Executive Officer of the combined company and (v) Mr. Coogan would serve as Chief Financial Officer of the combined company, which leadership being drawn from both companies enhances the likelihood that the strategic benefits that Veeco expects to achieve as a result of the merger will be realized;
- Veeco's and Aixcelis' complementary cultures and operating philosophies, and the fact that Mr. St. Dennis currently serves on the board of directors of both companies and Dr. Low was previously employed at Veeco from 2012 to 2016, all of which would facilitate integration and implementation of the merger;
- the aggregate value and nature of the consideration to be received in the merger by Veeco stockholders, including the fact that Veeco stockholders as of immediately prior to the completion of the merger are expected to own approximately 42% of the fully diluted shares of the combined company immediately following the completion of the merger, and will have the opportunity to share in the future growth and expected synergies of the combined company while retaining the flexibility of selling all or a portion of those shares;
- the fact that the consideration to be received in the merger by Veeco stockholders represents a premium of approximately 14.7% based on Veeco's closing stock price of \$30.43 and Aixcelis' closing stock price of \$97.64 on September 30, 2025, the last trading day prior to the announcement of the merger;
- the fact that the exchange ratio will not fluctuate in the event that the market price of Aixcelis increases relative to the market price of Veeco common stock between the date of the merger agreement and the closing date;
- the Veeco board of directors' belief that (i) customers, employees and other key stakeholders would react positively to the combined company after the merger, (ii) the combination would improve Veeco's

and Axcelis' existing customer relationships by increasing the scope and scale of end to end support and accelerate research and development investments for customers and (iii) the merger would enhance the combined company's ability to compete for and attract top talent across a broader set of technologies and markets and further allow employees to benefit from a broader range of opportunities as part of a larger and better capitalized business with a stronger platform for innovation and growth;

- the Veeco board of directors' belief, based on its knowledge of, and discussions with Veeco's management and outside advisors regarding, Veeco's standalone business, prospects and opportunities and the risks of remaining as a standalone public company, that the value offered to Veeco's stockholders pursuant to the merger would be more favorable to Veeco's stockholders than the potential value that might reasonably be expected to result from remaining as an independent public company;
- the written opinion of UBS, dated September 30, 2025, to Veeco's board of directors as to the fairness, from a financial point of view, as of such date and based upon and subject to the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by UBS in connection with such opinion, of the exchange ratio to the holders of Veeco common stock (other than Axcelis and its affiliates) (as more fully described below under "**Opinion of Financial Advisor to Veeco**" and is attached as Annex C hereto);
- that the merger is intended to qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Code, as more fully described under "**U.S. Federal Income Tax Consequences of the Merger**";
- the results of the due diligence review of Axcelis and its business, including with respect to Axcelis' products and technologies, financial condition and regulatory compliance, conducted by Veeco and its advisors;
- the recommendation of Veeco's senior management in favor of the merger;
- the structure of the proposed merger and the terms and conditions of the merger agreement, which were reviewed with Veeco's outside legal counsel and financial advisor:
 - that Veeco and Axcelis agreed to use their respective reasonable best efforts to consummate the merger and obtain the necessary approvals and expirations or terminations of applicable waiting periods required under applicable antitrust laws and investment screening laws;
 - the nature of the closing conditions included in the merger agreement, including the reciprocal exceptions to the events that would constitute a material adverse effect on either Veeco or Axcelis for purposes of the merger agreement, as well as the likelihood of satisfaction of all conditions to completion of the transactions;
 - that the representations and warranties of Veeco and Axcelis, as well as the interim operating covenants requiring the parties to conduct their respective businesses in the ordinary course prior to completion of the merger, subject to specific limitations, are reasonable, customary and generally reciprocal;
 - the fact that there are limited circumstances in which the Axcelis board of directors may terminate the merger agreement or change its recommendation that Axcelis stockholders approve the Axcelis share issuance proposal, and the requirement that Axcelis pay Veeco a \$108.7 million termination fee if the merger agreement is terminated under certain circumstances, including if the merger agreement is terminated by Veeco as a result of a change in recommendation by the Axcelis board of directors;
 - Veeco's right to engage in negotiations with, and provide information to, a third party that makes an unsolicited bona fide written proposal relating to an alternative transaction, if the Veeco board of directors has determined in good faith, after consultation with its outside legal counsel and financial advisor, that such proposal would reasonably be expected to lead to a transaction that is superior to the merger with Axcelis and that a failure to take action with respect to such proposal would be inconsistent with its fiduciary duties under applicable law;

- the right of the Veeco board of directors to change its recommendation that Veeco stockholders vote to adopt the merger agreement in response to certain intervening events, subject to certain conditions, and the Veeco board of directors' view that the termination fee of \$77.5 million payable to Axcelis under certain circumstances is customary and reasonable and would not preclude or deter a willing and financially capable third party from making an acquisition proposal for an alternative transaction;
- the fact that Veeco stockholders will have the opportunity to vote to approve or reject the merger by voting on the adoption of the merger agreement;
- the "force the vote" provision that applies even if Axcelis' board of directors makes an adverse recommendation change, such that Axcelis must submit the Axcelis share issuance proposal to a stockholder vote, unless Veeco decides to terminate the merger agreement upon such recommendation change and collect a termination fee instead;
- the fixed expense reimbursement to be paid by Axcelis if Axcelis' stockholders vote down the Axcelis share issuance proposal or Veeco validly terminates for Axcelis' breach resulting in failure of conditions; and
- the fact that there are no financing conditions or contingencies, and that Axcelis does not require financing in order to complete the merger.

In the course of its evaluation of the merger agreement and the merger, the Veeco board of directors also considered a variety of risks, uncertainties and other potentially negative factors, including the following (which are not necessarily presented in order of their relative importance to the Veeco board of directors):

- the risks and contingencies relating to the announcement and pendency of the merger (including the likelihood of litigation or other opposition brought by or on behalf of Veeco stockholders or Axcelis stockholders challenging the merger and the other transactions contemplated by the merger agreement);
- the possibility that the merger may not be completed or that completion may be delayed for an extended period of time for reasons beyond the control of Veeco or Axcelis, including the failure to receive the required Veeco stockholder approval, the required Axcelis stockholder approval or the approvals for the merger required under applicable antitrust laws and investment screening laws;
- the risks and costs to Veeco if the completion of the merger is not accomplished in a timely manner or if the merger does not close at all, including potential employee attrition, the impact on Veeco's relationships with third parties and the effect that the termination of the merger agreement may have on the trading price of Veeco common stock and Veeco's operating results;
- the fact that the exchange ratio under the merger agreement is fixed, meaning that Veeco stockholders could be adversely affected if the implied value of the merger consideration declines as a result of a decline in the trading price of the Axcelis common stock;
- the risk that the combined company will not realize any or all of the anticipated strategic and other benefits of the merger, including the possibility that Axcelis' financial performance may not meet Veeco's expectations and that the expected synergies may take longer to be realized, may not be realized at all or in full or will cost more to achieve than anticipated;
- the challenges inherent in completing the merger, integrating the businesses, and managing the expanded operations and workforce of Veeco and Axcelis, including the challenge of blending board and management leadership, harmonizing compensation philosophies, employee compensation and benefit plans, and the potential loss of key personnel, customers and suppliers during the pendency of the merger and thereafter, and the risk that the anticipated benefits of the merger may take longer to realize or may not be realized at all or in full;
- the restrictions in the merger agreement on the conduct of Veeco's business during the period between execution of the merger agreement and the consummation of the merger, including that Veeco is required to conduct its business in the ordinary course consistent with past practice, subject to specific limitations, which could delay or prevent Veeco from pursuing certain business

opportunities or strategic transactions that may arise and could have a negative impact on Veeco's ability to maintain its existing business and employee relationships, in each case, through the outside date under the merger agreement;

- the possible diversion of management focus and resources from other strategic opportunities and operational matters while working to implement the merger and planning for the integration of Veeco and Axcelis;
- the possibility that regulatory authorities may delay, object to or challenge the merger or may impose terms and conditions in order to resolve those objections that adversely affect the financial results of Veeco, Axcelis or the combined company, as more fully described under "**— Regulatory Approvals**";
- the risk that, if paid to Veeco by Axcelis pursuant to the merger agreement in certain circumstances following the termination of the merger agreement, the \$108.7 million termination fee or the \$15 million expense reimbursement amount may not sufficiently compensate Veeco for the adverse effects that may arise out of such termination;
- the risks of any prospective geopolitical changes or the inability of the combined company or its customers to obtain U.S. export control licenses for sales of certain products or provision of certain services in key geographies;
- the following aspects of the merger agreement:
 - the provisions of the merger agreement that restrict Veeco's ability to solicit or negotiate alternative transactions, and the potential that the requirement of Veeco to pay Axcelis a termination fee of \$77.5 million under certain circumstances could deter a potential acquirer from proposing an alternative transaction for Veeco that would provide Veeco stockholders with greater value than the merger;
 - Axcelis' right, subject to certain conditions, to respond to and negotiate with respect to certain acquisition proposals from third parties made prior to the time Axcelis stockholders approve the Axcelis share issuance proposal;
 - the fact that Axcelis stockholders will have the opportunity to vote to approve or reject the merger by voting on the Axcelis share issuance proposal;
 - the "force the vote" provision that applies even if Veeco's board of directors makes an adverse recommendation change, such that Veeco must submit the merger proposal to a stockholder vote, unless Axcelis decides to terminate upon such recommendation change and collect a termination fee instead; and
 - the fixed expense reimbursement to be paid by Veeco if Veeco's stockholders vote down the merger proposal or Axcelis validly terminates for Veeco's breach resulting in failure of conditions;
 - the costs associated with the proposed merger, including management's time and energy and potential opportunity costs, regardless of whether the proposed merger is completed;
 - the fact that Veeco stockholders will not be entitled to appraisal rights in connection with the merger;
 - the potential for litigation by Veeco stockholders in connection with the transactions contemplated by the merger agreement, which, even where lacking in merit, could nonetheless result in distraction and expense;
 - the fact that Veeco's directors and executive officers may have interests in the merger that may be different from, or in addition to, those of Veeco stockholders (for more information about such interests, see below under the heading "**Interests of Veeco Directors and Executive Officers in the Merger**"); and
 - risks of the type and nature described under the sections entitled "**Risk Factors**" and "**Cautionary Statements Regarding Forward-Looking Statements.**"

The foregoing discussion of the information and factors that the Veeco board of directors considered is not, and is not intended to be, exhaustive. The Veeco board of directors collectively (with one abstention)

reached the conclusion to approve the merger agreement and the consummation of the transactions contemplated thereby, including the merger, in light of the various factors described above and other factors that the Veeco board of directors believed were appropriate. In view of the complexity and wide variety of factors, both positive and negative, that the Veeco board of directors considered in connection with its evaluation of the merger, the Veeco board of directors did not find it useful to, and did not attempt to, quantify, rank or otherwise assign relative or specific weights or values to any of the factors it considered in reaching its decision and did not undertake to make any specific determination as to whether any particular factor, or any aspect of any particular factor, was favorable or unfavorable to the ultimate determination of the Veeco board of directors. In considering the factors discussed above, each member of the Veeco board of directors applied his or her own personal business judgment to the process and may have given different weight to different factors.

The foregoing discussion of the information and factors considered by the Veeco board of directors in approving the merger agreement is forward-looking in nature. This information should be read in light of the factors discussed under **“Cautionary Statement Regarding Forward-Looking Statements.”**

Opinion of Financial Advisor to Axcelis

Pursuant to an engagement letter, Axcelis retained J.P. Morgan as financial advisor to Axcelis in connection with the proposed merger. As part of such engagement, J.P. Morgan delivered a written opinion dated September 30, 2025 to the Axcelis board of directors to the effect that, as of such date and based upon and subject to the assumptions made, procedures followed, matters considered and limitations on the review undertaken by J.P. Morgan in preparing the opinion, the exchange ratio in the proposed merger was fair, from a financial point of view, to Axcelis.

The full text of the written opinion of J.P. Morgan dated September 30, 2025, which sets forth the assumptions made, procedures followed, matters considered and limitations on the review undertaken by J.P. Morgan in preparing the opinion, is attached as Annex B to this joint proxy statement/prospectus and is incorporated herein by reference. The issuance of J.P. Morgan’s opinion was approved by a fairness opinion committee of J.P. Morgan. The summary of the opinion of J.P. Morgan set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of such opinion. Axcelis stockholders are encouraged to read the opinion in its entirety. J.P. Morgan’s written opinion was addressed to the Axcelis board of directors (in its capacity as such) in connection with and for the purposes of its evaluation of the proposed merger, was directed only to the exchange ratio in the proposed merger and did not address any other terms, aspects or implications of the merger. J.P. Morgan expressed no opinion as to the fairness of the merger, or any consideration paid in connection therewith, to the holders of any class of securities, creditors or other constituencies of Axcelis or as to the underlying decision by Axcelis to engage in the proposed merger. J.P. Morgan’s opinion does not constitute a recommendation to any stockholder as to how any stockholder should vote with respect to the proposed merger or any other matter.

In connection with preparing its opinion, J.P. Morgan, among other things:

- reviewed a draft dated September 30, 2025 of the merger agreement;
- reviewed certain publicly available business and financial information concerning Veeco and Axcelis and the industries in which they operate;
- compared the financial and operating performance of Veeco and Axcelis with publicly available information concerning certain other companies J.P. Morgan deemed relevant and reviewed the current and historical market prices of Veeco common stock and Axcelis common stock and certain publicly traded securities of such other companies;
- reviewed certain internal financial analyses and forecasts prepared by or at the direction of the managements of Veeco and Axcelis relating to their respective businesses, as well as the estimated amount and timing of the cost savings and related expenses and cost synergies; and
- performed such other financial studies and analyses and considered such other information as J.P. Morgan deemed appropriate for the purposes of its opinion.

In addition, J.P. Morgan held discussions with certain members of the management of Veeco and Axcelis with respect to certain aspects of the merger, and the past and current business operations of Veeco

and Axcelis, the financial condition and future prospects and operations of Veeco and Axcelis, the effects of the merger on the financial condition and future prospects of Axcelis, and certain other matters J.P. Morgan believed necessary or appropriate to its inquiry.

In giving its opinion, J.P. Morgan relied upon and assumed the accuracy and completeness of all information that was publicly available or was furnished to or discussed with J.P. Morgan by Veeco and Axcelis or otherwise reviewed by or for J.P. Morgan. J.P. Morgan did not independently verify any such information or its accuracy or completeness and, pursuant to J.P. Morgan's engagement letter with Axcelis, J.P. Morgan did not assume any obligation to undertake any such independent verification. J.P. Morgan did not conduct and was not provided with any valuation or appraisal of any assets or liabilities of Veeco or Axcelis, nor did J.P. Morgan evaluate the solvency of Veeco or Axcelis under any state or federal laws relating to bankruptcy, insolvency or similar matters. In relying on financial analyses and forecasts provided to J.P. Morgan or derived therefrom, including the cost synergies, J.P. Morgan assumed that they were reasonably prepared based on assumptions reflecting the best currently available estimates and judgments by management as to the expected future results of operations and financial condition of Veeco and Axcelis to which such analyses or forecasts relate. J.P. Morgan expressed no view as to such analyses or forecasts (including the cost synergies) or the assumptions on which they were based. J.P. Morgan also assumed that the merger and the other transactions contemplated by the merger agreement would qualify for a tax-free reorganization for United States federal income tax purposes and would be consummated as described in the merger agreement, and that the definitive merger agreement would not differ in any material respects from the draft thereof furnished to J.P. Morgan. J.P. Morgan also assumed that the representations and warranties made by Axcelis and Veeco in the merger agreement and the related agreements were and will be true and correct in all respects material to its analysis. J.P. Morgan is not a legal, regulatory or tax expert and relied on the assessments made by advisors to Axcelis with respect to such issues. J.P. Morgan further assumed that all material governmental, regulatory or other consents and approvals necessary for the consummation of the merger would be obtained without any adverse effect on Veeco or Axcelis or on the contemplated benefits of the merger.

J.P. Morgan's opinion was necessarily based on economic, market and other conditions as in effect on, and the information made available to J.P. Morgan as of, the date of such opinion. It should be understood that subsequent developments may affect J.P. Morgan's opinion and that J.P. Morgan does not have any obligation to update, revise, or reaffirm such opinion. J.P. Morgan's opinion was limited to the fairness, from a financial point of view, to Axcelis of the exchange ratio in the proposed merger and J.P. Morgan expressed no opinion as to the fairness of the exchange ratio to the holders of any class of securities, creditors or other constituencies of Axcelis or as to the underlying decision by Axcelis to engage in the merger. Furthermore, J.P. Morgan expressed no opinion with respect to the amount or nature of any compensation to any officers, directors or employees of any party to the merger, or any class of such persons, relative to the exchange ratio in the merger or with respect to the fairness of any such compensation. J.P. Morgan expressed no opinion as to the prices at which Veeco common stock or Axcelis common stock would trade at any future time.

The terms of the merger agreement, including the exchange ratio, were determined through arm's-length negotiations between Axcelis and Veeco, and the decision to enter into the merger agreement was solely that of the Axcelis board of directors and the Veeco board of directors. J.P. Morgan's opinion and financial analyses were only one of the many factors considered by the Axcelis board of directors in its evaluation of the proposed merger and should not be viewed as determinative of the views of the Axcelis board of directors or the management of Axcelis with respect to the proposed merger or the exchange ratio.

Financial Analyses

In accordance with customary investment banking practices, J.P. Morgan employed generally accepted valuation methodologies in delivering its written opinion dated September 30, 2025 and contained in the presentation for the Axcelis board of directors delivered on such date in connection with the delivery of such opinion. **The following summary of the material financial analyses utilized by J.P. Morgan does not purport to be a complete description of the analyses or data provided by J.P. Morgan. Some of the summaries of the financial analyses include information presented in tabular format. The tables are not intended to stand alone, and in order to more fully understand the financial analyses used by J.P. Morgan, the tables must be read**

together with the full text of each summary. Considering the data set forth below without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of J.P. Morgan's analyses. For purposes of the financial analyses described below, the term "adjusted EPS" generally refers to earnings per share adjusted for certain one-time and non-recurring items, as applicable, and excluding the impact of stock-based compensation expense. Implied equity value per share reference ranges derived from the financial analyses described below were rounded to the nearest \$0.25.

In calculating approximate implied exchange ratio reference ranges as reflected in the financial analyses described below, J.P. Morgan divided the low-ends (or high-ends, as the case may be) of the implied equity value per share reference ranges derived for Veeco from such analyses by the high-ends (or low-ends, as the case may be) of the implied equity value per share reference ranges derived for Axcelis from such analyses in order to calculate the low-ends (or high-ends) of the approximate implied exchange ratio reference ranges.

Selected Public Trading Multiples Analyses. J.P. Morgan performed separate selected public trading multiples analyses of Veeco and Axcelis in which J.P. Morgan reviewed selected financial data relating to Veeco, Axcelis and the selected publicly traded companies listed below.

In its selected public trading multiples analyses of Veeco and Axcelis, using publicly available information, J.P. Morgan compared selected financial data of Veeco and Axcelis with similar data for selected publicly traded companies engaged in businesses that J.P. Morgan deemed sufficiently analogous to those engaged in by Veeco and Axcelis. The selected companies were as follows:

- Aixtron SE
- Applied Materials, Inc.
- ASM International N.V.
- ASML Holding N.V.
- Camtek Ltd.
- KLA Corporation
- Lam Research Corporation
- Onto Innovation Inc.

None of the selected companies reviewed is identical to Veeco or Axcelis and certain of these companies may have characteristics that are materially different from those of Veeco and Axcelis. However, these companies were selected because they are publicly traded companies that J.P. Morgan considered relevant for purposes of analysis. The analysis necessarily involves complex considerations and judgments concerning differences in financial and operational characteristics of the companies involved and other factors that could affect the companies differently than they would affect Veeco or Axcelis.

Using publicly available information, J.P. Morgan reviewed, among other information, firm values (calculated as implied equity values based on closing stock prices on September 29, 2025 plus total debt, preferred equity and non-controlling interests (as applicable) and less cash, cash equivalents and investments in unconsolidated affiliates (as applicable)) as a multiple of calendar year 2026 estimated adjusted EPS. Financial data of the selected companies were based on publicly available research analysts' estimates, public filings and other publicly available information. Financial data of Veeco and Axcelis were based on publicly available research analysts' estimates, public filings and other information and data provided to or discussed with J.P. Morgan by the managements of Veeco and Axcelis.

The overall low to high calendar year 2026 estimated adjusted EPS multiples observed for the selected companies were 17.5x to 32.0x. J.P. Morgan noted that the calendar year 2026 estimated adjusted EPS multiples observed for Veeco and Axcelis were 19.3x and 22.7x, respectively, based on publicly available research analysts' estimates. J.P. Morgan applied selected ranges of calendar year 2026 estimated adjusted EPS multiples derived from the selected companies of 17.5x to 26.0x and 21.5x to 30.0x to corresponding data of Veeco and Axcelis, respectively, based on financial forecasts and other information and data provided to

or discussed with J.P. Morgan by the managements of Veeco and Axcelis. This analysis indicated implied equity value per share reference ranges for Veeco and Axcelis of \$27.00 to \$40.25 and \$94.00 to \$131.00, respectively.

Utilizing the implied equity value per share reference ranges derived for Veeco and Axcelis as described above, J.P. Morgan calculated the following approximate implied exchange ratio reference range, as compared to the exchange ratio in the proposed merger:

Implied Exchange Ratio Reference Range	Merger Exchange Ratio
0.206x – 0.428x	0.3575x

Discounted Cash Flow Analyses. J.P. Morgan conducted separate discounted cash flow analyses of Veeco and Axcelis, both before, and in the case of the discounted cash flow analysis of Veeco after, giving effect to potential cost synergies expected by management to result from the merger. J.P. Morgan conducted discounted cash flow analyses of Veeco and Axcelis by calculating the estimated present value of the unlevered free cash flows expected to be generated by Veeco and Axcelis during the third and fourth quarters of the fiscal year ending December 31, 2025 through the full fiscal year ending December 31, 2034 based on, in the case of Veeco, financial forecasts and other information and data relating to Veeco as per the management of Veeco for fiscal years ending December 31, 2025 through December 31, 2028 and as adjusted and extrapolated per the management of Axcelis for the fiscal years ending December 31, 2029 through December 31, 2034 and, in the case of Axcelis, based on financial forecasts and other information and data relating to Axcelis as per the management of Axcelis. J.P. Morgan calculated a range of terminal values by applying perpetuity growth rates ranging from 2.5% to 3.5% to the respective normalized unlevered free cash flows of Veeco and Axcelis during the terminal period of the forecasts. The unlevered free cash flows and the range of terminal values were discounted to present values (as of June 30, 2025) using discount rates ranging from 10.0% to 11.0% in the case of Veeco and 11.0% to 12.0% in the case of Axcelis. This analysis indicated implied equity value per share reference ranges for Veeco of \$38.00 to \$47.25 (before giving effect to potential cost synergies) and \$43.00 to \$52.25 (after giving effect to potential cost synergies) and an implied equity value per share reference range for Axcelis of \$109.25 to \$129.25.

Utilizing the implied equity value per share reference ranges derived for Veeco and Axcelis as described above, J.P. Morgan calculated the following approximate implied exchange ratio reference ranges, both before and after giving effect to potential cost synergies, as compared to the exchange ratio in the proposed merger:

Implied Exchange Ratio Reference Ranges		Merger Exchange Ratio
Before Potential Cost Synergies	After Potential Cost Synergies	
0.294x – 0.432x	0.333x – 0.478x	0.3575x

Illustrative Intrinsic-Based Theoretical Value Creation Analysis. J.P. Morgan conducted an analysis of the implied theoretical per share value creation of the merger to existing holders of Axcelis common stock based on the pro forma equity ownership of such holders in the combined company upon consummation of the merger, after giving effect to potential cost synergies expected by management to result from the merger, relative to the implied equity value per share of Axcelis on a standalone basis, based on financial forecasts and other information and data relating to Veeco and Axcelis as per the managements of Veeco and Axcelis.

J.P. Morgan calculated the implied pro forma equity value per share to holders of Axcelis common stock by taking into account (i) the midpoints of the respective approximate implied equity values for Veeco and Axcelis, each on a standalone basis, as derived from the discounted cash flow analyses for Veeco and Axcelis described above and (ii) the estimated present value of the midpoint of the potential cost synergies estimates provided by the management of Axcelis. Based on the implied pro forma equity ownership of holders of Axcelis common stock in the combined company upon consummation of the merger of 58.1%, this indicated that the merger could create a hypothetical incremental implied equity value uplift for holders of Axcelis common stock of approximately 4.4% relative to the midpoint of the approximate implied equity value for Axcelis on a standalone basis. There can be no assurance that the projected financial

information and impacts from the merger will not be substantially greater or less than those estimated by the managements of Axcelis and Veeco or as described above.

Certain Additional Information

J.P. Morgan observed the following additional information that was not considered part of J.P. Morgan's financial analyses with respect to its opinion but was noted for informational purposes:

- historical closing intraday prices for Veeco common stock and Axcelis common stock during the 52-week period prior to September 29, 2025, which indicated low and high closing prices during such period for Veeco common stock of \$17.35 per share and \$33.75 per share, respectively, and for Axcelis common stock of \$42.42 per share and \$105.10, respectively, and an approximate implied exchange ratio reference range of 0.165x to 0.796x; and
- certain publicly available equity research analysts' price targets for Veeco common stock and Axcelis common stock, which indicated price targets for Veeco common stock and Axcelis common stock of \$21.00 to \$30.00 per share and \$81.00 to \$90.00 per share, respectively, and an approximate implied exchange ratio reference range of 0.233x to 0.370x.

Miscellaneous

The foregoing summary does not purport to be a complete description of the analyses or data presented by J.P. Morgan. The preparation of a fairness opinion is a complex process and is not necessarily susceptible to partial analysis or summary description. J.P. Morgan believes that the foregoing summary and its analyses must be considered as a whole and that selecting portions of the foregoing summary and these analyses, without considering all of its analyses as a whole, could create an incomplete view of the processes underlying the analyses and its opinion. As a result, implied reference ranges from any particular analysis, combination of analyses or as otherwise described above were merely utilized to create points of reference for analytical purposes and should not be taken to be the view of J.P. Morgan with respect to the actual values of Veeco or Axcelis. The order of analyses described does not represent the relative importance or weight given to those analyses by J.P. Morgan. In arriving at its opinion, J.P. Morgan did not attribute any particular weight to any analyses or factors considered by it and did not form an opinion as to whether any individual analysis or factor (positive or negative), considered in isolation, supported or failed to support its opinion. Rather, J.P. Morgan considered the totality of the factors and analyses performed in determining its opinion.

Analyses based upon forecasts of future results are inherently uncertain, as they are subject to numerous factors or events beyond the control of the parties and their advisors. Accordingly, forecasts and analyses utilized by J.P. Morgan are not necessarily indicative of actual future results, which may be significantly more or less favorable than suggested by those analyses. Moreover, J.P. Morgan's analyses are not and do not purport to be appraisals or otherwise reflective of the prices at which businesses actually could be acquired or sold. None of the selected companies reviewed as described in the above summary is identical to Veeco or Axcelis and certain of the selected companies may have characteristics that are materially different from those of Veeco or Axcelis. However, the companies selected were chosen because they are publicly traded companies with operations and businesses that, for purposes of J.P. Morgan's analysis, may be considered similar to those of Veeco and/or Axcelis. The analyses necessarily involve complex considerations and judgments concerning differences in financial and operational characteristics of the companies involved and other factors that could affect the companies compared to Veeco and Axcelis.

As a part of its investment banking business, J.P. Morgan and its affiliates are continually engaged in the valuation of businesses and their securities in connection with merger and acquisitions, investments for passive and control purposes, negotiated underwritings, secondary distributions of listed and unlisted securities, private placements, and valuations for corporate and other purposes. J.P. Morgan was selected as financial advisor to Axcelis with respect to the merger on the basis of, among other things, such experience and its qualifications and reputation in connection with such matters and its familiarity with the industries in which Axcelis and Veeco operate.

For services rendered in connection with the merger, Axcelis has agreed to pay J.P. Morgan an aggregate fee of \$27.5 million, \$4 million of which became payable to J.P. Morgan at the time J.P. Morgan delivered its

opinion and the balance of which will become payable only if the proposed merger is consummated. In addition, Axcelis has agreed to indemnify J.P. Morgan for certain liabilities arising out of J.P. Morgan's engagement. During the two years preceding the date of J.P. Morgan's opinion, neither J.P. Morgan nor its affiliates had any material financial advisory or other material commercial or investment banking relationships with Axcelis or Veeco. J.P. Morgan and its affiliates hold, on a proprietary basis, approximately 1% of the outstanding Veeco common stock and approximately 4.18% of the outstanding Axcelis common stock. During the two years preceding the date of J.P. Morgan's opinion, the aggregate fees recognized by J.P. Morgan from Axcelis were approximately \$600,000. In the ordinary course of their businesses, J.P. Morgan and its affiliates actively trade the debt and equity securities or financial instruments (including derivatives, bank loans or other obligations) of Axcelis or Veeco for their own account or for the accounts of customers and, accordingly, likely hold long or short positions in such securities or other financial instruments.

Opinion of Financial Advisor to Veeco

UBS was retained by Veeco to act as financial advisor in connection with the merger. As part of that engagement, the Veeco board of directors requested that UBS render an opinion as to the fairness, from a financial point of view, to the holders of Veeco common stock (other than Axcelis and its affiliates) of the exchange ratio provided for in the merger agreement. On September 30, 2025, at a meeting of the Veeco board of directors held to evaluate the merger agreement and the transactions contemplated thereby, including the merger, UBS delivered to the Veeco board of directors an oral opinion, which opinion was confirmed by delivery of a written opinion dated as of September 30, 2025, to the effect that, as of that date and based upon, and subject to, among other things, the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by UBS in connection with its opinion, the exchange ratio provided for in the merger agreement was fair, from a financial point of view, to the holders of Veeco common stock (other than Axcelis and its affiliates).

The full text of UBS's opinion describes the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by UBS. UBS's opinion is attached to this joint proxy statement/prospectus as Annex C and is incorporated herein by reference. **UBS's opinion was provided for the benefit of the Veeco board of directors in connection with, and for the purpose of, its evaluation of the exchange ratio and addresses only the fairness, from a financial point of view, to the holders of Veeco common stock (other than Axcelis and its affiliates) of the exchange ratio provided for in the merger agreement. UBS's opinion does not address the relative merits of the merger as compared to other business strategies or transactions that might be available to Veeco or Veeco's underlying business decision to effect the merger. UBS's opinion does not constitute a recommendation to any stockholder as to how such stockholder should vote or act with respect to the merger. Holders of Veeco common stock are encouraged to read UBS's opinion carefully and in its entirety.** The following summary of UBS's opinion is qualified in its entirety by reference to, and should be read in conjunction with, the full text of UBS's opinion.

In arriving at its opinion, UBS, among other things:

- reviewed certain publicly available business and financial information relating to Veeco and Axcelis;
- reviewed certain internal financial information and other data relating to the business and financial prospects of Veeco that were not publicly available, including financial forecasts and estimates prepared by the management of Veeco that the Veeco board of directors directed UBS to utilize for purposes of its analysis, which are referred to in this section of the joint proxy statement/prospectus as the Veeco Projections (as more fully described below under "**— Certain Financial Forecasts Utilized in Connection with the Merger**" under the heading "*Veeco Financial Forecasts with respect to Veeco*");
- reviewed certain internal financial information and other data relating to the business and financial prospects of Axcelis that were not publicly available, including financial forecasts and estimates prepared by the management of Veeco that the Veeco board of directors directed UBS to utilize for purposes of its analysis, which are referred to in this section of the joint proxy statement/prospectus as the Axcelis Projections (as more fully described below under "**— Certain Financial Forecasts Utilized in Connection with the Merger**" under the heading "*Veeco Financial Forecasts for Axcelis*");
- reviewed certain estimates of cost synergies prepared by the management of Veeco that were not publicly available that the Veeco board of directors directed UBS to utilize for purposes of its analysis,

which are referred to in this section of the joint proxy statement/prospectus as the **Synergies Projections** (as more fully described below under “— **Certain Financial Forecasts Utilized in Connection with the Merger**” under the heading “*Certain Estimated Cost Synergies*”);

- conducted discussions with members of the senior management of Veeco and Axcelis concerning the businesses and financial prospects of Veeco and Axcelis;
- performed a discounted cash flow analysis of Veeco in which UBS analyzed the future cash flows of Veeco using financial forecasts and estimates prepared by the management of Veeco;
- performed a discounted cash flow analysis of Axcelis in which UBS analyzed the future cash flows of Axcelis using financial forecasts and estimates prepared by the management of Veeco;
- performed a discounted cash flow analysis in which UBS analyzed the future cash flows of Axcelis on a combined company basis assuming the merger is consummated, using financial forecasts and estimates prepared by the management of Veeco;
- reviewed publicly available financial and stock market data with respect to certain other companies UBS believed to be generally relevant;
- reviewed current and historical market prices of Veeco common stock and Axcelis common stock;
- considered certain effects of the merger on Axcelis’ financial statements;
- reviewed a draft, dated September 30, 2025, of the merger agreement; and
- conducted such other financial studies, analyses and investigations, and considered such other information, as UBS deemed necessary or appropriate.

In connection with its review, with the consent of the Veeco board of directors, UBS assumed and relied upon, without independent verification, the accuracy and completeness in all material respects of the information provided to or reviewed by UBS for the purpose of its opinion. In addition, with the consent of the Veeco board of directors, UBS did not make any independent evaluation or appraisal of any of the assets or liabilities (contingent or otherwise) of Veeco or Axcelis, nor was UBS furnished with any such evaluation or appraisal. With respect to the financial forecasts, estimates, cost synergies and effects on the combined company referred to above, UBS assumed, at the direction of the Veeco board of directors, that they had been reasonably prepared on a basis reflecting the best currently available estimates and judgments of the management of Veeco as to the future financial performance of Veeco, Axcelis and such cost synergies and effects on the combined company. In addition, UBS assumed, with the approval of the Veeco board of directors, that the financial forecasts and estimates, including cost synergies, referred to above will be achieved at the times and in the amounts projected. UBS also assumed, with the consent of the Veeco board of directors, that the merger will qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Code. UBS’s opinion was necessarily based on economic, monetary, market and other conditions as in effect on, and the information available to UBS as of, the date of its opinion.

At the direction of the Veeco board of directors, UBS was not asked to, and UBS did not, offer any opinion as to the terms, other than the exchange ratio to the extent expressly specified in UBS’s opinion, of the merger agreement or any related documents or the form of the merger. In addition, UBS expressed no opinion as to the fairness of the amount or nature of any compensation to be received by any officers, directors or employees of any parties to the merger, or any class of such persons, whether relative to the exchange ratio or otherwise. UBS expressed no opinion as to what the value of Axcelis common stock will be when issued pursuant to the merger or the prices at which Axcelis common stock or Veeco common stock will trade at any time. In rendering its opinion, UBS assumed, with the consent of the Veeco board of directors, that (i) the final executed form of the merger agreement would not differ in any material respect from the draft that UBS reviewed, (ii) the parties to the merger agreement will comply with all material terms of the merger agreement, and (iii) the merger will be consummated in accordance with the terms of the merger agreement without any adverse waiver or amendment of any material term or condition thereof. UBS also assumed that all governmental, regulatory or other consents and approvals necessary for the consummation of the merger will be obtained without any material adverse effect on Veeco, Axcelis or the

merger. UBS was not authorized to solicit and did not solicit indications of interest in a transaction with Veeco from any third party. The issuance of UBS's opinion was approved by an authorized committee of UBS.

In connection with rendering its opinion to the Veeco board of directors, UBS performed a variety of financial and comparative analyses which are summarized below. The following summary is not a complete description of all analyses performed and factors considered by UBS in connection with its opinion. The preparation of a fairness opinion is a complex process involving subjective judgments and is not necessarily susceptible to partial analysis or summary description.

UBS believes that its analysis and the summary below must be considered as a whole and that selecting portions of its analysis and factors, or focusing on information presented in tabular format, without considering all analyses and factors or the full narrative description of the analyses, could create a misleading or incomplete view of the processes underlying UBS's analyses and opinion. UBS did not draw, in isolation, conclusions from or with regard to any one factor or method of analysis for purposes of its opinion, but rather arrived at its ultimate opinion based on results of all analyses undertaken by it and assessed as a whole.

The estimates of the future performance of Veeco and Axcelis, and of the cost synergies, provided by Veeco's management, and the estimates of the future financial performances reflecting such estimates, in or underlying UBS's analyses are not necessarily indicative of future results or values, which may be significantly more or less favorable than those estimates. In performing its analyses, UBS considered industry performance, general business and economic conditions and other matters, many of which are beyond the control of Veeco and Axcelis. Estimates of the financial value of companies do not purport to be appraisals or necessarily reflect the prices at which companies may actually be sold.

The exchange ratio was determined through negotiation between Veeco and Axcelis, and the decision by the Veeco board of directors to enter into the merger agreement was solely that of the Veeco board of directors. UBS's opinion and financial analyses were only one of many factors considered by the Veeco board of directors in its evaluation of the merger agreement and the transactions contemplated thereby, including the merger, and should not be viewed as determinative of the views of the Veeco board of directors with respect to the merger agreement, the transactions contemplated thereby, including the merger, or the exchange ratio.

The following is a brief summary of the material financial analyses performed by UBS and reviewed with the Veeco board of directors on September 30, 2025 in connection with UBS's opinion. **The financial analyses summarized below include information presented in tabular format. In order to fully understand UBS's financial analyses, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Considering the data below without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of UBS's financial analyses.**

The following summary does not purport to be a complete description of the financial analyses performed by UBS. The following quantitative information, to the extent that it is based on market data, is based on market data as it existed on or before September 29, 2025 and is not necessarily indicative of current or future market conditions.

Selected Public Companies Analysis

With respect to Veeco and Axcelis, UBS reviewed publicly available financial and stock market information of the following companies in the semiconductor capital equipment, which is referred to as SemiCap, industry that UBS in its professional judgment considered generally relevant to each of Veeco and Axcelis for purposes of its financial analyses, which companies are referred to as the Selected Public Companies, and compared such information with similar financial data of each of Veeco and Axcelis provided by the management of Veeco to UBS, including the Veeco Projections and the Axcelis Projections:

Mid-Cap SemiCap

- ASM International NV;
- Nova Ltd.;

- Onto Innovation Inc.;
- Camtek Ltd.
- FormFactor, Inc.; and
- AIXTRON SE

Large-Cap SemiCap

- ASML Holding N.V.;
- Lam Research Corporation;
- Applied Materials, Inc.
- KLA Corporation; and
- Tokyo Electron Limited

In its analysis, UBS derived mean and median multiples for the Selected Public Companies as follows: (i) the total enterprise value, defined as equity market value less cash, cash equivalents and equity investments, plus total debt, finance lease liabilities, unfunded pension liabilities, preferred equity and noncontrolling interests (as applicable) as a multiple of estimated earnings before interest, tax, depreciation and amortization, and, where applicable, adjusted for certain non-cash expenses and non-recurring items, which is hereinafter referred to as Adjusted EBITDA, for each of calendar years 2025 and 2026, which multiples are referred to as EV / 2025E Adjusted EBITDA and EV / 2026E Adjusted EBITDA, respectively); and (ii) the closing share prices of the Selected Public Companies on September 29, 2025 as a multiple of estimated earnings per share for each of calendar years 2025 and 2026, which is hereinafter referred to as P / 2025E Earnings and P / 2026E Earnings, respectively.

Estimated Adjusted EBITDA and estimated earnings per share of the Selected Public Companies were based on publicly available research analysts' estimates.

This analysis indicated the following:

Benchmark	Mid-Cap SemiCap		Large-Cap SemiCap	
	Mean	Median	Mean	Median
EV / 2025E Adjusted EBITDA	21.5x	19.7x	21.5x	23.7x
EV / 2026E Adjusted EBITDA	19.6x	17.9x	20.2x	21.4x
P / 2025E Earnings	30.4x	33.4x	27.6x	28.8x
P / 2026E Earnings	26.5x	28.2x	25.7x	25.8x

Veeco Analysis

Using the selected multiples set forth in the table below, which multiples were selected by UBS in its professional judgment, and the Veeco Projections, UBS determined (i) the implied enterprise values of Veeco based on Veeco's estimated Adjusted EBITDA, and added Veeco's total cash and subtracted Veeco's total debt (based on net share settlement of convertible debt), in each case as of June 30, 2025 and provided by Veeco's management, to determine the implied equity value of Veeco and (ii) the implied per share price of Veeco common stock based on Veeco's estimated earnings per share. This analysis indicated the implied equity values per share of Veeco common stock set forth opposite the relevant benchmarks below:

Benchmark	Selected Multiples	Implied Equity Value Per Share of Veeco Common Stock
EV / 2025E Adjusted EBITDA	16.0x – 20.0x	\$26.69 – \$32.46
EV / 2026E Adjusted EBITDA	13.0x – 18.0x	\$28.29 – \$37.38
P / 2025E Earnings	21.0x – 28.0x	\$25.90 – \$34.53
P / 2026E Earnings	18.0x – 25.0x	\$27.87 – \$38.71

Axcelis Analysis

Using the selected multiples set forth in the table below, which multiples were selected by UBS in its professional judgment, and the Axcelis Projections, UBS determined (i) the implied enterprise values of Axcelis based on Axcelis' estimated Adjusted EBITDA, and added Axcelis' total cash as of June 30, 2025 and subtracted Axcelis' (a) finance leases as of June 30, 2025 and (b) unfunded pension liabilities as of December 31, 2024, in each case as provided by Veeco's management, to determine the implied equity value of Axcelis and (ii) the implied per share price of Axcelis common stock based on Axcelis' estimated earnings per share. This analysis indicated the implied equity values per share of Axcelis common stock set forth opposite the relevant benchmarks below:

Benchmark	Selected Multiples	Implied Equity Value Per Share of Axcelis Common Stock
EV / 2025E Adjusted EBITDA	16.0x – 20.0x	\$103.22 – \$124.80
EV / 2026E Adjusted EBITDA	13.0x – 18.0x	\$83.71 – \$109.42
P / 2025E Earnings	21.0x – 28.0x	\$96.81 – \$129.08
P / 2026E Earnings	18.0x – 25.0x	\$78.63 – \$109.20

Exchange Ratio Implied by Selected Public Companies Analysis

Using the ranges of implied equity values per share of Veeco common stock and Axcelis common stock derived using the analyses summarized above, for each benchmark, UBS calculated the ratio of the lowest implied value per share of Veeco common stock to the highest implied value per share of Axcelis common stock, and the ratio of the highest implied value per share of Veeco common stock to the lowest implied value per share of Axcelis common stock, compared in each case to the exchange ratio:

Benchmark	Implied Exchange Ratio
EV / 2025E Adjusted EBITDA	0.214x – 0.314x
EV / 2026E Adjusted EBITDA	0.259x – 0.447x
P / 2025E Earnings	0.201x – 0.357x
P / 2026E Earnings	0.255x – 0.492x

No Selected Public Company is identical to Veeco or Axcelis. In evaluating the Selected Public Companies, UBS made numerous judgments and assumptions with regard to industry performance, general business, economic, market and financial conditions and other matters, many of which are beyond the control of Veeco, Axcelis and UBS. Mathematical analysis, such as determining the mean or median, is not in itself a meaningful method of using the Selected Public Companies' data.

Discounted Cash Flow Analysis

Veeco Analysis

UBS performed a discounted cash flow analysis of Veeco on a standalone basis using the Veeco Projections. UBS calculated a range of implied present values, as of June 30, 2025, of the standalone after-tax unlevered free cash flows that Veeco was forecasted to generate from July 1, 2025 through December 31, 2028, as set forth in the Veeco Projections, using discount rates ranging between 14.0% and 17.0% based on Veeco's estimated weighted average cost of capital, which is referred to as WACC. UBS also calculated estimated terminal values for Veeco based on Veeco's estimated standalone Adjusted EBITDA for calendar year 2028 as set forth in the Veeco Projections, using terminal multiples of 12.0x to 14.0x. The estimated terminal values were then discounted to present value as of June 30, 2025 using discount rates ranging between 14.0% and 17.0%, based on Veeco's estimated WACC. UBS then derived a reference range of implied equity values per share of Veeco common stock from the resulting implied enterprise value reference range, using Veeco's total cash and debt (based on net share settlement of convertible debt), in each case as of June 30, 2025, and the number fully diluted shares of Veeco common stock outstanding as of September 29, 2025, in each case, as provided by Veeco's management. This analysis indicated a range of implied equity values per share of Veeco common stock of \$30.14 to \$36.54.

Axcelis Analysis

UBS performed a discounted cash flow analysis of Axcelis on a standalone basis using the Axcelis Projections. UBS calculated a range of implied present values, as of June 30, 2025, of the standalone after-tax unlevered free cash flows that Axcelis was forecasted to generate from July 1, 2025 through December 31, 2028, as set forth in the Axcelis Projections, using discount rates ranging between 14.0% and 17.0% based on Axcelis' estimated WACC. UBS also calculated estimated terminal values for Axcelis based on Axcelis' estimated standalone Adjusted EBITDA for calendar year 2028 as set forth in the Axcelis Projections, using terminal multiples of 12.0x to 14.0x. The estimated terminal values were then discounted to present value as of June 30, 2025 using discount rates ranging between 14.0% and 17.0%, based on Axcelis' estimated WACC. UBS then derived a reference range of implied equity values per share of Axcelis common stock from the resulting implied enterprise value reference range, using Axcelis' total cash and finance leases, in each case, as of June 30, 2025, Axcelis' unfunded pension liabilities as of December 31, 2024, and the number of fully diluted shares of Axcelis common stock outstanding as of September 29, 2025, in each case, as provided by Veeco's management. This analysis indicated a range of implied equity values per share of Axcelis common stock of \$91.91 to \$109.93.

Exchange Ratio Implied by Discounted Cash Flow Analysis

Using the ranges of implied equity values per share of Veeco common stock and Axcelis common stock derived from the analyses summarized above, UBS calculated the ratio of the lowest implied equity value per share of Veeco common stock to the highest implied equity value per share of Axcelis common stock, and the ratio of the highest implied equity value per share of Veeco common stock to the lowest implied equity value per share of Axcelis common stock, which indicated a range of implied exchange ratios of 0.274x to 0.398x.

Combined Company Analysis

UBS performed a discounted cash flow analysis of the combined company, including cost synergies. UBS calculated a range of implied enterprise values of the combined company based on (i) the implied standalone enterprise values of each of Veeco and Axcelis derived from the respective standalone discounted cash flow analyses summarized above and (ii) the present value of the estimated cost synergies, as reflected in the Synergies Projections, using discount rates ranging between 14.0% and 17.0%, based on the combined company's estimated WACC. Based on this range of implied combined enterprise values and (i) the combined company's cash as of June 30, 2025 (post-estimated transaction fees), (ii) Axcelis' finance leases as of June 30, 2025, (iii) Axcelis' unfunded pension liabilities as of December 31, 2024 and (iv) Veeco's debt (based on net share settlement of convertible debt) as of June 30, 2025, in each case, as provided by Veeco's management, UBS calculated a range of implied equity values of the combined company. Based on the exchange ratio and the number of fully diluted shares of Veeco common stock and Axcelis common stock outstanding as of September 29, 2025, in each case, as provided by Veeco's management, this analysis indicated a range of implied equity values per share of Veeco common stock of \$32.91 to \$40.07, compared to the range of implied equity values per share of Veeco common stock on a standalone basis of \$30.14 to \$36.54.

Contribution Analysis

Using the Veeco Projections and the Axcelis Projections, UBS performed a contribution analysis to compare the relative contributions of Veeco and Axcelis to the combined company, without giving effect to cost synergies, based on the various financial metrics described below.

Financial Metric	Veeco Contribution	Axcelis Contribution	Implied Veeco Ownership	Implied Exchange Ratio
Equity Value	39%	61%	38.5%	0.315x
Revenue				
2025E	45%	55%	41.1%	0.351x
2026E	47%	53%	43.7%	0.389x

Financial Metric	Veeco Contribution	Acelis Contribution	Implied Veeco Ownership	Implied Exchange Ratio
Adjusted EBITDA				
2025E	36%	64%	33.9%	0.257x
2026E	44%	56%	40.5%	0.342x
Adjusted Operating Income				
2025E	34%	66%	32.3%	0.239x
2026E	43%	57%	39.7%	0.331x
Net Income				
2025E	33%	67%	33.5%	0.252x
2026E	41%	59%	41.4%	0.354x

Excluding the highest and lowest data points for implied exchange ratio, this analysis indicated a range of implied exchange ratios of 0.252x to 0.354x.

Miscellaneous

Under the terms of UBS's engagement by Veeco, Veeco has agreed to pay UBS for its financial advisory services in connection with the proposed transaction an aggregate fee that is estimated, based on information available as of September 30, 2025, to be approximately \$28.5 million, \$3.0 million of which became payable upon delivery of UBS's opinion, and the remainder of which is contingent upon consummation of the merger. In addition, Veeco has agreed to reimburse certain of UBS's expenses arising, and indemnify UBS against certain liabilities that may arise, out of UBS's engagement. UBS Group AG (the indirect parent of UBS) and its subsidiaries, branches and affiliates provide a wide range of investment banking, commercial banking and other activities (including wealth and investment management, corporate finance, subscription lines, asset management, securities issuing, trading and brokerage activities, research and other investment and financial businesses and services). In connection therewith, UBS and/or its affiliates may have provided services unrelated to the merger to Veeco and its affiliates and/or Acelis and its affiliates and received compensation for such services. In addition, in the ordinary course of business, UBS, its affiliates and its and their respective employees may currently own or trade or otherwise originate, hedge or enforce interests in loans, debt and/or equity securities of Veeco (including its affiliates) and/or Acelis (including its affiliates) for its own account or for the accounts of customers, and may at any time hold a long or short position in, or security interests over, such securities. As of September 11, 2025, UBS held less than 1% of the outstanding shares of Veeco common stock (including shares of Veeco common stock held by UBS Asset Management in discretionary accounts and held on behalf of a client, related to client facilitation or as security). As of September 11, 2025, UBS held less than 1% of the outstanding shares of Acelis common stock (including shares of Acelis common stock held by UBS Asset Management in discretionary accounts and held on behalf of a client, related to client facilitation or as security).

The Veeco board of directors selected UBS as its financial advisor in connection with the merger because UBS is an internationally recognized investment banking firm with substantial experience in similar transactions. UBS is continually engaged in the valuation of businesses and their securities in connection with mergers and acquisitions, leveraged buyouts, negotiated underwritings, competitive bids, secondary distributions of listed and unlisted securities and private placements.

Certain Financial Forecasts Utilized in Connection with the Merger

Veeco Financial Forecasts

The unaudited prospective financial data presented below includes projections prepared by Veeco management. Other than providing certain limited periodic earnings guidance, Veeco does not, as a matter of course, make public long-term projections or publicly disclose financial projections or forecasts as to future performances, revenues, earnings or other results given, among other things, the unpredictability of the underlying assumptions and estimates inherent in preparing financial projections and forecasts. As a result, Veeco does not endorse unaudited prospective financial information as necessarily indicative of actual future results.

In connection with the evaluation of the merger, however, Veeco management prepared the Veeco management forecasts and other forecasts which are summarized in the below table. Veeco is electing to provide the Veeco management forecasts and other forecasts in this section of the joint proxy statement/prospectus to provide Veeco and Axcelis stockholders access to the Veeco management forecasts that were made available to the Veeco board of directors, Axcelis and Veeco's and Axcelis' respective financial advisors in connection with the merger.

The Veeco management forecasts were prepared treating Veeco on a standalone basis without giving effect to the merger. Although presented with numerical specificity, the Veeco management forecasts reflect numerous estimates and assumptions with respect to matters such as future industry performance and competition, general business, economic, market and geopolitical conditions, and additional matters specific to Veeco's business, all of which are difficult to predict and many of which are beyond Veeco's control. The Veeco management forecasts and other forecasts in this section of the joint proxy statement/prospectus thus reflect a substantial degree of uncertainty and are subject to periodic revisions based on actual experience and business developments.

Veeco Financial Forecasts with Respect to Veeco

The table below reflects the Veeco management forecasts with respect to certain financial metrics of Veeco for the six months ended December 31, 2025 and for fiscal years 2026 through 2028 considered by the Veeco board of directors in its consideration and evaluation of the merger, and provided to, and approved by the Veeco board of directors for use by, Veeco's financial advisor in connection with its financial analysis and opinion.

\$mm	2025E	2026E	2027E	2028E
Total Revenue	\$658	\$733	\$824	\$985
Adjusted Gross Profit ⁽¹⁾	\$269	\$307	\$359	\$443
Adjusted EBITDA ⁽²⁾	\$ 97	\$127	\$162	\$231
Adjusted Operating Income ⁽³⁾	\$ 79	\$106	\$137	\$200
Unlevered Free Cash Flow ⁽⁴⁾	\$ —	\$ 41	\$ 60	\$102

- (1) Adjusted Gross Profit means GAAP Gross Profit, adjusted to exclude share-based compensation expenses, one-time charges related to restructuring initiatives, non-cash asset impairments, acquisition-related items such as one-time transaction costs, and certain other expenses that result from unplanned events outside the ordinary course of continuing operations or are infrequent in nature. Adjusted Gross Profit is a non-GAAP measure, and Veeco's calculation of Adjusted Gross Profit may differ from other companies.
- (2) Adjusted EBITDA means earnings before interest, taxes, depreciation and amortization, as adjusted to exclude share-based compensation expenses, one-time charges related to restructuring initiatives, non-cash asset impairments, acquisition-related items such as one-time transaction costs, and certain other expenses that result from unplanned events outside the ordinary course of continuing operations or are infrequent in nature. Adjusted EBITDA is a non-GAAP measure, and Veeco's calculation of Adjusted EBITDA may differ from other companies.
- (3) Adjusted Operating Income means Adjusted EBITDA, adjusted to give effect to depreciation. Adjusted Operating Income is a non-GAAP measure, and Veeco's calculation of Adjusted Operating Income may differ from other companies.
- (4) Unlevered free cash flow means Adjusted Operating Income, adjusted to add share-based compensation expenses, depreciation and amortization, and taxes, and subtract changes in net working capital and capital expenditures. Unlevered free cash flow is a non-GAAP measure, and Veeco's calculation of Unlevered free cash flow may differ from other companies. The forecasts did not include Unlevered free cash flow for the full year ended December 31, 2025.

Veeco Financial Forecasts for Axcelis

In connection with the merger, Veeco management reviewed the Axcelis management projections, which are summarized below under “— **Axcelis Financial Forecasts**,” and made certain adjustments to those

for purposes of evaluating the merger. The table below reflects the Veeco management forecasts with respect to certain financial metrics of Axcelis for the fiscal years 2025 through 2028 considered by the Veeco board of directors in its consideration and evaluation of the merger, and provided to, and approved by the Veeco board of directors for use by, Veeco's financial advisor in connection with its financial analysis and opinion.

\$mm	2025E	2026E	2027E	2028E
Total Revenue	\$821	\$813	\$1,022	\$1,168
Adjusted Gross Profit ⁽¹⁾	\$369	\$368	\$ 469	\$ 531
Adjusted EBITDA ⁽²⁾	\$171	\$163	\$ 246	\$ 289
Adjusted Operating Income ⁽³⁾	\$152	\$141	\$ 222	\$ 264
Unlevered Free Cash Flow ⁽⁴⁾	\$164	\$107	\$ 117	\$ 169

- (1) Adjusted Gross Profit means GAAP Gross Profit, adjusted to exclude share-based compensation expenses, one-time charges related to restructuring initiatives, non-cash asset impairments, acquisition-related items such as one-time transaction costs, and certain other expenses that result from unplanned events outside the ordinary course of continuing operations or are infrequent in nature. Adjusted Gross Profit is a non-GAAP measure, and Veeco's calculation of Adjusted Gross Profit may differ from other companies.
- (2) Adjusted EBITDA means earnings before interest, taxes, depreciation and amortization, as adjusted to exclude share-based compensation expenses, one-time charges related to restructuring initiatives, non-cash asset impairments, acquisition-related items such as one-time transaction costs, bad debt expense, and certain other expenses that result from unplanned events outside the ordinary course of continuing operations or are infrequent in nature. Adjusted EBITDA is a non GAAP measure, and Veeco's calculation of Adjusted EBITDA may differ from other companies.
- (3) Adjusted Operating Income means Adjusted EBITDA adjusted to give effect to depreciation and amortization. Adjusted Operating Income is a non-GAAP measure, and Veeco's calculation of Adjusted Operating Income may differ from other companies.
- (4) Unlevered free cash flow means Adjusted Operating Income, adjusted to add share-based compensation expenses, depreciation and amortization, and taxes, and subtract changes in net working capital and capital expenditures. Unlevered free cash flow is a non-GAAP measure, and Veeco's calculation of Unlevered free cash flow may differ from other companies.

Axcelis Financial Forecasts

The unaudited prospective financial data presented below includes projections prepared by Axcelis management. Axcelis does not, as a matter of course, normally make public long-term projections or publicly disclose financial projections or forecasts as to future performances, revenues, earnings or other results given, among other things, the unpredictability of the underlying assumptions and estimates inherent in preparing financial projections and forecasts. As a result, Axcelis does not endorse unaudited prospective financial information as necessarily indicative of actual future results.

Axcelis Financial Forecasts with Respect to Axcelis

In connection with the evaluation of the merger, however, Axcelis management prepared financial forecasts for Axcelis' fiscal years 2025 through 2034 (which we refer to in this joint proxy statement/prospectus as the Axcelis Financial Forecasts), selected metrics of which are summarized in the below table. Axcelis is electing to provide the Axcelis Financial Forecasts in this section of the joint proxy statement/prospectus to provide Axcelis stockholders access to the Axcelis Financial Forecasts that were made available to the Axcelis board of directors for purposes of considering and evaluating the merger and provided to Axcelis' financial advisor for its use and reliance for purposes of its financial analyses and opinion in connection with the merger.

The Axcelis Financial Forecasts were prepared for internal use and reflect numerous estimates and assumptions with respect to matters such as future industry performance and competition, general business,

economic, market and geopolitical conditions, and additional matters specific to Axcelis' business, all of which are difficult to predict and many of which are beyond Axcelis' control. The Axcelis Financial Forecasts thus reflect a substantial degree of uncertainty and are subject to periodic revisions based on actual experience and business developments.

\$mm	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
Total Revenue	\$821	\$813	\$1,103	\$1,372	\$1,577	\$1,775	\$1,952	\$2,108	\$2,235	\$2,302
Gross Profit	\$369	\$368	\$ 507	\$ 623	\$ 717	\$ 807	\$ 887	\$ 958	\$ 1,016	\$ 1,046
Adjusted EBITDA (pre-SBC) ⁽¹⁾ ..	\$171	\$163	\$ 283	\$ 373	\$ 429	\$ 481	\$ 529	\$ 571	\$ 604	\$ 621
EBIT (post-SBC) ⁽²⁾	\$131	\$122	\$ 238	\$ 326	\$ 372	\$ 414	\$ 451	\$ 483	\$ 507	\$ 517
Unlevered Free Cash Flow ⁽³⁾	\$166	\$107	\$ 128	\$ 210	\$ 260	\$ 294	\$ 325	\$ 351	\$ 378	\$ 395

- (1) Adjusted EBITDA means earnings before interest, taxes, depreciation and amortization, as adjusted for certain items related to restructuring and severance charges and any associated adjustments and transaction and integration costs associated with the merger and certain other expenses that result from unplanned events outside the ordinary course of continuing operations or are infrequent in nature. Adjusted EBITDA is a non GAAP measure, and Axcelis's calculation of Adjusted EBITDA may differ from other companies.
- (2) EBIT means Adjusted EBITDA adjusted to give effect to depreciation and amortization. EBIT is a non-GAAP measure.
- (3) Unlevered free cash flow, a non-GAAP financial measure, refers to Adjusted EBITDA less stock-based compensation which is treated as a cash expense, less taxes, change in net working capital and capital expenditures.

Axcelis Financial Forecasts for Veeco

In connection with the evaluation of the merger, Axcelis management reviewed the Veeco management projections for fiscal years 2025 through 2028, which are summarized above under “— **Veeco Financial Forecasts**,” and adjusted to reflect numerous estimates and assumptions with respect to matters such as future industry performance and competition, general business, economic, market and geopolitical conditions, and additional matters specific to Veeco's business. Axcelis management also extrapolated such adjusted projections through fiscal year 2034. These adjusted projections and extrapolations for the years ending 2025 through 2034 are referred to as the Axcelis-adjusted Veeco projections and were provided to the Axcelis board of directors for purposes of considering and evaluating the merger and to Axcelis' financial advisor for its use and reliance for purposes of its financial analyses and opinion in connection with the merger.

The Axcelis-adjusted Veeco projections, which contain certain unaudited prospective financial information, are presented in the following table.

\$mm	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
Total Revenue	\$658	\$733	\$824	\$985	\$1,157	\$1,331	\$1,497	\$1,647	\$1,729	\$1,781
Gross Profit	\$269	\$307	\$359	\$443	\$ 521	\$ 599	\$ 674	\$ 741	\$ 778	\$ 802
Adjusted EBITDA (pre-SBC) ⁽¹⁾ ..	\$ 97	\$127	\$162	\$231	\$ 278	\$ 333	\$ 389	\$ 445	\$ 467	\$ 481
EBIT (post-SBC) ⁽²⁾	\$ 41	\$ 68	\$ 98	\$160	\$ 199	\$ 248	\$ 300	\$ 354	\$ 380	\$ 400
Unlevered Free Cash Flow ⁽³⁾	\$ 38	\$ 42	\$ 59	\$102	\$ 129	\$ 169	\$ 213	\$ 260	\$ 291	\$ 311

- (1) Adjusted EBITDA means earnings before interest, taxes, depreciation and amortization, as adjusted for certain items related to restructuring and severance charges and any associated adjustments and transaction and integration costs associated with the merger and certain other expenses that result from unplanned events outside the ordinary course of continuing operations or are infrequent in nature. Adjusted EBITDA is a non GAAP measure, and Axcelis's calculation of Adjusted EBITDA may differ from other companies.
- (2) EBIT means Adjusted EBITDA adjusted to give effect to depreciation and amortization. EBIT is a non-GAAP measure.

(3) Unlevered free cash flow, a non-GAAP financial measure, refers to Adjusted EBITDA less stock-based compensation which is treated as a cash expense, less taxes, change in net working capital and capital expenditures.

Certain Estimated Cost Synergies

Prior to Veeco and Axcelis entering into the merger agreement, Veeco's management and Axcelis' management prepared certain estimates of annual cost synergies anticipated to be realized by the combined company. Such cost synergies were estimated at approximately \$35 million and are anticipated to be achieved within 24 months of the closing of the merger.

Important Information About the Financial Forecasts

The foregoing financial forecasts, which are collectively referred to as the Financial Forecasts, provide summary unaudited prospective financial information for Veeco and Axcelis. The Financial Forecasts were not prepared with a view toward public disclosure and the inclusion of such Financial Forecasts should not be regarded as an indication that any of Veeco, Axcelis, or any other recipient of this information considered, or now considers, it to be necessarily predictive of actual future results.

The Financial Forecasts were not prepared for purposes of public disclosure, nor were they prepared on a basis designed to comply with published guidelines of the SEC or the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of projections. However, in the view of Veeco management and Axcelis management, the Financial Forecasts were prepared on a reasonable basis, and reflect the best currently available estimates and judgments, and present, to the best of Veeco management's and Axcelis management's knowledge and belief, the expected course of action and the expected future financial performance of Veeco and Axcelis. In addition, as further described under "**— Certain Estimated Cost Synergies**," Veeco management and Axcelis management prepared and provided to their respective boards of directors certain estimates of annual costs savings and other cost synergies. Such estimated cost synergies were also provided to Veeco's and Axcelis' respective financial advisors for their use and reliance in connection with their respective financial analyses and opinions.

Axcelis' prospective financial information included in this document has been prepared by, and is the responsibility of, Axcelis management. Neither Ernst & Young LLP nor any other independent accountant has compiled, reviewed, examined, performed any other assurance procedures, or expressed any form of assurance with respect to the prospective financial information included in this Registration Statement. The report of Ernst & Young LLP incorporated by reference in this Registration Statement/Prospectus relates to the Axcelis' historical audited financial statements and does not extend to the unaudited prospective financial information and should not be read to do so.

Veeco's prospective financial information included in this document has been prepared by, and is the responsibility of, Veeco management. KPMG LLP has not audited, reviewed, examined, compiled nor applied agreed-upon procedures with respect to the accompanying prospective financial information and, accordingly, KPMG LLP does not express an opinion or any other form of assurance with respect thereto. KPMG LLP's report as incorporated by reference in this document relates to Veeco's previously issued financial statements. It does not extend to the prospective financial information and should not be read to do so.

Although presented with numerical specificity, the Financial Forecasts were prepared in accordance with variables, estimates, and assumptions that are inherently uncertain and may be beyond the control of Veeco and Axcelis, and which may prove not to have been, or to no longer be, appropriate. While in the view of Veeco and Axcelis management the Financial Forecasts were prepared on a reasonable basis, the Financial Forecasts are subject to many risks and uncertainties. Important factors that may affect actual results and cause actual results to differ materially from the Financial Forecasts include risks and uncertainties relating to Veeco's and Axcelis' businesses, industry performance, the regulatory environment, general business and economic conditions, market and financial conditions, various risks set forth in Veeco's and Axcelis' reports filed with the SEC, and other factors described or referenced in the sections entitled "**Risk Factors**" and "**Cautionary Statement Regarding Forward-Looking Statements**" beginning on pages 33 and 31, respectively, of this joint proxy statement/prospectus.

The Financial Forecasts also reflect assumptions that are subject to change and are susceptible to multiple interpretations and to conditions, transactions or events that may occur and were not anticipated at the time the Financial Forecasts were prepared. In addition, the Financial Forecasts do not take into account any circumstances, transactions or events occurring after the date the Financial Forecasts were prepared. Accordingly, actual results will likely differ, and may differ materially, from those contained in the Financial Forecasts. We do not assure you that the financial results in the Financial Forecasts set forth above will be realized or that future financial results of Veeco or Axcelis will not materially vary from those in the Financial Forecasts.

None of Veeco, Axcelis, or their respective affiliates, officers, directors, or other representatives gives any stockholder of Veeco or Axcelis, or any other person, any assurance that actual results will not differ materially from the Financial Forecasts, and, except as otherwise required by law, none of them undertakes any obligation to update or otherwise revise or reconcile the Financial Forecasts to reflect circumstances after the date the Financial Forecasts were generated or to reflect the occurrence of future events, even in the event that any or all of the assumptions and estimates underlying the Financial Forecasts are shown to be in error.

No one has made or makes any representation to any stockholder of Veeco or Axcelis, or anyone else regarding the ultimate performance of Veeco and Axcelis as reflected in the Financial Forecasts set forth above. You are cautioned not to rely on the Financial Forecasts. The inclusion of this information should not be regarded as an indication that Veeco, Axcelis or their respective advisors or any other person considered, or now considers, it to be material or to be necessarily predictive of actual future results.

The Financial Forecasts included above cover multiple years, and this information by its nature becomes subject to greater uncertainty with each successive year. The Financial Forecasts should be evaluated, if at all, in conjunction with the historical financial statements and other information contained in Veeco's and Axcelis' respective public filings with the SEC.

Given the forward-looking nature of the Financial Forecasts, specific quantifications of the amounts that would be required to reconcile it to GAAP measures are not available without unreasonable efforts. Veeco and Axcelis believe that there is a degree of volatility with respect to certain GAAP measures, and certain adjustments made to arrive at the relevant non-GAAP measures, which preclude Veeco and Axcelis from providing forecasted non-GAAP to GAAP reconciliations.

Closing and Effective Time of the Merger

The closing of the merger will take place virtually at 9:00 a.m. Eastern Time, as soon as practicable, and in any event, within three business days after the satisfaction or, to the extent permitted by applicable law, waiver of all applicable conditions for completion of the merger set forth in the merger agreement (other than those conditions that by their nature are to be satisfied at the closing, but subject to the satisfaction or, to the extent permitted by applicable law, waiver of those conditions by the party entitled to waive such conditions at the closing), or at such other time, place and date as Axcelis and Veeco shall agree. Subject to the satisfaction or waiver of the conditions to the closing described in the section entitled **“The Merger Agreement — Conditions to the Completion of the Merger”** beginning on page 131 of this joint proxy statement/prospectus, including approval of the Veeco merger agreement proposal by Veeco stockholders at the Veeco special meeting and approval of the Axcelis share issuance proposal by Axcelis stockholders at the Axcelis special meeting, it is anticipated that the merger will close in the second half of 2026. However, neither Axcelis nor Veeco can predict the actual date on which the merger will be completed, or if the completion will occur at all, because completion is subject to conditions and factors outside the control of both companies. It is possible that factors outside the control of both companies could result in the merger being completed at a different time, or not at all.

On the date of the closing, Veeco and Merger Sub will cause the certificate of merger relating to the merger, which is referred to as the certificate of merger, to be duly executed and filed with the Secretary of State of the State of Delaware as provided under the DGCL. The merger will become effective on the date and at the time when the certificate of merger has been duly filed with the Secretary of State of the State of Delaware or on or at such other date and at such other time as may be agreed by Axcelis and Veeco and specified in the certificate of merger.

Regulatory Approvals

General

Axcelis, Veeco and Merger Sub must use their reasonable best efforts to consummate and make effective the transactions contemplated by the merger agreement, including using their respective reasonable best efforts to obtain, or cause to be obtained, all waivers, permits, consents, approvals, authorizations, qualifications, orders and expirations or terminations of applicable waiting periods of all governmental entities and parties to contracts with Axcelis, Veeco or either company's subsidiaries that may be or become necessary or advisable for the performance of obligations pursuant to the merger agreement and the consummation of the transactions contemplated thereby.

At any time before or after consummation of the merger, the DOJ or the FTC, or any state, could take such action under the antitrust laws as it deems necessary or desirable in the public interest, including seeking to enjoin the completion of the merger, seeking divestiture of substantial assets of the parties or requiring the parties to license, or hold separate, assets or terminate existing relationships and contractual rights. Private parties may also seek to take legal action under the antitrust laws under certain circumstances. More information can be found in the section entitled **“The Merger Agreement — Cooperation; Efforts to Consummate”** beginning on page 126 of this joint proxy statement/prospectus.

Litigation Related to the Merger

As of December 29, 2025, Axcelis and Veeco have received several demand letters from purported Axcelis and Veeco stockholders in connection with the merger. The letters allege disclosure deficiencies in the preliminary joint proxy statement/prospectus filed on December 8, 2025 with the SEC and demands that additional disclosures be made before Axcelis and Veeco stockholders vote on the merger.

Axcelis and Veeco believe they have substantial defenses in connection with the claims asserted in the demand letters. Axcelis and Veeco may receive additional stockholder demand letters or complaints may be filed in courts related to the merger in the future. If additional similar demands are sent, absent new or significantly different allegations, Axcelis and Veeco will not necessarily disclose such additional demands.

Ownership of the Combined Company After the Merger

As of the date of this joint proxy statement/prospectus, based on the exchange ratio of 0.3575 and the fully diluted number of shares of Axcelis common stock and Veeco common stock as of September 29, 2025, Axcelis stockholders will own approximately 58.1% and Veeco stockholders will own approximately 41.9% of the issued and outstanding shares of the combined company (based on fully diluted shares outstanding of the combined company) immediately following the completion of the merger.

Governance of the Combined Company

Board of Directors

As of the effective time, the board of directors of the combined company will consist of eleven directors, including:

- Thomas St. Dennis, who will serve as the chairman of the board of directors of the combined company;
- Six directors designated by Axcelis, who are referred to as the Axcelis designees, including:
 - Russell J. Low, Ph.D., the Axcelis CEO, who will be the chief executive officer of the combined company;
 - Jorge Titinger, the chairperson of the Axcelis board of directors; and
 - four additional directors to be designated by Axcelis prior to completion of the merger.
- Four directors designated by Veeco, who are referred to as the Veeco designees, including:
 - William J. Miller, Ph.D., the Veeco CEO;

- Keith D. Jackson;
- Lena Nicolaides, Ph.D.; and
- Sujeeb Chand, Ph.D.

Each of the Axcelis designees, other than the Axcelis CEO, and each of the Veeco designees, other than the Veeco CEO, will meet the independence standards of Nasdaq with respect to the combined company as of the effective time. Except for Drs. Low and Miller and Messrs. St. Dennis and Titinger, none of the designees for service on the board of directors of the combined company were determined prior to the effective time of the merger agreement.

Chairman of the Board of Directors

Thomas St. Dennis, a member of the board of directors of Axcelis and Veeco, will serve as the Chairman of the board of directors of the combined company as of the effective time.

Chief Executive Officer

As of the effective time, Russell J. Low, Ph.D., the Axcelis CEO, will serve as the chief executive officer of the combined company.

Name

The name of the combined company as of the effective date will be mutually agreed by Axcelis and Veeco prior to the effective date.

Headquarters

As of the effective time, the headquarters of the combined company will be located in Beverly, Massachusetts.

U.S. Federal Securities Law Consequences

Subsequent to the effectiveness of the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, shares of Axcelis common stock issued in the merger pursuant to the registration statement will not be subject to any restrictions on transfer arising under the Securities Act, except that any stockholders who are affiliates of the combined company will be subject to the resale restrictions under Rule 144 of the Securities Act. This joint proxy statement/prospectus does not cover resales of Axcelis common stock received by any person upon the completion of the merger, and no person is authorized to make any use of this joint proxy statement/prospectus in connection with any resale of Axcelis common stock.

Accounting Treatment

The merger will be accounted for using the acquisition method of accounting in accordance with ASC 805, Business Combinations. GAAP requires that one of the companies in the merger be designated as the acquirer for accounting purposes based on the evidence available. Axcelis expects that it will be treated as the acquiring entity for accounting purposes. Accordingly, Axcelis will measure the assets acquired and liabilities assumed at their fair values including net tangible and identifiable intangible assets acquired and liabilities assumed as of the closing date of the merger, with any excess purchase price over those fair values being recorded as goodwill. In identifying Axcelis as the acquiring entity for accounting purposes, Axcelis and Veeco took into account the voting rights of all equity instruments, the intended corporate governance structure of the combined company, and the size of each of the companies. No single factor was the sole determinant in the overall conclusion that Axcelis is the acquirer for accounting purposes, rather all factors were considered in arriving at such conclusion.

Exchange of Shares

As promptly as practicable after the effective time, Axcelis will cause the Exchange Agent to mail to each holder of record of shares of Veeco common stock immediately prior to the effective time (including

each holder of record of Veeco equity awards that are entitled to receive the merger consideration, as discussed in the section entitled “**The Merger Agreement — Treatment of Veeco Equity Awards**” beginning on page 114 of this joint proxy statement/prospectus) (i) a letter of transmittal and (ii) instructions for effecting the surrender of the Veeco certificates or book-entry share of Veeco common stock in exchange for the number of shares of Axcelis common stock and/or cash in lieu of fractional shares that such holder has the right to receive and any dividends or distributions to be paid pursuant to the merger agreement.

More information can be found in the section entitled “**The Merger Agreement — Exchange of Shares**” beginning on page 115 of this joint proxy statement/prospectus.

Market Listing

The shares of Axcelis common stock to be issued in connection with the merger are expected to be listed for trading on Nasdaq under a ticker symbol to be mutually agreed by Axcelis and Veeco. It is a condition of the merger that the shares of Axcelis common stock to be issued to Veeco stockholders in the merger be approved for listing on Nasdaq, subject to official notice of issuance. Axcelis will use its reasonable best efforts to cause the shares of Axcelis common stock to be issued in connection with the merger to be approved for listing on Nasdaq.

Delisting and Deregistration of Veeco Common Stock

If the merger is completed, Veeco common stock will be delisted from Nasdaq and deregistered under the Exchange Act, and Veeco will no longer be required to file periodic reports with the SEC with respect to Veeco common stock.

Veeco has agreed to cooperate with Axcelis to take, or cause to be taken, all actions necessary to delist the Veeco common stock from Nasdaq and to terminate their registration under the Exchange Act after the effective time.

THE MERGER AGREEMENT

*The following description sets forth the principal terms of the merger agreement, which is attached as Annex A and is incorporated by reference into this joint proxy statement/prospectus. The rights and obligations of the parties are governed by the express terms and conditions of the merger agreement and not by this description, which is summary by nature. This description does not purport to be complete and is qualified in its entirety by reference to the complete text of the merger agreement. You are encouraged to read the merger agreement carefully and in its entirety, as well as this joint proxy statement/prospectus and any documents incorporated by reference herein, before making any decisions regarding any of the proposals described in this joint proxy statement/prospectus. This section is intended to provide you with information regarding the terms of the merger agreement. Accordingly, the representations, warranties, covenants and other agreements in the merger agreement should not be read alone, and you should read the information provided elsewhere in this joint proxy statement/prospectus and in the public filings Axcelis and Veeco make with the SEC, as described in the section entitled “**Where You Can Find More Information**” beginning on page 189 of this joint proxy statement/prospectus.*

Explanatory Note Regarding the Merger Agreement

The Agreement and Plan of Merger, dated as of September 30, 2025 (as it may be amended from time to time), or the merger agreement, and this summary of terms are included to provide you with information regarding the terms of the merger agreement. Factual disclosures about Axcelis and Veeco, contained in this joint proxy statement/prospectus or in the public reports of Axcelis and Veeco filed with the Securities and Exchange Commission, or SEC, may supplement, update or modify the factual disclosures about Axcelis and Veeco contained in the merger agreement. The representations, warranties and covenants made in the merger agreement by Axcelis and Veeco were qualified and subject to important limitations agreed to by Axcelis and Veeco in connection with negotiating the terms of the merger agreement. In particular, in your review of the representations and warranties contained in the merger agreement and described in this summary, it is important to bear in mind that the representations and warranties were negotiated with the principal purpose of establishing circumstances in which a party to the merger agreement may have the right not to consummate the merger if the representations and warranties of the other party prove to be untrue due to a change in circumstance or otherwise, and allocating risk between the parties to the merger agreement, and were not intended by the parties to the merger agreement to be a characterization of the actual state of facts or condition of Axcelis or Veeco, except as expressly stated in the merger agreement. The representations and warranties also may be subject to a contractual standard of materiality different from that generally applicable to stockholders and reports and documents filed with the SEC and in some cases were qualified by the matters contained in the confidential disclosures that Axcelis and Veeco each delivered in connection with the merger agreement, which disclosures were not reflected in the merger agreement. Moreover, information concerning the subject matter of the representations and warranties, which do not purport to be accurate as of the date of this joint proxy statement/prospectus, may have changed since the date of the merger agreement and subsequent developments or new information qualifying a representation or warranty may have been included in this joint proxy statement/prospectus or in the respective public filings made by each of Axcelis or Veeco with the SEC.

Additional information about Axcelis and Veeco may be found elsewhere in this joint proxy statement/prospectus and in the public filings Axcelis and Veeco make with the SEC. See the section entitled “**Where You Can Find More Information**” beginning on page 189 of this joint proxy statement/prospectus.

Structure of the Merger

Pursuant to the terms of the merger agreement, Merger Sub will merge with and into Veeco, with Veeco as the surviving corporation and continuing as a wholly owned subsidiary of Axcelis.

Completion and Effectiveness of the Merger

The closing of the merger will take place, virtually at 9:00 a.m. Eastern Time, as soon as practicable, and in any event, within three business days after the satisfaction or waiver of all applicable conditions for completion of the merger set forth in the merger agreement (other than those conditions that by their nature are to be satisfied at the closing, but subject to the satisfaction or, to the extent permitted by applicable

law, waiver of those conditions by the party entitled to waive such conditions at the closing), by teleconference or through electronic exchange of transaction documents in portable document format by electronic mail or at such other time, place and date as Axcelis and Veeco shall agree.

On the date of the closing, Veeco and Merger Sub will cause the certificate of merger to be duly executed and filed with the Secretary of State of the State of Delaware as provided under the Delaware General Corporation Law, or the DGCL. The merger will become effective on the date and at the time when the certificate of merger has been duly filed with the Secretary of State of the State of Delaware or on or at such other date and at such other time as may be agreed by Axcelis and Veeco and specified in the certificate of merger.

Axcelis and Veeco are working to complete the merger prior to the outside date of September 30, 2026 (subject to extension in certain circumstances, solely for regulatory reasons, to March 30, 2027 and to June 30, 2027 pursuant to the terms of the merger agreement). It is possible that factors outside the control of both companies could result in the merger being completed at a different time, or not at all.

Merger Consideration

At the effective time, by virtue of the merger and without any action on the part of the parties, of holders of any securities of Veeco or of any other person, each share of Veeco common stock issued and outstanding immediately prior to the effective time will be converted into and become exchangeable for 0.3575 shares of Axcelis common stock, which we refer to as the exchange ratio, and cash in lieu of any fractional shares of Axcelis common stock any former holder of Veeco common stock would otherwise be entitled to receive. At the effective time, all shares of Veeco common stock owned by Axcelis, Veeco or Merger Sub or any wholly owner subsidiary of Axcelis, Veeco or Merger Sub will be canceled and will cease to exist, and no consideration will be delivered in exchange for such shares.

The exchange ratio is fixed, which means that it will not change between now and the effective time, regardless of whether the market price of either Axcelis common stock or Veeco common stock changes. Therefore, the value of the merger consideration will depend on the market price of Axcelis common stock at the effective time. The market price of Axcelis common stock has fluctuated since the date of the announcement of the merger agreement and may continue to fluctuate from the date of this joint proxy statement/prospectus to the date of the special meetings, the date the merger is completed and thereafter. The market price of Axcelis common stock, when received by Veeco stockholders after the merger is completed, could be greater than, less than or the same as the market price of Axcelis common stock on the date of this joint proxy statement/prospectus or at the time of the special meetings. Accordingly, you should obtain current market quotations for Axcelis common stock and Veeco common stock before deciding how to vote with respect to any of the proposals described in this joint proxy statement/prospectus. Axcelis common stock is traded on the Nasdaq Global Select Market, or Nasdaq, under the symbol “ACLS” and Veeco common stock is traded on Nasdaq under the symbol “VECO.”

Treatment of Veeco Equity Awards

Veeco RSUs

As of the effective time, each Vested Veeco RSU will be canceled, and the holder thereof will be entitled to receive, subject to any applicable tax withholding, (i) the merger consideration in respect of each share of Veeco common stock subject to such Vested Veeco RSU immediately prior to the effective time and (ii) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Vested Veeco RSU.

As of the effective time, each Unvested Veeco RSU will be assumed by Axcelis and converted into an Axcelis RSU covering Axcelis common stock with the same terms and conditions as applied to the Unvested Veeco RSU immediately prior to the effective time, except that such Unvested Veeco RSUs will cover the number of whole shares of Axcelis common stock (rounded down to the nearest whole share) equal to the product of (i) the number of shares of Veeco common stock subject to such Unvested Veeco RSU and (ii) the exchange ratio. All dividend equivalents, if any, accrued but unpaid as of the effective time with respect to

each such Unvested Veeco RSU will also be assumed and become an obligation of Axcelis in connection with the applicable Axcelis RSU.

Veeco PSUs

As of the effective time, each Vested Veeco PSU will be canceled, and the holder thereof will be entitled to receive, subject to any applicable tax withholding, (i) the merger consideration in respect of each share of Veeco common stock subject to such Vested Veeco PSU immediately prior to the effective time (based on the achievement of the applicable performance metrics (x) for those Vested Veeco PSUs where the applicable performance period has elapsed prior to the effective time, at the actual level of performance as determined by the Veeco compensation committee in the ordinary course of business consistent with past practice at the conclusion of such performance period and (y) for those Vested Veeco PSUs where the applicable performance period has not elapsed prior to the effective time, at the greater of (A) target level of performance or (B) actual performance through the most recent practicable date prior to the closing date, as determined in good faith and consistent with past practice by the Veeco compensation committee) and (ii) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Vested Veeco PSU.

As of the effective time, each Unvested Veeco PSU will be assumed by Axcelis and converted into an Axcelis RSU covering Axcelis common stock with the same terms and conditions as applied to the Unvested Veeco PSU immediately prior to the effective time, except that each such Axcelis RSU will be subject solely to the service-based conditions applicable to the corresponding Unvested Veeco PSU and will cover that number of whole shares of Axcelis common stock (rounded down to the nearest whole share) equal to the product of (i) the number of shares of Veeco common stock subject to such Unvested Veeco PSU (based on the achievement of the applicable performance metrics at the greater of (y) target level of performance or (z) actual performance through the most recent practicable date prior to the closing date, as determined in good faith and consistent with past practice by the Veeco compensation committee) and (ii) the exchange ratio. All dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Unvested Veeco PSU will also be assumed and become an obligation of Axcelis in connection with the applicable Axcelis RSU.

Veeco Restricted Stock

As of the effective time, each Veeco Director RSA will, to the extent not vested, become fully vested and canceled, and the holder thereof will be entitled to receive the merger consideration in respect of each share of Veeco common stock subject to such Veeco Director RSA immediately prior to the effective time.

At the effective time, each Veeco RSA that is not a Veeco Director RSA will be automatically, and without any required action on the part of the holder thereof, assumed by Axcelis and converted into an Axcelis RSA, with the same terms and conditions as were applicable to such Veeco RSA immediately prior to the effective time, except that such awards will, after the effective time, relate to the number of shares of Axcelis common stock equal to the product of (i) the number of shares of Veeco Common Stock subject to the Veeco RSA, as of immediately prior to the effective time and (ii) the exchange ratio (rounded down to the nearest whole share of Axcelis common stock).

The merger will be treated as a “change in control” or term of similar meaning for purposes of the Veeco compensation and benefit plans, which determination may result in certain “double trigger” benefits under such plans upon certain qualifying terminations of employment of certain executives in connection with such change in control. For more information, see the information provided in the sections entitled “**Interests of Veeco’s Directors and Executive Officers in the Merger**” beginning on page 157 of this joint proxy statement/prospectus.

Exchange of Shares

Exchange Agent

At or prior to the effective time, Axcelis will deposit with the Exchange Agent appointed by Axcelis and Veeco, for the benefit of the holders of Veeco common stock, a sufficient number of shares of Axcelis common stock to issue the aggregate per share merger consideration pursuant to the terms of the merger agreement.

Such shares of Axcelis common stock, together with cash in lieu of fractional shares of Axcelis common stock, are referred to as the exchange fund.

Exchange Procedures

As promptly as practicable after the effective time, Axcelis will cause the Exchange Agent to mail to each holder of record of shares of Veeco common stock immediately prior to the effective time (i) a letter of transmittal and (ii) instructions for effecting the surrender of the certificates and book-entry shares of Veeco common stock in exchange for the number of shares of Axcelis common stock and/or cash in lieu of fractional shares that such holder has the right to receive and any dividends or distributions to be paid pursuant to the merger agreement.

Dividends and Distributions with Respect to Unexchanged Shares of Veeco Common Stock

No dividends or other distributions declared or made after the effective time with respect to Axcelis common stock with a record date after the effective time shall be paid to the holder of any unsurrendered Veeco certificate or Veeco book-entry share with respect to any shares of Axcelis common stock in accordance with the merger agreement. Following surrender of any such Veeco certificate or Veeco book-entry share, there will be paid by Axcelis to the holder thereof, without interest, (i) promptly, the portion of the fractional shares cash amount, if applicable, payable with respect to a fractional share of Axcelis common stock to which such holder is entitled pursuant to the merger agreement and the amount of dividends or other distributions with a record date after the effective time and (ii) at the appropriate payment date, the amount of dividends or other distributions, with a record date after the effective time but prior to surrender and a payment date occurring after surrender, payable with respect to such whole shares of Axcelis common stock.

Treatment of Fractional Shares

No fractional shares of Axcelis common stock will be issued upon the surrender or transfer for exchange of shares of Veeco common stock. In lieu thereof, each holder of Veeco common stock otherwise entitled to a fractional share of Axcelis common stock (after aggregating all shares represented by Veeco certificates and Veeco book-entry shares held by such holder) will be entitled to receive, from the Exchange Agent in accordance with the merger agreement provisions, a cash payment in lieu of such fractional share of Axcelis common stock representing such holder's proportionate interest, if any, in the proceeds from the sale by the Exchange Agent (reduced by any fees of the Exchange Agent attributable to such sale) in one or more transactions of shares of Axcelis common stock in accordance with the provisions of the merger agreement.

The Exchange Agent will execute the sale on Nasdaq, in round lots to the extent practicable. Until the proceeds of such sale or sales of the excess shares have been distributed to holders of Veeco common stock, the Exchange Agent shall hold such proceeds in trust for the holders of Veeco common stock that would otherwise receive fractional shares of Axcelis common stock. The Exchange Agent shall determine the portion of the common shares trust to which each holder of Veeco common stock shall be entitled, if any, by multiplying the amount of the aggregate proceeds comprising the common shares trust by a fraction, the numerator of which is the amount of the fractional share interest to which such holder of Veeco common stock would otherwise be entitled and the denominator of which is the aggregate amount of fractional share interests to which all holders of Veeco common stock would otherwise be entitled.

As soon as practicable after the determination of the amount of cash, if any, to be paid to holders of Veeco common stock in lieu of any fractional shares of Veeco common stock, the Exchange Agent shall make available such amounts to such holders of shares of Veeco common stock without interest in accordance with the provisions of the merger agreement.

Termination of the Exchange Fund

At any time following twelve months after the closing, Axcelis will be entitled to require the Exchange Agent to deliver to it any portion of the exchange fund that has not been disbursed to holders of certificates or book-entry shares of Veeco common stock. Thereafter, such holders will be entitled to look only to Axcelis (subject to abandoned property, escheat or other similar laws) as general creditors thereof with respect

to the applicable merger consideration that such holder has the right to receive pursuant to the merger agreement. If any Veeco certificated or book-entry share has not been surrendered, prior to six years after the closing (or otherwise immediately prior to such time on which any payment in respect hereof would escheat to or become the property of any government entity pursuant to any applicable abandoned property, escheat or similar laws), any such shares, cash, dividends or distributions in respect of such Veeco certificated or book-entry share will, to the extent permitted by applicable law, become the property of Axcelis, free and clear of all claims or interests of any person previously entitled thereto.

None of Axcelis, the surviving company, the Exchange Agent, or any representative or affiliate, will be liable to any holder of a certificated or book-entry share for any merger consideration delivered to a public official pursuant to any applicable abandoned property, escheat or similar law.

Withholding Rights

Each of Axcelis, Veeco, Merger Sub, the surviving company, the Exchange Agent and any other applicable withholding agent will be entitled to deduct and withhold from the merger consideration or other amounts payable pursuant to the merger agreement to any person, such amounts as are required to be deducted and withheld under the Code, the U.S. Treasury Regulations promulgated thereunder, or any applicable provisions of state, local or non-United States tax law. To the extent that amounts are so deducted and withheld and paid over to the applicable governmental entity in accordance with applicable law, such deducted and withheld amounts will be treated for all purposes of the merger agreement as having been paid to the person(s) in respect of which such deduction and withholding was made.

Adjustments to Prevent Dilution

If, from the date of the merger agreement until the effective time of the merger, the outstanding shares of Axcelis common stock or Veeco common stock have been changed into a different number of shares or different class of shares by reason of any reclassification, stock split or reverse stock split, recapitalization, split-up, combination, exchange of shares, readjustment or similar transaction, or a stock dividend or stock distribution thereon shall have been declared with a record date within said time period, the applicable merger consideration and exchange ratio will be equitably adjusted to provide the holders of Veeco common stock the same economic effect as contemplated by the merger agreement prior to such event.

Governance Matters

Under the merger agreement, Axcelis and Veeco have agreed to certain provisions relating to the governance of Axcelis as of the effective time, including composition of the board of directors and the roles of the Chairman of the board of directors and the chief executive officer. For a more detailed description of the governance matters relating to Axcelis, see the section entitled **“The Merger — Governance of the Combined Company”** beginning on page 110 of this joint proxy statement/prospectus.

Representations and Warranties

The merger agreement contains reciprocal representations and warranties that are subject, in some cases, to specified exceptions and qualifications contained in confidential disclosure letters and qualified by certain information filed by the parties with the SEC, excluding, in each case, any disclosures set forth in any risk factor section or “forward-looking statements” sections. Each of Axcelis and Veeco has made representations and warranties regarding, among other things:

- corporate organization;
- capitalization;
- ownership of subsidiaries;
- authority with respect to the execution and delivery of the merger agreement and the due and valid execution and delivery and enforceability of the merger agreement;
- absence of conflicts with, or violations of, organizational documents, applicable law and other contracts;

- certain SEC filings and the financial statements contained in those filings;
- controls and procedures for required disclosures of financial and non-financial information in certain reports filed with the SEC;
- absence of undisclosed liabilities (other than certain specified exceptions);
- absence of certain changes and events from July 1, 2025 through the date of execution of the merger agreement;
- accuracy of information supplied or to be supplied for use in this joint proxy statement/prospectus;
- absence of certain legal proceedings;
- compliance with applicable laws, including the Foreign Corrupt Practices Act and other anti-corruption laws;
- possession of, and compliance with, applicable permits;
- benefits matters and ERISA compliance;
- collective bargaining agreements and other employee and labor matters;
- environmental matters;
- real property;
- tax matters;
- material contracts and the absence of breaches of material contracts;
- intellectual property;
- data privacy;
- brokerage fees that may be payable in connection with the merger;
- opinions from financial advisors;
- ownership of Veeco common stock;
- insurance;
- takeover provisions;
- owned and leased assets;
- top customers and suppliers; and
- product defects and warranties.

The merger agreement also contains certain representations and warranties of Axcelis with respect to the lack of prior business activities and capitalization of Merger Sub with respect to the execution and delivery of the merger agreement.

Many of the representations and warranties in the merger agreement are qualified by a “materiality” or “material adverse effect” standard (that is, they will not be deemed to be untrue or incorrect unless their failure to be true or correct, individually or in the aggregate, would, as the case may be, be material or have a material adverse effect). Under the merger agreement, a “material adverse effect” means, with respect to a party, any change, event, development, condition, occurrence or effect that is, or would reasonably be expected to be, materially adverse to the business, condition (financial or otherwise), assets, liabilities or results of operations of such party and its subsidiaries, except that none of the following will be deemed in themselves, either alone or in combination, to constitute, and none of the following will be taken into account in determining whether there has been or will be, a material adverse effect:

- any changes resulting from general market, economic, financial, capital markets or political, or regulatory conditions;
- any changes or proposed changes of law or GAAP;

- any changes resulting from any act of terrorism, war, national or international calamity or any worsening thereof;
- any changes generally affecting the industries in which the applicable company and its subsidiaries conduct their businesses;
- any changes resulting from the execution of the merger agreement or the public announcement or pendency of the merger, including any loss of employees or any disruption in or termination of (or loss of or other negative effect or change with respect to) supplier, distributor or similar business relationships or partnerships resulting from the transactions under the merger agreement, with certain exceptions;
- changes in the applicable company's stock price or the trading volume of the applicable company's stock or any change in the credit rating of the applicable company (but not, in each case, the underlying cause of any such changes, unless such underlying cause would otherwise be excepted from the definition of material adverse effect);
- any changes or effects resulting from any action required to be taken by the terms of the merger agreement;
- the failure to meet internal or analysts' expectations, projections or results of operations (but not, in each case, the underlying cause of any such changes, unless such underlying cause would otherwise be excepted from the definition of material adverse effect);
- any legal proceeding arising from or relating to the merger or the other transactions contemplated by the merger agreement.

Any changes of the sort referred to in the first four bullets above may be taken into account in determining whether there has been a material adverse effect if, and only to the extent, such changes do not have a disproportionate impact on the applicable company and its subsidiaries, taken as a whole, as compared to other participants in the industries in which such company and its subsidiaries conduct their businesses.

The representations and warranties do not survive the effective time of the merger.

Conduct of Business Prior to the Effective Time

In the merger agreement, Axcelis and Veeco have each agreed that until the effective time of the merger, subject to certain specified exceptions, and unless expressly required by the merger agreement, or required by law or the regulations or requirements of any stock exchange or the other party consents in writing (which consent will not be unreasonably withheld, conditioned or delayed), they and their respective subsidiaries will:

- conduct their operations in the ordinary course of business;
- use commercially reasonable efforts to keep available the services of their current officers, employees and consultants of each of company, and its applicable subsidiaries, and to preserve the goodwill and current relationships with persons having business relations; and
- use commercially reasonable efforts to preserve intact their business organizations, maintain their existence in good standing pursuant to applicable law and comply with all applicable law.

In addition, each of Axcelis and Veeco has agreed that until the effective time of the merger, subject to certain specified exceptions, it and its respective subsidiaries will not do any of the following without the prior written consent of the other party (which consent will not be unreasonably withheld, conditioned or delayed):

- amend or change its certificate of incorporation or bylaws or equivalent organizational documents;
- issue, sell, pledge, dispose of, grant, transfer or encumber, or authorize the issuance, sale, pledge, disposition, grant, transfer, or encumbrance of, any shares of capital stock of, or other equity interests in, the applicable company or any of its subsidiaries, other than: (i) the issuance of stock upon the

vesting of restricted stock units (including performance-based restricted stock units) that are outstanding as of the date of the merger agreement in accordance with their terms, (ii) in connection with the assumption and conversion of restricted stock units, performance stock units and restricted stock awards in accordance with the terms of the merger agreement, (iii) the issuance of any shares of common stock in accordance with the other company's employee stock purchase plan or (iv) as set forth in the applicable company;

- sell, pledge, dispose of, transfer, lease, license, guarantee or encumber (except for permitted liens) (i) any property or assets of its or its subsidiaries with value in excess of \$2 million, or (ii) any of its owned real property or leased real property, except pursuant to existing contracts or the sale or purchase of goods, products, inventory or personal property in the ordinary course of business consistent with past practice;
- (i) sell, assign, pledge, grant or acquire, agree to grant to or acquire from any person, or otherwise encumber, transfer, license, abandon, place in the public domain, permit to lapse, disclose or agree to disclose or otherwise dispose of any intellectual property except (x) pursuant to the terms of existing contracts or the licensing of any such intellectual property on a non-exclusive basis in the ordinary course of business consistent with past practice, (y) abandonment or other disposition of such intellectual property that is no longer used or useful in its business or any of its subsidiaries or otherwise not economically practical to maintain, or (z) expiration of any such intellectual property at the end of its statutory term (or otherwise) in the ordinary course of business, or (ii) compromise, settle or agree to settle, or consent to judgment in, any one or more actions or institute any action concerning any of the companies' material intellectual property except in the ordinary course of business consistent with past practice;
- declare, set aside, make or pay any dividend or other distribution (whether payable in cash, shares, property or a combination thereof) with respect to any of its capital stock or other equity interests, other than dividends paid by a wholly owned subsidiary to the applicable company or another wholly owned subsidiary of the applicable company, or enter into any agreement with respect to the voting or registration of its capital stock or other equity interests;
- reclassify, combine, split, subdivide or amend the terms of, or redeem, purchase or otherwise acquire, directly or indirectly, any of its capital stock or other equity interests, except for the withholding of its shares of common stock to satisfy withholding tax obligations with respect to awards granted pursuant to its stock plan and the acquisition by the company in the ordinary course of business consistent with past practice in connection with the forfeiture of awards pursuant to the terms of the company's stock plan upon termination of employment or service of an award holder;
- merge or consolidate itself or any of its subsidiaries with any person or adopt a plan of complete or partial liquidation or resolutions providing for a complete or partial liquidation, dissolution, restructuring, recapitalization or other reorganization of itself or any of its subsidiaries, other than internal reorganizations in the ordinary course of business that would not have a material and adverse impact;
- acquire (including by merger, business combination, tender offer, consolidation, or acquisition of shares) any interest in any person or any assets, licenses, rights, product lines, operations or businesses thereof, in each case (i) with value in excess of \$1,000,000 or (ii) that would reasonably be expected to prevent or materially delay consummation of the transaction, in each case other than (y) purchases of equipment and inventory in the ordinary course of business and (z) pursuant to specified contracts;
- repurchase, repay, refinance or incur any indebtedness for borrowed money, except as required by the terms of any such indebtedness as of the date of the merger agreement, or issue any debt securities or assume, guarantee or endorse, or otherwise as an accommodation become responsible for (whether directly, contingently or otherwise), the obligations of any person (other than a wholly owned subsidiary) for borrowed money, except for borrowings under existing credit facilities or issuances of commercial paper for working capital and general corporate purposes in the ordinary course of business consistent with past practice;

- make any loans, advances or capital contributions to, or investments in, any other person (other than any wholly owned subsidiary) in excess of \$10,000,000 in aggregate;
- terminate, cancel, renew or request or agree to any material change in or waiver under any material contract, or enter into or materially amend any contract that, if existing on the date of the agreement, would be a material contract, other than in the ordinary course of business consistent with past practice;
- make or authorize any capital expenditure in excess of its capital expenditure budget as disclosed to the other party, other than capital expenditures that are not, in the aggregate, in excess of \$10,000,000;
- except to the extent required by applicable law or the existing terms of any benefit plan and certain scheduled exceptions for actions taken in the ordinary course of business consistent with past practice: (i) increase, or commit to increase the compensation or benefits payable or to become payable to its current or former directors, officers, employees or individual service providers or any of its subsidiaries; (ii) grant any equity or equity-based awards; (iii) grant or pay, or commit to grant or pay, any bonus, incentive, any rights to severance or termination pay or transaction or retention bonus payments to, or enter into any severance agreement with, any current or former director, officer, employee or individual service provider or any of its subsidiaries (including any obligation to gross-up, indemnify or otherwise reimburse any such individual for any tax incurred by any such individual, including under Section 409A or 4999 of the code); (iv) establish, adopt, enter into or materially amend any collective bargaining agreement or other contract with any labor union or labor organization; (v) establish, adopt, enter into, amend or terminate any benefit plan (including any plan, agreement, program, policy or other arrangement that would be a benefit plan if it were in existence as of the date of this merger agreement) other than in connection with routine, immaterial or ministerial amendments to health and welfare plans that do not materially increase benefits or result in a material increase in administrative costs; (vi) amend or modify any performance criteria, metrics or targets under any benefit plan such that, as compared to those criteria, metrics or targets under any benefit plan in effect as of the date of this agreement, the performance criteria, metrics or targets would reasonably be expected to be more likely to be achieved than in the absence of such amendment or modification; (vii) take any action to waive any performance or vesting criteria or accelerate vesting, exercisability or funding under any benefit plan; or (viii) hire or terminate the employment of any executive officer other than terminations for cause, death or disability;
- forgive any loans to employees of the party or its subsidiaries;
- engage in any “plant closing,” or similar act requiring notice under the WARN Act or any similar federal, state, local or foreign law;
- waive, release, assign, settle or compromise any claim or rights with value in excess of \$3 million, other than in the ordinary course of business consistent with past practice and in accordance with their terms;
- compromise, settle or agree to settle any pending or threatened proceeding or investigation (including any proceeding relating to the merger agreement or the merger) other than compromises, settlements or agreements in the ordinary course of business consistent with past practice that involve only the payment of monetary damages not in excess of \$1 million individually or in the aggregate, without the imposition of equitable relief on, or the admission of wrongdoing by, the applicable company or any of its subsidiaries;
- except as required by applicable law, (i) make, change or revoke any material tax election, (ii) change any tax accounting period for purposes of a material tax or material method of tax accounting, (iii) file any material amended tax return, (iv) settle or compromise any audit or proceeding relating to a material amount of taxes, (v) agree to an extension or waiver of the statute of limitations with respect to a material amount of taxes, (vi) enter into any “closing agreement” within the meaning of Section 7121 of the Code (or any similar provision of state, local or non-U.S. law) with respect to any material tax or (vii) surrender any right to claim a material tax refund;
- convene any annual or special meetings (or any adjournment thereof) of stockholders other than the applicable company’s stockholder meeting and any other annual meeting of stockholders (only if such annual meetings are not otherwise combined with the stockholder’s meeting);

- fail to use reasonable efforts to maintain existing material insurance policies or comparable replacement policies to the extent available for a reasonable cost; or
- authorize or enter into any contract to do any of the foregoing or otherwise make any commitment to do any of the foregoing.

No Solicitation of Competing Proposals

Axcelis and Veeco have agreed that neither Axcelis nor Veeco, nor any of their respective subsidiaries, will, and that they will not permit their and their respective subsidiaries' representatives to, directly or indirectly, from the date of the merger agreement until the earlier of the effective time or the valid termination of the merger agreement:

- solicit, initiate, or knowingly encourage or knowingly induce (including by way of furnishing information), or take any other action intentionally designed to facilitate, any inquiries, or the making of any proposal that constitutes, or would be reasonably expected to lead to, a competing proposal;
- engage in any negotiations or discussions regarding any competing proposal;
- approve, endorse, recommend or enter into, or publicly propose to do any of the foregoing, any letter of intent, memorandum of understanding, agreement in principle, acquisition agreement, merger agreement or similar definitive agreement with respect to any competing proposal (excluding an acceptable confidentiality agreement);
- take any action to make the provisions of any takeover statute inapplicable to any transactions contemplated by a competing proposal;
- terminate, amend, release, modify or knowingly fail to enforce any provision of, or grant any permission, waiver or request under, any standstill, confidentiality or similar agreement entered into by the applicable party in respect of or in contemplation of a competing proposal (other than to the extent the Axcelis board of directors or the Veeco board of directors, as applicable, determines in good faith after consultation with its outside legal counsel that failure to take any of such actions would inconsistent with its fiduciary duties under applicable law); or
- propose to take any of the actions listed in the immediately preceding three paragraphs.

A “competing proposal” means:

- any proposal or offer from a third party relating to (i) a merger, reorganization, share exchange, consolidation, business combination, recapitalization, dissolution, liquidation, joint venture or similar transaction involving Axcelis or Veeco, as applicable, or any of their respective subsidiaries; (ii) the acquisition (whether by merger, consolidation, equity investment, joint venture, out license or otherwise) by any person of twenty percent (20%) or more of the consolidated assets of Axcelis or Veeco, and their respective subsidiaries, as determined on a book-value or fair-market-value basis; (iii) the purchase or acquisition, in any manner, directly or indirectly, by any person of twenty percent (20%) or more of the issued and outstanding shares of the Axcelis common stock or the Veeco common stock, as applicable, or any other equity interests in Axcelis or Veeco, as applicable; (iv) any purchase, acquisition, tender offer or exchange offer that, if consummated, would result in any person beneficially owning twenty percent (20%) or more of the shares of Axcelis common stock or Veeco common stock, as applicable, or any other equity interests of Axcelis, Veeco or any of their respective subsidiaries, as applicable; or (v) any combination of the foregoing.

Notwithstanding the limitations described above, if prior to obtaining the Veeco stockholder approval (in the case of Veeco) or the Axcelis stockholder approval (in the case of Axcelis) and following the receipt of a bona fide written competing proposal made after the date hereof that the Veeco board of directors or Axcelis board of directors, as applicable, determines in good faith (after consultation with Veeco's or Axcelis' financial advisor and outside legal counsel) would reasonably be expected to lead to a superior proposal and that was not, directly or indirectly, solicited, initiated or knowingly encouraged in violation of the merger agreement, the Veeco board of directors or the Axcelis board of directors, as applicable, determines in good faith, after consultation with financial advisors and outside legal counsel, as applicable, that a failure to take action with respect to such competing proposal would be inconsistent with its fiduciary

duties under applicable law, Veeco or Axcelis may, in response to such competing proposal, as applicable, and subject to compliance with the merger agreement (i) furnish information with respect to Veeco or Axcelis, as applicable, to the person making such competing proposal pursuant to an acceptable confidentiality agreement, and (ii) engage in discussions or negotiations with such person (and such person's representatives and financing sources (if any)) regarding such competing proposal.

A "superior proposal" means: a competing proposal (except the references therein to "twenty percent (20%)" shall be replaced by "eighty percent (80%)") made by a third party and which, in the good faith judgment of the Axcelis board of directors or the Veeco board of directors, as applicable, and after consultation with outside legal counsel and financial advisors, taking into account the various legal, financial, regulatory, timing, tax and other aspects of the competing proposal, including the financing terms thereof, the identity of the third party making such competing proposal and potential synergies expected to be realized from the transactions (i) if accepted, is reasonably likely to be consummated, (ii) if consummated, would result in a transaction that is more favorable to Axcelis' stockholders or Veeco's stockholders, as applicable, from a financial point of view, than the merger and the other transactions contemplated hereby (after giving effect to all adjustments or modifications to the terms thereof which may be agreed in writing to be made by the other party (including pursuant to the merger agreement), and (iii) if a cash transaction (in whole or in part), financing for which is then fully committed or reasonably determined to be available.

Notice Regarding Competing Proposals

Axcelis and Veeco each must promptly (but in no event later than 24 hours) give oral and written notice, to the other party after receipt of (i) any competing proposal or indication by any person that it is considering making a competing proposal, (ii) any request for non-public information relating to either party or its respective subsidiaries (other than requests for information that would not reasonably be expected to result in a competing proposal), or (iii) any inquiry or request for discussions or negotiations regarding any competing proposal. The notice must describe any of the foregoing occurrences, the identity of the person making such request, inquiry, or competing proposal and a copy of the request, inquiry or competing proposal (or, where no such copy is available, a reasonably detailed description of such request, inquiry or competing proposal). Axcelis or Veeco, as applicable, must then keep the other party reasonably informed (orally and in writing) on a current basis (and in any event at the other party's request and otherwise no later than 24 hours after the occurrence of any material changes, developments, discussions, or negotiations) of the status of the request, inquiry or competing proposal, including the terms and conditions thereof and any modification thereto, including any developments, discussions, and negotiations, including furnishing copies of any written inquiries, material correspondence and draft documentation, and written summaries of any material oral inquiries or discussions.

No Change of Recommendation

Axcelis and Veeco have agreed that, except as otherwise set forth in the merger agreement, neither the Axcelis board of directors nor the Veeco board of directors, including any committee thereof, will:

- withhold, withdraw, modify or qualify, or propose publicly to withhold, withdraw, modify or qualify, in a manner adverse to the other party, the approval, determination of advisability or recommendation by the Axcelis board of directors or the Veeco board of directors, as applicable, in favor of the merger agreement, the merger and the other transactions contemplated by the merger agreement;
- make, or permit any director or executive officer to make, any public statement in connection with the Veeco Axcelis special meeting or Veeco special meeting, as applicable, by or on behalf of the Veeco board of directors or Axcelis board of directors, as applicable that would reasonably be expected to have an adverse effect to the other party; or
- approve, determine to be advisable, or recommend, or propose publicly to approve, determine to be advisable, or recommend, any competing proposal.

Permitted Change of Recommendation — Intervening Event

Prior to the time, in the case of Axcelis, the required Axcelis stockholder vote to approve the Axcelis share issuance proposal is obtained, or in the case of Veeco, the required Veeco stockholder vote to approve the merger agreement proposal is obtained, the Axcelis board of directors or the Veeco board of directors, as applicable, may make an adverse recommendation change in response to an intervening event that has occurred and is continuing, if, and only, if: (i) the Axcelis board of directors or Veeco board of directors, as applicable, determines, that an intervening event has occurred and is continuing; (ii) such board determines, in good faith, after consultation with its respective outside legal counsel, that the failure to make a change in recommendation in response to such intervening event would be inconsistent with the directors' fiduciary duties under applicable law; (iii) Axcelis has given Veeco or Veeco has given Axcelis, as applicable, at least five business days' written notice of such board's intention to change its recommendation, which notice specifies, in reasonable detail, circumstances related to such determination; and (iv) prior to effecting a change of recommendation, Axcelis or Veeco, as applicable, has negotiated and has caused its representatives to negotiate in good faith with the other party during such notice period (to the extent the other party desires to negotiate), to enable such party to revise the terms of this merger agreement, such that the failure to make an Axcelis recommendation change or a Veeco recommendation change, as applicable, would not be inconsistent with its fiduciary duties under applicable law.

An "intervening event" means any event, development or change in circumstances that materially affects the business, assets or operations of Axcelis or Veeco, or their respective subsidiaries that first occurs, arises or becomes known to Axcelis, or Veeco after the date of the merger agreement, which event, development or change in circumstances was not reasonably foreseeable as of the date of the merger agreement; provided, however, that in no event shall the following events, developments or changes in circumstances constitute an intervening event:

- the receipt, existence of terms of a competing proposal or any matter relating thereto or consequence thereof;
- any change in the price, or change in trading volume, of Axcelis common stock or Veeco common stock (provided that the underlying causes giving rise to or contributing to such change may constitute an intervening event or be taken into account when determining whether an intervening event has occurred);
- meeting or exceeding internal or analysts' expectations, projections or results of operations (provided that the underlying causes giving rise to or contributing to such circumstance may constitute an intervening event or be taken into account when determining whether an intervening event has occurred); and
- changes in general economic, political or financial conditions or markets (including changes in interest rates, exchange rates, stock, bond and/or debt prices).

Permitted Change of Recommendation — Superior Proposal

Prior to the time, in the case of Axcelis, the required Axcelis stockholder vote to approve the Axcelis share issuance proposal is obtained, or in the case of Veeco, the required Veeco stockholder vote to approve the merger agreement proposal is obtained, the Axcelis board of directors or the Veeco board of directors, as applicable, may make an adverse recommendation change in response to its receipt of a *bona fide* written competing proposal that was not, directly or indirectly, solicited, initiated or knowingly encouraged in violation of the merger agreement, made after the date of the merger agreement that did not result from a breach in any material respect of the obligations set forth in the merger agreement, as applicable, and is not withdrawn, if, and only if: (i) the Axcelis board of directors or Veeco board of directors, as applicable, concludes in good faith, after consultation with its financial advisor and outside legal counsel, that such competing proposal constitutes a superior proposal; (ii) the Axcelis board of directors or the Veeco board of directors, as applicable, provides the other party five (5) business days prior written notice of its intention to take such action, which notice shall include the information with respect to such competing proposal that is specified in the merger agreement as well as a copy of such competing proposal; (iii) during the five (5) business days following such written notice, if requested by the other party, the board of directors effecting the recommendation change and its representatives have negotiated in good faith with the other party

regarding any revisions to the terms of the transactions proposed by the other party in response to such competing proposal and (iv) at the end of the five (5) business day period described in the foregoing clause (iii), the Veeco board of directors or Axcelis board of directors, as applicable, concludes in good faith, after consultation with Veeco's or Axcelis' outside legal counsel and financial advisors that the competing proposal continues to be a superior proposal, and, after consultation with Veeco's or Axcelis' outside legal counsel, that the failure to make a Veeco adverse recommendation change or Axcelis adverse recommendation change, as applicable, would be inconsistent with the fiduciary duties of the Veeco board of directors or Axcelis board of directors under applicable law.

Any material amendment or modification to any competing proposal shall require a new competing proposal notice and the negotiation period shall be extended by an additional four (4) business days from the date of receipt of such new competing proposal notice.

Nothing contained in the merger agreement will prevent Axcelis or Veeco or their respective boards of directors from taking and disclosing to their stockholders, as applicable, a position contemplated by Rule 14d-9 or Rule 14e-2(a) promulgated under the Exchange Act regarding a competing proposal or from issuing a "stop, look and listen" communication pending disclosure of its position thereunder, making any disclosure regarding a competing proposal to such entity's stockholders if the board has determined in good faith after consultation with its outside legal counsel that the failure to do so would be inconsistent with its duties to stockholders under, or would violate, applicable law, except that neither party may effect a change of recommendation other than in accordance with the procedures described above.

Existing Discussions

Upon entering into the merger agreement, Axcelis and Veeco each agreed to immediately cease and terminate, and to cause their respective subsidiaries and their representatives to immediately cease and terminate, any and all existing discussions or negotiations with any person (or provision of any non-public information to any person) with respect to any proposal that could reasonably be expected to lead to a competing proposal, and to request to have returned promptly to Axcelis and Veeco, as applicable, or to have promptly destroyed any confidential information provided by Axcelis and Veeco in any such discussions or negotiations.

Special Meetings

Each of Axcelis and Veeco must, promptly following the date of filing of this Registration Statement on Form S-4, establish a record date for, and, as soon as practicable following the effectiveness of this Registration Statement on Form S-4, duly call, give notice of, convene and hold such party's special meeting.

As promptly as practicable after this Registration Statement on Form S-4 shall have become effective, each of Axcelis and Veeco must use its reasonable best efforts to cause the joint proxy statement to be mailed to its respective stockholders entitled to notice of the special meeting and to hold the special meeting as soon as practicable after this Registration Statement on Form S-4 is declared effective under the Securities Act. Each of Axcelis and Veeco will, through its respective board of directors, recommend to its stockholders that they vote in favor of the stockholder approval, include such recommendation in this joint proxy statement and use its reasonable best efforts to solicit and obtain the stockholder approval and take all other customary action necessary or advisable to secure the stockholder approval, except in each case to the extent that the board has made an adverse recommendation change pursuant to the merger agreement.

Each of Axcelis and Veeco has agreed that the applicable company may postpone or adjourn the special meeting (i) with the prior written consent of the other party (which consent shall not be unreasonably withheld, conditioned or delayed), (ii) if a quorum has not been established, (iii) to allow reasonable additional time for the filing and mailing of any supplemental or amended disclosure and for such supplemental or amended disclosure to be disseminated and reviewed by the applicable stockholders prior to the special meeting, (iv) to allow reasonable time to solicit additional proxies, if and to the extent that the stockholder approval would not otherwise be obtained, (v) if required by applicable law or order or (vi) if requested by the SEC or its staff, provided that in the case of (ii) – (v), Axcelis or Veeco, as applicable, shall not postpone or adjourn the special meeting for more than twenty (20) business days in the aggregate from the originally scheduled date of the applicable special meeting without the prior written consent of the other party.

Axcelis and Veeco will use their respective reasonable best efforts to hold the special meetings on the same date. Subject to each party's termination rights described in "— **Termination of the Merger Agreement**" beginning on page 132 of this joint proxy statement/prospectus, each of Axcelis and Veeco agrees that its obligations to call, give notice of and hold the Axcelis special meeting and the Veeco special meeting, as applicable, will not be affected, including if a competing proposal or superior proposal shall have been made or received or if the board of directors shall have effected a recommendation change or announced or proposed any intention to do so.

Cooperation; Efforts to Consummate

Pursuant to the merger agreement, Veeco, Axcelis and Merger Sub must use their reasonable best efforts to consummate and make effective the transactions contemplated by the merger agreement, including using their respective reasonable best efforts to obtain, or cause to be obtained, all waivers, permits, consents, approvals, authorizations, qualifications, orders and expirations or terminations of applicable waiting periods of all governmental entities and parties to contracts with Veeco, Axcelis, or either company's subsidiaries that may be or become necessary or advisable for the performance of obligations pursuant to the merger agreement and the consummation of the transactions contemplated thereby.

Pursuant to the merger agreement, the parties must cooperate and assist one another in good faith in connection with all the actions to be taken in this regard, including (i) in the preparation and making of the filings referred to in the merger agreement and, if requested, amending or furnishing additional information thereunder, and (ii) in seeking, as promptly as reasonably practicable, to obtain all such waivers, permits, consents, approvals, authorizations, qualifications, orders or expirations or terminations of applicable waiting periods. Upon the terms and subject to the conditions set forth in the merger agreement, each party has agreed to make any filings required or advisable to be made pursuant to the HSR Act or other applicable antitrust and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom, with respect to the transactions as promptly as reasonably practicable (and, in the case of the required notification and report forms pursuant to the HSR Act, in any event, unless otherwise mutually agreed by Veeco and Axcelis, within twenty (20) business days after the date merger agreement, it being understood that if on such twentieth (20th) business day a Government Shutdown were in effect and the applicable governmental entities are not accepting filings, such twentieth (20th) business day deadline would be extended until the fifth (5th) business day after the date on which the governmental entities are accepting filings) and to supply as promptly as reasonably practicable to the appropriate governmental entities any information and documentary material that may be requested by such governmental entities pursuant to the HSR Act or such other applicable antitrust and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom. All such antitrust filings and filings pursuant to any investment screening laws to be made must be made in substantial compliance with the requirements of the HSR Act and such other applicable antitrust laws and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom. Other than in Sweden, foreign direct investment filings were made in each of the foregoing countries. The parties will determine in January 2026 whether or not to make a filing in Sweden in light of facts and circumstances as of that time. The parties' HSR Act notifications were filed with the FTC and the DOJ on October 29, 2025. The waiting period under the HSR Act expired on November 28, 2025 at 11:59 p.m. Eastern Time. On November 20, 2025, the parties notified the State Administration of Market Regulation in China of the merger. On December 10, 2025, the Inward Investment Screening Unit of the Department of Enterprise, Tourism and Employment of Ireland notified the parties that the merger will not be subject to screening under Irish foreign direct investment laws. On December 22, 2025, the German Federal Ministry for Economic Affairs and Energy issued a certificate of non-objection with respect to the merger.

Axcelis and Veeco shall jointly develop, consult and cooperate with one another with respect to the strategy for obtaining any regulatory approvals relating to the transactions, including the HSR Act, other applicable antitrust laws and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom, or responding to any request from, inquiry by, or investigation by any governmental entity in

connection with the merger agreement and the transactions, including the timing and content of any registrations, filings, agreements, forms, notices, petitions, statements, submissions of information, applications and other documents, communications and correspondence contemplated by, made in accordance with or subject to the merger agreement. In the event of any disagreement between the parties relating to the strategy or content of any submission made in connection with obtaining any regulatory approvals relating to the transactions, the parties shall escalate such dispute to the chief executive officer of Axcelis and the chief executive officer of Veeco for resolution. If such dispute as to strategy or content is not resolved in a timely manner pursuant to the preceding sentence, Axcelis shall have the right to make the final determination with respect to such dispute so long as such determination is consistent with the terms of the merger agreement and is in good faith with the intention to receive all required regulatory approvals and consummate the transactions as promptly as possible and without preference to the interests of Axcelis over the interests of Veeco. Notwithstanding the foregoing, the parties shall at all times remain obligated to use reasonable best efforts to consummate the transactions pursuant to the relevant terms of the merger agreement. Moreover, the foregoing regulatory strategy framework shall in no event govern the decision by any party to pursue (or not) any specific remedies in connection with obtaining any regulatory approvals.

In addition, the parties shall use their reasonable best efforts to cooperate with and assist each other in good faith to (i) determine, as promptly as reasonably practicable, which filings are required or advisable to be made pursuant to the HSR Act or other applicable antitrust and foreign investment laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom, with respect to transactions contemplated by the merger agreement, (ii) provide or cause to be provided as promptly as reasonably practicable to the other party all necessary information and assistance as any governmental entity may require of such party in connection with obtaining the relevant waivers, permits, consents, approvals, authorizations, qualifications, orders, or expiration or terminations of waiting periods in relation to such filings or in connection with any other review or investigation of the transactions contemplated by the merger agreement by a governmental entity pursuant to the HSR Act or other applicable antitrust laws and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom, and (iii) provide or cause to be provided as promptly as reasonably practicable all assistance and cooperation to allow the other party to prepare and submit any such filings or submissions required to be submitted under the HSR Act or other applicable antitrust laws and investment screening laws, including applicable antitrust laws and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom, including providing to the other party any information in support of such filings, filing with, notification to, application with, or request for further information made by, any governmental entity in respect of any such filing, subject to the regulatory strategy framework described above.

To the extent permitted by applicable law and not prohibited by any governmental entity, each party shall (i) keep the other apprised of the content and status of any material communications with or from any governmental entity with respect to the transactions, including promptly notifying the other party of any communication it receives from any governmental entity relating to any review or investigation of the transactions under the HSR Act or other applicable antitrust laws and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom, and (ii) provide advance notice of and permit representatives of the other party to be present and participate at each meeting or teleconference relating to any review or investigation of the transactions under the HSR Act or other applicable antitrust laws and investment screening laws, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom. Each party shall be consulted in advance in connection with any material draft submission to any governmental entity in such meetings or teleconferences. To the extent permitted by applicable law, the parties shall, and shall use their reasonable best efforts to cause their respective affiliates to use their reasonable best efforts to, provide each other with copies of all correspondence, filings or communications (which may be redacted or designated as "outside counsel only" material as provided in the merger agreement) between them or any of their respective representatives and any governmental entity on the other hand, with respect to the merger agreement and the transactions. Axcelis, Veeco, and Merger Sub shall, and shall cause their respective subsidiaries to, respond as promptly as reasonably practicable to any inquiries or requests for information and documentary material received from any governmental entity in connection with the HSR Act, other

applicable antitrust laws or investment screening laws related to the merger agreement and the transactions contemplated thereby, including applicable antitrust laws in the People's Republic of China and applicable foreign direct investment laws in Germany, Ireland, Sweden and the United Kingdom.

Neither Acelis nor Veeco nor any of their respective affiliates may, without the prior consent of the other party, propose, consent to, commit to or take any divestiture actions, such as selling or otherwise holding separate or disposing of asset or business, terminating existing business relationships or contractual rights or obligations or creating new ones, terminating any venture or other arrangement, or otherwise restructuring, that would result in a material adverse impact to either party or their reasonably anticipated benefits of the transactions. Moreover, neither party should be required to license their respective intellectual property.

Status and Notifications

Acelis will give prompt notice to Veeco, and Veeco will give prompt notice to Acelis, (i) of any notice or other communication in writing received by such party from any governmental entity or securities market in connection with the merger or the other transactions contemplated by the merger agreement, (ii) from any person alleging that the consent or approval of such person is or may be required in connection with the merger or the other transactions contemplated by the merger agreement, or (iii) if such party becomes aware of the occurrence of an event that could prevent or delay beyond the outside date the consummation of the merger, including any event that would reasonably be expected to result in any of the conditions to the merger agreement not being satisfied. The delivery of any notice pursuant to the foregoing will not cure any breach of any representation, warranty, covenants or agreement contained in the merger agreement or otherwise limit or affect the remedies available under the merger agreement to the party receiving such notice.

Each of Acelis and Veeco shall provide the other party with prompt written notice of any litigation to the extent not publicly available, brought by stockholders of either company or in the name of either company relating to transactions contemplated by the merger agreement.

Access to Information

From the date of the merger agreement until the effective time or the date, if any, on which the merger agreement is terminated in accordance with the provisions therein, upon reasonable advance written notice, each of Acelis and Veeco will, and will cause their respective subsidiaries to, afford to the other party and to the representatives of such other party reasonable access during normal business hours to all of their respective properties, books, contracts and records and their officers, employees and representatives and, during such period, each of Acelis and Veeco will, and will cause each of their subsidiaries and representatives to, furnish promptly to the other party (i) a copy of each report, schedule, registration statement and other document filed, published, announced or received by it during such period pursuant to the requirements of applicable securities laws and (ii) all other information concerning its business, properties and personnel as such other party may reasonably request, consistent with its obligations under applicable laws.

Notwithstanding the foregoing, neither Acelis nor Veeco (nor their respective subsidiaries or representatives) will be required to provide the other party or the representatives of such other party with access to or to disclose information where such information or access would, in the reasonable judgment of the requested party (i) breach any agreement with a third party, (ii) constitute a waiver of the attorney-client, work-product doctrine or other privilege held by such party, (iii) violate any applicable law or (iv) unreasonably interfere with the conduct of the business of the party. With respect to clauses (i) through (iii) above, each party shall advise the other party of the subject matter of the information that cannot be disclosed, and the parties shall use reasonable best efforts to make appropriate alternate disclosure arrangement, including adopting additional specific procedures to protect the confidentiality of sensitive material and to ensure compliance with applicable laws. Any such information provided pursuant to the above shall be held in confidence to the extent required by, and in accordance with, the confidentiality agreement previously entered into by Acelis and Veeco.

No investigation by any of the parties or their respective representatives or information provided, made available or delivered pursuant to the merger agreement shall affect the representations, warranties, covenants or agreements of any other party set forth in the merger agreement.

Nasdaq Listing; Nasdaq Delisting

Axcelis will use its reasonable best efforts to cause the shares of Axcelis common stock to be issued in connection with the merger to be approved for listing on Nasdaq prior to the effective time under a ticker symbol to be mutually agreed by Axcelis and Veeco. Each of the parties has agreed to cooperate with the other party in taking, or causing to be taken, all actions necessary to delist Veeco common stock and from Nasdaq and to terminate their registration under the Exchange Act as promptly as practicable following the closing in compliance with applicable law.

Publicity

Neither Axcelis nor Veeco will issue any public release or announcement with respect to the merger or the merger agreement without the prior written consent of the other party (such consent not to be unreasonably withheld, conditioned or delayed), unless (i) Axcelis or Veeco, as applicable, determines that it is required by applicable law or by any listing agreement with or the listing rules or regulations of any applicable securities exchange or regulatory or governmental body to which the relevant party is subject to issue or cause the publication of any press release or other public announcement, in which event such party shall use its reasonable best efforts to allow the other party reasonable time to comment upon such press release or other announcement in advance of such issuance or (b) Axcelis or Veeco, as applicable, issues any public release or announcement with respect to a competing proposal or change of recommendation in accordance with the merger agreement.

Employee Benefits Matters

At and following the effective time, Axcelis will and will cause its subsidiaries (including the surviving corporation and its subsidiaries) to honor all obligations under the Veeco employee benefit plans in accordance with their terms as in effect immediately before the effective time; provided that Axcelis will not be prevented from causing them to be enforced in accordance with their terms, including any reserved right to amend, modify, suspend, revoke or terminate them.

Each continuing employee, subject to continued employment, will continue to be eligible for, commencing on the closing date and ending on the one-year anniversary of the closing date (i) an annual base salary or wage rate at least equal to the annual base salary or wage rate provided to such continuing employee immediately prior to the closing date, (ii) annual target cash and equity incentive opportunities (excluding, for the avoidance of doubt, any change of control, transaction, retention or similar arrangements) that, in the aggregate, are no less favorable than the annual aggregate target cash and equity incentive opportunities provided to such continuing employee as of immediately prior to the closing date (provided, that in lieu of an equity-based incentive opportunity, cash incentive compensation of equivalent value may be provided), (iii) retirement and health and welfare benefits (excluding any defined benefit arrangements, deferred compensation and retiree health and welfare arrangements) that are substantially comparable, in the aggregate, to the retirement and health and welfare benefits (excluding any defined benefit arrangements, deferred compensation and retiree health and welfare arrangements) to such continuing employee immediately prior to the closing date and (iv) severance payments and benefits that are no less favorable than the severance payments and benefits that such continuing employee would have been eligible to receive upon a termination of employment by Veeco or its subsidiaries without cause under any applicable severance plan, policy, practice or arrangement sponsored or maintained by Veeco or its subsidiaries as of September 30, 2025.

Subject to applicable law, Axcelis will and will cause its subsidiaries (including the surviving corporation and its subsidiaries) to give credit under each of their respective employee benefit plans, programs and arrangements to continuing employees for all service prior to the effective time with Veeco or its subsidiaries, as applicable, or any predecessor employer (to the extent that such credit was given by Veeco or any of its subsidiaries, as applicable) for all purposes for which such service was taken into account or recognized by Veeco or Axcelis or their respective subsidiaries, as applicable, for purposes of eligibility for participation and vesting (but not accrual of benefits including under any defined benefit pension plan, other than for purposes of determining the level of vacation, travel and/or severance benefits), but not to the extent crediting such service would result in duplication of benefits and not for purposes of defined benefits plans or retiree welfare plans, except to the extent required by applicable laws.

In addition, for purposes of each post-closing plan providing medical, dental, pharmaceutical, vision and/or other health benefits to any continuing employee and his or her dependents, Axcelis will use its commercially reasonable efforts to and to cause its subsidiaries (including the surviving corporation and its subsidiaries) to, (i) cause all waiting periods, pre-existing condition exclusions, evidence of insurability requirements and actively-at-work requirements of such post-closing plan to be waived for such continuing employee and his or her covered dependents, to the extent any such waiting periods, pre-existing condition exclusions, evidence of insurability requirements and actively-at-work requirements were waived or were inapplicable under the comparable Veeco employee benefit plan, (ii) fully credit each continuing employee with all deductible payments, co-payments and other out-of-pocket expenses incurred by such continuing employee and his or her covered dependents under the medical, dental, pharmaceutical or vision benefit plans of Veeco or Axcelis (or their respective subsidiaries), as applicable, prior to the effective time during the plan year in which the effective time occurs for the purpose of determining the extent to which such continuing employee has satisfied the deductible, co-payments, or maximum out-of-pocket requirements applicable to such continuing employee and his or her covered dependents for such plan year under any pre-closing Veeco employee benefit plan providing medical, dental, pharmaceutical, vision or health benefits, as if such amounts had been paid in accordance with such plan, and (iii) credit the accounts of such continuing employees under any post-closing plan that is a flexible spending plan with any unused balance in the account of such continuing employee under the applicable Veeco employee benefit plan.

If requested by Axcelis no later than ten (10) days prior to the closing date, effective as of the day immediately prior to the closing date and contingent upon the occurrence of the closing, Veeco will terminate or cause the termination of each Veeco Qualified Plan. In such event, prior to the closing date and thereafter (as applicable), Axcelis will take any and all action as may be required, including amendments to each Axcelis Qualified Plan, to permit each continuing employee to make rollover contributions of “eligible rollover distributions” (within the meaning of Section 402(c)(4) of the Code) in cash or notes (representing plan loans from the Veeco Qualified Plan) in an amount equal to the eligible rollover distribution portion of the account balance distributable to such continuing employee from such Veeco Qualified Plan to the corresponding Axcelis Qualified Plan. If the Veeco Qualified Plan is terminated as described herein, the continuing employees will be eligible to participate in an Axcelis Qualified Plan as soon as administratively practicable following the closing date.

Tax Matters

The merger agreement is intended to constitute and be adopted as a “plan of reorganization” for purposes of Sections 354 and 361 of the Code and within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a).

Axcelis and Veeco agreed that they will (i) use its commercially reasonable efforts to cause the merger to qualify and (ii) not knowingly take or cause to be taken any action (or knowingly fail to take any commercially reasonable action) that would reasonably be expected to prevent the merger from qualifying, as a “reorganization” within the meaning of Section 368(a) of the Code.

While the obligation of the parties to consummate the merger is not conditioned upon the receipt of a tax opinion from counsel, each of Axcelis and Veeco will use commercially reasonable efforts to cooperate with one another to obtain any opinions required to be filed with the SEC regarding the intended tax treatment in connection with the filing of the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, including using reasonable best efforts to deliver to the relevant counsel tax representation certificates (dated as of the necessary date and signed by an officer of Axcelis or Veeco, as applicable) for purposes of rendering such opinions.

Expenses

Except as otherwise expressly provided in the merger agreement, all expenses incurred in connection with the merger agreement will be paid by the party incurring such expenses, except that Axcelis and Veeco will share equally the fees, costs and expenses, other than attorneys' fees, (i) the expenses in connection with printing and mailing this joint proxy statement/prospectus and the Form S-4; (ii) all SEC filing fees relating to the merger and (iii) the fees in connection with certain specified approvals to be sought pursuant to the merger agreement.

Directors' and Officers' Insurance and Indemnification

The merger agreement provides that Axcelis will, and will cause the surviving company to, from and after the effective time, indemnify, defend and hold harmless (including advancing expenses as incurred) to the fullest extent permitted under (i) applicable law, (ii) Veeco's and its subsidiaries' organizational documents and (iii) any contract of Veeco in effect as of the date of this the merger agreement, each present and former director and officer of Veeco against any costs, expenses (including reasonable attorneys' fees), judgments, settlements, fines, losses, claims, damages, or liabilities incurred in connection with any legal proceeding, whether civil, criminal, administrative or investigative, arising out of or pertaining to matters existing or occurring at or prior to the effective time, including in connection with the merger agreement and the transactions contemplated thereby. All rights to exculpation, indemnification or advancement of expenses for acts or omissions occurring prior to the effective time, now existing in favor of the indemnified parties as provided in their respective certificate of incorporation or bylaws (or other organizational documents) will survive the merger and the other transactions contemplated by the merger agreement and will continue in full force and effect in accordance with their terms.

For six years from and after the effective time, Axcelis will maintain in effect the exculpation, indemnification and advancement of expenses provisions in the Veeco and its subsidiaries' organizational documents that are in existence on the date of the merger agreement, and no such provision will be amended, modified or repealed in any manner that would adversely affect the rights or protections thereunder of any such indemnified party who immediately before the effective time were current or former directors or officers of Veeco.

Axcelis will maintain, for a period of six years from and after the effective time, for the benefit of the Veeco indemnified parties, directors' and officers' indemnification policies that provide coverage for events occurring prior to the closing that are no less favorable than Veeco's existing policies, as applicable, or, if substantially equivalent insurance coverage is unavailable, the best available coverage, which is referred to as the D&O Insurance, except that Axcelis will not be required to pay an annual premium for the D&O Insurance in excess of 300% of the last annual premium paid prior to the date of the merger agreement.

Litigation

Stockholder Litigation

Each party to the merger agreement has agreed to provide the other party prompt written notice, and the opportunity to participate in the defense of, any litigation brought by any stockholder of that party or in the name of that party against such party and/or any of their respective directors relating to the merger, the merger agreement or other transactions contemplated by the merger agreement. Each of Axcelis and Veeco has agreed not to compromise, settle, come to an arrangement or agree to take any of the foregoing actions or or consent to the same with respect to such litigation without the other party's prior written consent (which consent must not be unreasonably withheld, conditioned or delayed).

As of December 29, 2025, Axcelis and Veeco have received several demand letters from purported Axcelis and Veeco stockholders in connection with the merger. The letters allege disclosure deficiencies in the preliminary joint proxy statement/prospectus filed on December 8, 2025 with the SEC and demands that additional disclosures be made before Axcelis and Veeco stockholders vote on the merger.

Axcelis and Veeco believe they have substantial defenses in connection with the claims asserted in the demand letters. Axcelis and Veeco may receive additional stockholder demand letters or complaints may be filed in courts related to the merger in the future. If additional similar demands are sent, absent new or significantly different allegations, Axcelis and Veeco will not necessarily disclose such additional demands.

Conditions to the Completion of the Merger

Each party's obligation to effect the merger is subject to the satisfaction or waiver at or prior to closing of each of the following conditions:

- receipt of the required Axcelis stockholder vote to approve the Axcelis share issuance proposal and the required Veeco stockholder vote to approve the Veeco merger agreement proposal;

- the absence of any law or order promulgated, entered, enforced, enacted or issued by a governmental authority (whether temporary, preliminary or permanent) which prohibits, restrains, or makes illegal the consummation of the merger and shall continue in effect;
- the shares of Axcelis common stock, including the shares of Axcelis common stock to be issued to Veeco stockholders in accordance with the merger agreement having been approved for listing on Nasdaq, subject to official notice of issuance;
- the expiration or termination of any applicable waiting period, together with any extensions thereof, under the HSR Act, the approval of the Merger by the State Administration for Market Regulation in the People's Republic of China and receipt of, or expiration of applicable waiting periods in connection with, other government approvals from the applicable governmental entities in Germany, Ireland, Sweden and the United Kingdom;
- the Form S-4 Registration Statement of Axcelis, which will contain the joint proxy statement/prospectus of the parties in connection with the merger, having become effective under the Securities Exchange Act of 1934 and not being the subject of any stop order or pending proceeding by the U.S. Securities and Exchange Commission;
- the accuracy of the representations and warranties of the other party to the extent required under the merger agreement;
- the other party's compliance with and performance of, in all material respects, all covenants, obligations and agreements under the merger agreement required to be complied with or performed by such party at or prior to the closing;
- that no material adverse effect of such party has occurred and is continuing since the date of the merger agreement; and
- the receipt by such party of a certificate of an executive officer of the other party certifying that the conditions with respect to representations and warranties and performance of obligations have been satisfied.

Termination of the Merger Agreement

Termination by Mutual Consent

The merger agreement may be terminated and the merger and the other transactions contemplated by the merger agreement may be abandoned at any time prior to the effective time by mutual written consent of Axcelis and Veeco.

Termination by Either Axcelis or Veeco

Either Axcelis or Veeco may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time if:

- any law or final and non-appealable order has been promulgated, entered, enforced, enacted or issued or deemed applicable to the merger by any governmental entity of competent jurisdiction which permanently prohibits, restrains or makes illegal the consummation of the merger;
- the merger has not been completed by 11:59 p.m. Eastern time on September 30, 2026, referred to as the outside date (unless such date has been extended to March 30, 2027, or subsequently to June 30, 2027, which extensions, each of which, are available automatically but only in limited circumstances related to antitrust or similar law);
- the required Axcelis stockholder approval for the Axcelis share issuance proposal has not been obtained at the Axcelis special meeting or at any adjournment or postponement thereof; or
- the required Veeco stockholder approval of the Veeco merger agreement proposal has not been obtained at the Veeco special meeting or at any adjournment or postponement thereof.

Termination by Axcelis

Axcelis may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time:

- if there has been a breach by Veeco of any of its representations, warranties, or covenants under the merger agreement, which breach (i) resulted in the conditions to the merger agreement not being satisfied and (ii) is not curable prior to the outside date, or if curable prior to the outside date, has not been cured within the earlier of (y) 20 business days after the giving of notice thereof by Axcelis to Veeco or (z) one business day prior to the outside date; or
- if the Veeco board of directors has effected an adverse recommendation change.

Termination by Veeco

Veeco may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time:

- if there has been a breach by Axcelis or Merger Sub of any of their representations, warranties, or covenants under the merger agreement, which breach (i) resulted in the conditions to the merger agreement not being satisfied and (ii) is not curable prior to the outside date, or if curable prior to the outside date, has not been cured within the earlier of (y) 20 business days after the giving of notice thereof by Veeco to Axcelis or (z) one business day prior to the outside date; or
- if the Axcelis board of directors has effected an adverse recommendation change.

Termination Fees

Axcelis will be required to pay to Veeco a termination fee of \$108,700,000 if the merger agreement is terminated:

- by Veeco, due to the Axcelis board of directors making a change of recommendation;
- by Veeco, due to Axcelis' breach or failure to perform any of its representations, warranties or covenants contained in the merger agreement, which breach or failure to perform would result in a failure of conditions to the merger agreement and which is incapable of being cured by Axcelis prior to the outside date or otherwise is not cured by the earlier of (i) 20 business days following written notice to Axcelis by Veeco of such breach or (ii) the first business day prior to the outside date, if (y) a competing proposal for Axcelis has been publicly announced or otherwise communicated to the Axcelis board of directors (and not withdrawn) prior to the date of termination and (z) within 12 months after such termination, either (A) Axcelis consummates a competing proposal or (B) Axcelis has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of "competing proposal");
- if the Axcelis stockholder approval has not been obtained upon a vote taken thereon at the Axcelis stockholders meetings duly convened therefor or at any adjournment or postponement thereof, if (i) a competing proposal for Axcelis has been publicly announced or otherwise communicated to the Axcelis board of directors (and not withdrawn) prior to the date of the Axcelis special meeting and (ii) within 12 months after such termination, either (y) Axcelis consummates a competing proposal or (z) Axcelis has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of "competing proposal"); or
- by either Axcelis or Veeco due to Axcelis' failure to consummate the transactions by the outside date, subject to certain exceptions in the merger agreement, if (i) a competing proposal for Axcelis has been publicly announced or communicated to the Axcelis board of directors (and not withdrawn) prior to the date of termination and (ii) within 12 months after such termination, either (y) Axcelis consummates a competing proposal or (z) Axcelis has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of "competing proposal").

Axcelis will be required to pay to Veeco a fixed expense reimbursement amount of \$15,000,000 if the merger agreement is terminated:

- by Veeco, due to Axcelis not obtaining the required Axcelis stockholder approval during the Axcelis stockholder meeting, unless Veeco does not obtain the required Veeco stockholder approval during the Veeco stockholder meeting; or

- by Veeco, due to Axcelis' breach or failure to perform any of its representations, warranties or covenants contained in the merger agreement, which breach or failure to perform would result in a failure of conditions to the merger agreement and which is incapable of being cured by Axcelis prior to the outside date or otherwise is not cured by the earlier of (i) 20 business days following written notice to Axcelis by Veeco of such breach or (ii) the first business day prior to the outside date.

Veeco will be required to pay to Axcelis a termination fee of \$77,500,000 if the merger agreement is terminated:

- by Axcelis, due to the Veeco board of directors making a change of recommendation;
- by Axcelis, due to Veeco's breach or failure to perform any of its representations, warranties or covenants contained in the merger agreement, which breach or failure to perform would result in a failure of conditions to the merger agreement and which is incapable of being cured by Veeco prior to the outside date or otherwise is not cured by the earlier of (i) 20 business days following written notice to Veeco by Axcelis of such breach or (ii) the first business day prior to the outside date, if (y) a competing proposal for Veeco has been publicly announced or otherwise communicated to the Veeco board of directors (and not withdrawn) prior to the date of termination and (z) within 12 months after such termination, either (A) Veeco consummates a competing proposal or (B) Veeco has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of "competing proposal");
- if the Veeco stockholder approval has not been obtained upon a vote taken thereon at the Veeco stockholders meetings duly convened therefor or at any adjournment or postponement thereof, if (i) a competing proposal for Veeco has been publicly announced or communicated to the Veeco board of directors (and not withdrawn) prior to the Veeco special meeting and (ii) within 12 months after such termination, either (y) Veeco consummates a competing proposal or (z) Veeco has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of "competing proposal"); or
- by either Axcelis or Veeco due to Veeco's failure to consummate the transactions by the outside date, subject to certain exceptions in the merger agreement, if (i) a competing proposal for Veeco has been publicly announced or communicated to the Veeco board of directors (and not withdrawn) prior to the date of termination and (ii) within 12 months after such termination, either (y) Veeco consummates a competing proposal or (z) Veeco has entered into a definitive agreement for a competing proposal (in each case, with all references to 20% being changed to 50% in the definition of "competing proposal").

Veeco will be required to pay to Axcelis a fixed expense reimbursement amount of \$15,000,000 if the merger agreement is terminated:

- by Axcelis, due to Veeco not obtaining the required Veeco stockholder approval during the Veeco stockholder meeting, unless Axcelis does not obtain the required Axcelis stockholder approval during the Axcelis stockholder meeting; or
- by Axcelis due to Veeco's breach or failure to perform any of its representations, warranties or covenants contained in the merger agreement, which breach or failure to perform would result in a failure of conditions to the merger agreement and which is incapable of being cured by Veeco prior to the outside date or otherwise is not cured by the earlier of (i) 20 business days following written notice to Veeco by Axcelis of such breach or (ii) the first business day prior to the outside date.

Amendment

Subject to applicable law and except as otherwise provided in the merger agreement, the merger agreement may be amended, modified or supplemented, whether before or after receipt of the required Axcelis stockholder approval of the Axcelis share issuance proposal or the required Veeco stockholder approval of the Veeco merger agreement proposal, as applicable, by written agreement of Axcelis and Veeco authorized by their respective boards of directors, except that after receipt of such Axcelis stockholder approval or such Veeco stockholder approval, as applicable, no amendment will be made that by law requires further approval or adoption by such stockholders without obtaining such further approval or adoption.

The merger agreement may not be amended except by an instrument in writing specifically designated as an amendment signed on behalf of each of the parties in interest at the time of the amendment.

Waiver

At any time prior to the effective time, either Veeco, on the one hand, or Axcelis or Merger Sub, on the other hand, may, to the extent permitted by applicable laws and except as otherwise set forth in the merger agreement, (i) extend the time for the performance of any of the obligations or other acts of Axcelis, Merger Sub or Veeco, as applicable, (ii) waive any inaccuracies in the representations and warranties made to Axcelis or Veeco contained in the merger agreement or in any document delivered pursuant to the merger agreement and (iii) waive compliance with any of the agreements or conditions for the benefit of Axcelis, Merger Sub or Veeco, contained in the merger agreement, except that after receipt of the required Axcelis stockholder approval of the Axcelis share issuance proposal, or the required Veeco stockholder approval of the Veeco merger agreement proposal, as applicable, no waiver will be made that by law requires further approval or adoption by such stockholders without obtaining such further approval or adoption. Any agreement on the part of Axcelis, Merger Sub or Veeco to any such waiver will be valid only if set forth in an instrument in writing signed on behalf of such party. Any delay in exercising, or failure to assert, any right of remedy under the merger agreement will not constitute a waiver of such right, and any single or partial exercise of such right or power under the merger agreement, or any abandonment or discontinuance of steps to enforce such right or power, or any course of conduct, does not preclude any other or further exercise thereof or the exercise of any other right or power.

Specific Performance

Each of the parties to the merger agreement agrees that irreparable damage would occur in the event that any provision of the merger agreement is not performed in accordance with its specific terms or is otherwise breached. It is agreed that the parties will be entitled to an injunction or injunctions to prevent or remedy any actual breaches or threatened breaches of the merger agreement by any other party and specifically enforce the terms and provisions of the merger agreement and to any further relief at law or in equity.

Third-Party Beneficiaries

Except as provided in the merger agreement with respect to directors' and officers' insurance and indemnification, the merger agreement is not intended to confer upon any person any rights or remedies thereunder other than the parties to the merger agreement.

TREATMENT OF THE CONVERTIBLE NOTES

Axcelis, Veeco and the trustee under the Veeco Convertible Notes Indenture are expected to take all steps required to supplement or amend the terms of the Veeco Convertible Notes, the Veeco Convertible Notes Indenture and the Veeco Capped Call Instruments to reflect the consummation of the merger, including the execution of a supplemental indenture to the Veeco Convertible Notes Indenture (to be effective upon completion of the merger) pursuant to which, among other things, the Veeco Convertible Notes will become convertible into Axcelis common stock.

The merger agreement requires Veeco to satisfy the notice obligations under the Veeco Convertible Notes Indenture with respect to the merger, to execute a supplemental indenture to effect the treatment of the Veeco Convertible Notes contemplated in the merger agreement and to prepare and cause to be delivered any other documentation required under the Veeco Convertible Notes Indenture at or prior to the effective time, with Veeco providing Axcelis reasonable opportunity to review and comment on such documentation.

At or prior to the effective time, Veeco may take any actions permitted or contemplated under the terms of the Veeco Convertible Notes Indenture, including settling any conversions of any Veeco Convertible Notes in cash, shares of Veeco Common Stock or a combination thereof, with Veeco providing Axcelis reasonable advance notice of such conversions and consulting with Axcelis in good faith to take into account Axcelis' views regarding the settlement method applicable to any such conversions.

If Axcelis so requests, Veeco must cooperate and use commercially reasonable efforts to allow the Veeco Capped Call Instruments to remain outstanding through completion of the merger.

UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

On September 30, 2025, Axcelis Technologies, Inc., a Delaware corporation (“Axcelis” or the “Company”), Victory Merger Sub, Inc., a Delaware corporation and a wholly-owned subsidiary of Axcelis (“Merger Sub”), and Veeco Instruments Inc., a Delaware corporation (“Veeco”), entered into an Agreement and Plan of Merger (the “Merger Agreement”). Pursuant to the Merger Agreement, and subject to the satisfaction or waiver of the conditions specified therein, Merger Sub will be merged with and into Veeco (the “Merger”), with Veeco surviving as a wholly-owned subsidiary of Axcelis.

The unaudited pro forma condensed combined balance sheet as of September 30, 2025 gives effect to the Merger as if the transactions had been completed on September 30, 2025 and combines the unaudited consolidated balance sheet of Axcelis as of September 30, 2025 with Veeco’s unaudited consolidated balance sheet as of September 30, 2025.

The unaudited pro forma condensed combined Statement of Operations for the year ended December 31, 2024 and the nine months ended September 30, 2025 give effect to the Merger as if the transaction had occurred on January 1, 2024, the first day of the Company’s fiscal year 2024 and combines the historical results of Axcelis and Veeco. The unaudited pro forma condensed combined Statement of Operations for the fiscal year ended December 31, 2024 combines the audited consolidated Statement of Operations of Axcelis for the fiscal year ended December 31, 2024 and Veeco’s audited consolidated Statement of Operations for the fiscal year ended December 31, 2024. The unaudited pro forma condensed combined Statement of Operations for the nine months ended September 30, 2025 combines the unaudited consolidated Statement of Operations of Axcelis for the nine months ended September 30, 2025 with Veeco’s unaudited consolidated Statement of Operations for the nine months ended September 30, 2025.

The historical financial statements of Axcelis and Veeco have been adjusted in the accompanying unaudited pro forma condensed combined financial information to give effect to pro forma events that are transaction accounting adjustments which are necessary to account for the Merger in accordance with U.S. generally accepted accounting principals (“U.S. GAAP”). The unaudited pro forma adjustments are based upon available information and certain assumptions that our management believes are reasonable.

The unaudited pro forma condensed combined financial information and related notes are derived from, and should be read in conjunction with, the following historical financial statements and the accompanying notes, which are contained in, or incorporated by reference into, as applicable, this proxy statement/prospectus:

- The accompanying notes to the unaudited pro forma condensed combined financial information;
- The separate audited financial statements of Axcelis as of and for the fiscal year ended December 31, 2024 and the related notes, included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2024 as filed with the Securities and Exchange Commission (“SEC”) on February 28, 2025;
- The separate unaudited financial statements of Axcelis as of and for the nine months ended September 30, 2025 and the related notes, included in the Company’s Quarterly Report on Form 10-Q for the period ended September 30, 2025 as filed with the SEC on November 6, 2025;
- The separate audited financial statements of Veeco as of and for the fiscal year ended December 31, 2024 and the related notes, included in Veeco’s Annual Report on Form 10-K for the fiscal year ended December 31, 2024 as filed with the SEC on February 14, 2025; and
- The separate unaudited financial statements of Veeco as of and for the nine months ended September 30, 2025 and the related notes, included in Veeco’s Quarterly Report on Form 10-Q for the period ended September 30, 2025 as filed with the SEC on November 5, 2025.

Description of the Merger

Under the terms of the Merger Agreement, at the effective time of the Merger (the “Effective Time”), each share of common stock, par value \$0.01 per share, of Veeco (“Veeco common stock”) issued and outstanding immediately prior to the effective time will be converted into the right to receive 0.3575

(“Exchange Ratio”) of a validly issued fully paid and nonassessable share of common stock, par value \$0.001 per share, of Axcelis (“Axcelis Common Stock”). In lieu of fractional shares, each Veeco common stockholder will be entitled to receive a cash payment representing the holder’s proportional interest. Following the close of the transaction, Axcelis common stockholders will own approximately 58.1% of the shares of Axcelis Common Stock on a fully diluted basis, and Veeco common stockholders will own 41.9%. Further, under the terms of the Merger Agreement each outstanding equity award will be treated as follows:

- Each Veeco restricted stock unit (“Veeco RSU”) that has vested in accordance with its terms immediately prior to the Effective Time will be canceled, and the holder of such vested Veeco RSUs will be entitled to receive (i) the merger consideration payable for each share of Veeco common stock and (ii) any accrued but unpaid dividend equivalents as of the Effective Time. Each unvested Veeco RSU outstanding immediately prior to the effective time will be assumed by Axcelis and converted into a restricted stock unit of Axcelis (“Axcelis RSU”). Each Axcelis RSU will be subject to the same terms and conditions that applied to the corresponding unvested Veeco RSU, except that the number of shares of Axcelis common stock subject to each award will be adjusted based on the Exchange Ratio, rounded down to the nearest whole share.
- Each Veeco performance stock unit (“Veeco PSU”) that has vested in accordance with its performance terms immediately prior to the Effective Time will be canceled, and the holder will be entitled to receive (i) the merger consideration payable for each share of Veeco common stock earned pursuant to the applicable performance metrics and (ii) any accrued but unpaid dividend equivalents as of the Effective Time. Each unvested Veeco PSU will be assumed by Axcelis and converted into an Axcelis RSU. The converted Axcelis RSU will retain the same terms and conditions applicable to the unvested Veeco PSU, except that the award will vest solely based on continued service. The number of Axcelis shares subject to each such award will be determined based on the performance achievement level through the most recent practicable date prior to the closing date of the transaction and the Exchange Ratio, rounded down to the nearest whole share.
- Each unvested Veeco restricted stock award (“Veeco RSA”) held by a non-employee member of the Veeco Board of Directors immediately prior to the Effective Time will become fully vested, canceled, and converted into the right to receive the merger consideration for each share of Veeco common stock. Each unvested Veeco RSA held by any other participant will be assumed by Axcelis and converted into an Axcelis restricted stock award (“Axcelis RSA”) subject to the same terms and conditions as the original award, adjusted to reflect the Exchange Ratio, with fractional shares rounded down to the nearest whole share.
- Prior to the Effective Time, all outstanding purchase rights under the Veeco Employee Stock Purchase Plan (“Veeco ESPP”) will be exercised in accordance with the plan’s terms. Funds accumulated through payroll withholdings will be applied to the purchase of whole shares of Veeco common stock, which will be entitled to receive the merger consideration on the same basis as other outstanding shares.

Accounting for the Merger

The Merger is being accounted for as a business combination using the acquisition method with Axcelis as the accounting acquirer in accordance with Accounting Standards Codification (“ASC”) Topic 805, Business Combinations. Under this method of accounting, the estimated GAAP purchase price will be allocated to Veeco’s assets acquired and liabilities assumed based upon their estimated fair values at the date of completion of the Merger. The process of valuing the net assets of Veeco immediately prior to the Merger, as well as evaluating accounting policies for conformity, is preliminary. Any differences between the estimated fair value of the consideration transferred and the estimated fair value of the assets acquired and liabilities assumed will be recorded as goodwill. The preliminary estimated merger consideration could significantly differ from the amounts presented due to movements in the Axcelis share price up to the closing date. Accordingly, the aggregate merger consideration allocation and related adjustments reflected in this unaudited pro forma condensed combined financial information are preliminary and subject to revision based on a final determination of fair value. Refer to Note 1 — Basis of Presentation for more information.

The following unaudited pro forma condensed combined financial information has been prepared in accordance with Article 11 of Regulation S-X. All financial data included in the unaudited pro forma condensed combined financial information is presented in USD thousands, unless noted otherwise, and has been prepared based on U.S. GAAP and Axcelis' accounting policies. The unaudited pro forma condensed combined financial information presented is for informational purposes only and is not necessarily indicative of the financial position or results of operations that would have been realized if the Merger had been completed on the dates set forth above, nor is it intended to be indicative of the future results or financial position of the combined company.

UNAUDITED PRO FORMA CONDENSED COMBINED BALANCE SHEET

As of September 30, 2025

(\$ in 000's)

	Axcelis Historical	Veeco Historical, After Reclassifications (Note 2)	Transaction Accounting Adjustments	(Note 4)	Pro Forma Combined
Assets					
Current Assets:					
Cash and cash equivalents	\$ 187,501	\$ 193,192	\$ (34,977)	(a)	\$ 345,716
Restricted cash	—	30	—		30
Short-term investments	262,059	176,130	—		438,189
Accounts receivable, net	147,636	116,471	—		264,107
Contract assets	—	31,067	—		31,067
Inventories, net	324,342	263,311	19,651	(b)	607,304
Prepaid income taxes	4,687	—	3,634	(c)	8,321
Prepaid expenses and other current assets	57,804	30,133	—		87,937
Total Current Assets	984,029	810,334	(11,692)		1,782,671
Property, plant & equipment, net	57,979	86,077	27,742	(e)	171,798
Operating lease assets	29,499	25,275	11,428	(g)	66,202
Intangible assets, net	—	6,418	781,063	(d)	787,481
Goodwill	—	214,964	312,903	(f)	527,867
Finance lease assets, net	14,440	—	—		14,440
Long-term restricted cash	7,626	—	—		7,626
Deferred income taxes	70,033	120,120	(173,758)	(j)	16,395
Long-term investments	143,214	—	—		143,214
Other assets	45,120	26,723	15,842	(h)	87,685
Total Assets	\$1,351,940	\$1,289,911	\$ 963,528		\$3,605,379
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current Liabilities:					
Accounts payable	\$ 52,466	\$ 43,580	\$ —		\$ 96,046
Accrued compensation	24,357	22,380	—		46,737
Warranty	9,258	10,034	—		19,292
Income taxes	—	332	273	(i)	605
Deferred Revenue	81,486	57,054	—		138,540
Current portion of finance lease obligation	1,505	—	—		1,505
Other current liabilities	29,917	17,806	—		47,723
Total Current Liabilities	198,989	151,186	273		350,448
Long-term debt	—	225,723	64,977	(k)	290,700
Long-term operating lease obligation	—	32,644	—		32,644
Long-term finance lease obligation	41,166	—	—		41,166

	Axcelis Historical	Veeco Historical, After Reclassifications (Note 2)	Transaction Accounting Adjustments	(Note 4)	Pro Forma Combined
Long-term deferred revenue	47,434	—	—	—	47,434
Deferred income taxes – liability	—	633	—	—	633
Other long-term liabilities	44,207	3,755	—	—	47,962
Total Liabilities	331,796	413,941	65,250	—	810,987
Commitments and contingencies	—	—	—	—	—
Stockholders' Equity:					
Common stock	31	602	(602)	(I)	31
Additional paid-in capital	532,951	1,297,743	508,121	(I)	2,338,815
Retained earnings	488,771	(424,179)	392,563	(I)	457,155
Accumulated other comprehensive loss	(1,609)	1,804	(1,804)	(I)	(1,609)
Total stockholders' equity	1,020,144	875,970	898,278	—	2,794,392
Total liabilities and stockholders' equity	\$1,351,940	\$1,289,911	\$ 963,528	—	\$3,605,379

See the accompanying notes to the Unaudited Pro Forma Condensed Combined Financial Information

UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS

For The Nine Months Ended September 30, 2025

(\$ in 000's, except share and per share data)

	Axcelis Historical	Veeco Historical, After Reclassifications (Note 2)	Transaction Accounting Adjustments	(Note 5)	Pro Forma Combined
Revenue:					
Product	\$567,444	\$485,195	\$ —		\$1,052,639
Services	33,274	14,082	—		47,356
Total Revenue	600,718	499,277	—		1,099,995
Cost of revenue:					
Product	302,041	284,094	31,521	(a)	617,656
Services	33,761	8,245	36	(b)	42,042
Total cost of revenue	335,802	292,339	31,557		659,698
Gross Profit	264,916	206,938	(31,557)		440,297
Operating expenses:					
Amortization of intangible assets	—	2,413	28,088	(c)	30,501
Research and development	78,832	89,062	713	(d)	168,607
Sales and marketing	45,965	26,716	234	(e)	72,915
General and administrative	56,976	51,543	488	(f)	109,007
Other operating (income) expense, net	—	132	—		132
Total operating expenses	181,773	169,866	29,523		381,162
Income from Operations	83,143	37,072	(61,080)		59,135
Other income (expense):					
Interest income	16,547	10,022	—		26,569
Interest expense	(4,028)	(6,960)	(9,052)	(h)	(20,040)
Other, net	2,569	(653)	—		1,916
Total other income (expense)	15,088	2,409	(9,052)		8,445
Income before income taxes	98,231	39,481	(70,132)		67,580
Income tax provision	12,290	5,205	(15,220)	(g)	2,275
Net income per share:	\$ 85,941	\$ 34,276	\$ (54,912)		\$ 65,305
Basic	<u><u>\$ 2.70</u></u>			(i)	<u><u>\$ 1.23</u></u>
Diluted	<u><u>\$ 2.70</u></u>			(i)	<u><u>\$ 1.21</u></u>
Pro forma shares used in computing net income per share:					
Basic weighted average shares of common stock	<u><u>31,796</u></u>			(i)	<u><u>53,303</u></u>
Diluted weighted average shares of common stock	<u><u>31,863</u></u>			(i)	<u><u>53,981</u></u>

See the accompanying notes to the Unaudited Pro Forma Condensed Combined Financial Information.

UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS

For the Year Ended December 31, 2024
(\$ in 000's, except share and per share data)

	Axcelis Historical	Veeco Historical, After Reclassifications (Note 2)	Transaction Accounting Adjustments	(Note 5)	Pro Forma Combined
Revenue:					
Product	\$ 976,881	\$698,294	\$ —		\$1,675,175
Services	40,984	19,007	—		59,991
Total Revenue	1,017,865	717,301	—		1,735,166
Cost of revenue:					
Product	524,451	399,248	59,540	(a)	983,239
Services	38,760	10,867	43	(b)	49,670
Total cost of revenue	563,211	410,115	59,583		1,032,909
Gross Profit	454,654	307,186	(59,583)		702,257
Operating expenses:					
Amortization of intangible assets	—	6,983	35,638	(c)	42,621
Research and development	105,497	124,507	1,001	(d)	231,005
Sales and marketing	68,046	37,539	377	(e)	105,962
General and administrative	70,317	65,305	35,694	(f)	171,316
Impairment	—	28,131	—		28,131
Other operating (income) expense, net	—	(22,260)	—		(22,260)
Total operating expenses	243,860	240,205	72,710		556,775
Income from Operations	210,794	66,981	(132,293)		145,482
Other income (expense):					
Interest income	24,403	12,898	—		37,301
Interest expense	(5,462)	(11,045)	(11,381)	(h)	(27,888)
Other, net	539	—	—		539
Total other income (expense)	19,480	1,853	(11,381)		9,952
Income before income taxes	230,274	68,834	(143,674)		155,434
Income tax provision	29,282	(4,880)	(31,737)	(g)	(7,335)
Pro forma net income per share:	\$ 200,992	\$ 73,714	\$ (111,937)		\$ 162,769
Basic	<u>\$ 6.17</u>			(i)	<u>\$ 3.01</u>
Diluted	<u>\$ 6.15</u>			(i)	<u>\$ 2.97</u>
Pro forma shares used in computing net income per share:					
Basic weighted average shares of common stock	<u>32,552</u>			(i)	<u>54,059</u>
Diluted weighted average shares of common stock	<u>32,704</u>			(i)	<u>54,727</u>

See the accompanying notes to the Unaudited Pro Forma Condensed Combined Financial Information.

NOTES TO THE UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

Note 1 — Basis of Presentation

The unaudited pro forma condensed combined financial information and related notes are prepared in accordance with Article 11 of Regulation S-X.

Axcelis' and Veeco's historical financial statements were prepared in accordance with U.S. GAAP and presented in U.S. dollars. As discussed in Note 2, certain reclassifications were made to align Axcelis' and Veeco's financial statement presentation. Axcelis is currently in the process of evaluating Veeco's accounting policies, which will be finalized upon completion of the Merger, or as more information becomes available. As a result of that review, additional differences could be identified between the accounting policies of the two companies. With the information currently available, Axcelis has determined that no significant adjustments are necessary to conform Veeco's financial statements to the accounting policies used by the Axcelis.

The unaudited pro forma condensed combined financial information was prepared using the acquisition method of accounting in accordance with ASC 805, with Axcelis as the accounting acquirer, using the fair value concepts defined in ASC Topic 820, Fair Value Measurement, and based on the historical financial statements of Axcelis and Veeco. Under ASC 805, all assets acquired, and liabilities assumed in a business combination are recognized and measured at their assumed acquisition date fair value, while transaction costs associated with the business combination are expensed as incurred. The excess of merger consideration over the estimated fair value of assets acquired and liabilities assumed, if any, is allocated to goodwill. The preliminary estimated merger consideration is based upon the estimated shares of Axcelis to be issued multiplied by Axcelis' current share price. The final merger consideration will be based on the actual shares of Axcelis issued multiplied by Axcelis' share price as of the date of close.

The allocation of the preliminary estimated merger consideration depends upon certain estimates and assumptions, all of which are preliminary. The allocation of the preliminary estimated merger consideration has been made for the purpose of developing the unaudited pro forma condensed combined financial information. The final determination of fair values of assets acquired and liabilities assumed relating to the Merger could differ materially from the preliminary allocation of aggregate merger consideration. The final valuation will be based on the actual net assets of Veeco existing at the acquisition date and could differ materially from preliminary values.

The unaudited pro forma condensed combined financial information does not reflect any anticipated synergies or dis-synergies, operating efficiencies or cost savings that may result from the Merger or any acquisition and integration costs that may be incurred. The pro forma adjustments represent management's best estimates and are based upon currently available information and certain assumptions that the Company believes are reasonable under the circumstances. Axcelis is not aware of any material transactions between Axcelis and Veeco during the periods presented. Accordingly, adjustments to eliminate transactions between Axcelis and Veeco have not been reflected in the unaudited pro forma condensed combined financial information.

Note 2 — Reclassification adjustments

During the preparation of this unaudited pro forma condensed combined financial information, management performed a preliminary analysis of Veeco's financial information to identify differences in accounting policies as compared to those of Axcelis and differences in financial statement presentation as compared to the presentation of the Company. With the information currently available, Axcelis has determined that no significant adjustments are necessary to conform Veeco's financial statements to the accounting policies used by the Company. However, certain reclassification adjustments have been made to conform Veeco's historical financial statement presentation to the Company's financial statement presentation. Following the Merger, the combined company will finalize the review of accounting policies and reclassifications, which could be materially different from the amounts set forth in the unaudited pro forma condensed combined financial information presented herein.

A) Refer to the table below for a summary of reclassification adjustments made to present Veeco's balance sheet as of September 30, 2025 to conform with that of Axcelis':

(in 000's)	Axcelis Historical Consolidated Balance Sheet Line Items	Veeco Historical Consolidated Balance Sheet Line Items	Veeco Historical Consolidated Balances As of September 30, 2025	Reclassification	Veeco Historical, After Reclassifications As of September 30, 2025
	Cash and cash equivalents	Cash and cash equivalents	\$193,192	\$	\$193,192
		Restricted cash	30		30
	Short-term investments	Short-term investments	176,130		176,130
	Accounts receivable, net	Accounts receivable, net	116,471		116,471
		Contract Assets	31,067		31,067
	Inventories, net	Inventory	263,311		263,311
	Prepaid income taxes				—
	Prepaid expenses and other assets	Prepaid and other current assets	30,133		30,133
	Property and equipment, net	Property, plant & equipment, net	109,120	(23,043)	(a) 86,077
	Operating lease assets	Operating lease right-of-use assets	25,275		25,275
		Intangible assets, net	6,418		6,418
		Goodwill	214,964		214,964
	Deferred income taxes	Deferred income taxes – asset	120,120		120,120
	Finance lease assets, net				—
	Long-term restricted cash				—
	Long-term investments				—
	Other assets	Other assets	3,680	23,043	(a) 26,723
	Accounts payable	Accounts payable	43,580		43,580
	Accrued compensation	Accrued expenses and other current liabilities	50,220	(27,840)	(b)(c) 22,380
	Warranty			10,034	(b) 10,034
	Deferred revenue	Contract liabilities	57,054		57,054
	Income taxes	Income taxes payable	332		332
		Deferred tax liability – current	—		—
	Current portion of finance lease obligation				—
		Current portion of long-term debt	—		—
	Other current liabilities		—	17,806	(c) 17,806
	Deferred income taxes – liability	Deferred income taxes – liability	633		633
		Long-term debt	225,723		225,723
		Long-term operating lease liabilities	32,644		32,644
	Long-term finance lease obligation		—		—
	Long-term deferred revenue		—		—
	Other long-term liabilities	Other liabilities	3,755		3,755

(a) Reclassification of \$23.0 million of Property, plant & equipment, net to Other assets related to assets manufactured for internal use.

- (b) Reclassification of \$10.0 million of Accrued expenses and other current liabilities to Warranty.
- (c) Reclassification of \$17.8 million of Accrued expenses and other current liabilities to Other current liabilities.

- B) Refer to the table below for a summary of adjustments made to present Veeco's Statement of Operations for the nine months ended September 30, 2025 to conform with that of the Company's:

(in 000's)	Axcelis Historical Consolidated Statement of Operations Line Items	Veeco Historical Consolidated Statement of Operations Line Items	Veeco Nine Months Ended September 30, 2025	Reclassification	Veeco Reclassified Nine Months Ended September 30, 2025
Revenue:		Net Sales	\$499,277	\$(499,277)	(a)(b) \$ —
Product				485,195	(a) 485,195
Services				14,082	(b) 14,082
Cost of revenue:	Cost of sales		294,380	(294,380)	(c)(d)(e) —
Product				284,094	(c) 284,094
Services				8,245	(d) 8,245
	Amortization of Intangible Assets		2,413		2,413
Research and development	Research and development		89,062		89,062
Sales and marketing				26,716	(e)(f) 26,716
General and administrative	Selling, general, and administrative		76,218	(24,675)	(f) 51,543
	Asset impairment		—		—
	Other operating expense (income), net		132		132
Other income (expense):					
Interest income	Interest income		10,022		10,022
Interest expense	Interest expense		(6,960)		(6,960)
Other, net	Other income (expense), net		(653)		(653)
Income tax provision	Income tax expense (benefit)		5,205		5,205

- (a) Reclassification of \$485.2 million of Net sales to Product revenue.
- (b) Reclassification of \$14.1 million of Net sales to Services revenue.
- (c) Reclassification of \$284.1 million of Cost of sales to Product cost of revenue.
- (d) Reclassification of \$8.2 million of Cost of sales to Services cost of revenue.
- (e) Reclassification of \$2.0 million of Cost of sales to Sales and marketing
- (f) Reclassification of \$24.7 million of Selling, general and administrative to Sales and marketing

- C) Refer to the table below for a summary of adjustments made to present Veeco's Statement of Operations for the year ended December 31, 2024 to conform with that of the Company's:

(in 000's)	Axcelis Historical Consolidated Statement of Operations Line Items	Veeco Historical Consolidated Statement of Operations Line Items	Veeco Instruments Inc. Year Ended December 31, 2024	Reclassification	Veeco Reclassified Year Ended December 31, 2024
Revenue:		Net Sales	\$717,301	\$(717,301)	(a)(b) \$ —
Product				698,294	(a) 698,294
Services				19,007	(b) 19,007
Cost of revenue:	Cost of sales		413,296	(413,296)	(c)(d)(e) —
Product				399,248	(c) 399,248
Services				10,867	(d) 10,867
		Amortization of Intangible Assets	6,983		6,983
Research and development		Research and development	124,507		124,507
Sales and marketing				37,539	(e)(f) 37,539
General and administrative		Selling, general, and administrative	99,663	(34,358)	(f) 65,305
		Asset impairment	28,131		28,131
		Other operating expense (income), net	(22,260)		(22,260)
Other income (expense):					
Interest income		Interest income	12,898		12,898
Interest expense		Interest expense	(11,045)		(11,045)
Other, net		Other income (expense), net	—		—
Income tax provision		Income tax expense (benefit)	(4,880)		(4,880)

- (a) Reclassification of \$698.3 million of Net sales to Product revenue.
- (b) Reclassification of \$19.0 million of Net sales to Services revenue.
- (c) Reclassification of \$399.2 million of Cost of sales to Product cost of revenue.
- (d) Reclassification of \$10.9 million of Cost of sales to Services cost of revenue.
- (e) Reclassification of \$3.2 million of Cost of sales to Sales and marketing
- (f) Reclassification of \$34.4 million of Selling, general and administrative to Sales and marketing

Note 3 — Preliminary purchase price allocation

Merger Consideration

The following table summarizes the preliminary estimated merger consideration for Veeco (in thousands):

(in 000's, except share and per share data)	Amount
Estimated shares of Veeco common stock to be exchanged for Axcelis common stock	60,159,113
Exchange Ratio	0.3575
Shares of Axcelis common stock to be issued	21,506,882
Axcelis closing stock price	\$ 82.43
Total equity consideration⁽ⁱ⁾	\$ 1,772,812
Estimated converted Veeco equity awards attributable to pre-combination ⁽ⁱⁱ⁾	33,052
Preliminary estimated aggregate merger consideration	\$ 1,805,864

- (i) Value of estimated shares of Axcelis common stock issued is based on 60,159,113 shares of outstanding common stock of Veeco, each of which is being exchanged for 0.3575 of a share of Axcelis common stock based on a share price of \$82.43 on December 2, 2025.

(ii) As discussed in the section entitled “**The Merger**” beginning on page 63 of this joint proxy statement/prospectus, certain equity awards of Veeco will be replaced by Axcelis’ equity awards with similar terms. Amount represents the estimated consideration for replacement of Veeco’s outstanding equity awards, including partial acceleration of certain equity awards based on their pre-existing terms. All other outstanding equity awards of Veeco for continuing employees will be replaced by Axcelis’ equity awards with similar terms. A portion of the fair value of Axcelis’ equity awards issued represents consideration transferred of \$33.1 million, while the remaining portion represents compensation expense based on the vesting terms of the converted awards of \$51.8 million. No adjustment was made for cash in lieu of fractional shares as this amount was determined to be immaterial.

The preliminary estimated aggregate merger consideration could significantly differ from the amounts presented due to movements in the Axcelis’ share price up to the closing date. A sensitivity analysis related to the fluctuation in Axcelis’ share price was performed to assess the impact a hypothetical change of 10% on the closing price of Axcelis common stock on December 2, 2025 would have on the estimated preliminary aggregate merger consideration as of the closing date:

(in 000's)	Stock Price	Total Estimated Consideration
10% increase	\$90.67	\$1,986,385
10% decrease	74.19	1,625,344

Preliminary Merger Consideration Allocation

The assumed accounting for the Merger, including the preliminary estimate merger consideration, is based on provisional amounts, and the associated purchase accounting is not final. The preliminary allocation of the purchase price to the acquired assets and assumed liabilities was based upon the preliminary estimate of fair values. For the preliminary estimate of fair values of assets acquired and liabilities assumed of Veeco, Axcelis used publicly available benchmarking information as well as a variety of other assumptions, including market participant assumptions. Axcelis is expected to use widely accepted income-based, market-based, and cost-based valuation approaches upon finalization of purchase accounting for the Merger. Actual results may differ materially from the assumptions within the accompanying unaudited pro forma condensed combined financial information. The unaudited pro forma adjustments are based upon available information and certain assumptions that the Company believes are reasonable under the circumstances. The purchase price adjustments relating to the Axcelis and Veeco combined financial information are preliminary and subject to change, as additional information becomes available and as additional analyses are performed.

The following table summarizes the preliminary aggregate merger consideration allocation, as if the Merger had been completed on September 30, 2025:

(in 000's)	Amount
Assets:	
Cash and cash equivalents	\$ 193,192
Restricted cash	30
Short-term investments	176,130
Accounts receivable	116,471
Contract assets	31,067
Inventories ⁽ⁱ⁾	282,962
Prepaid income taxes	—
Prepaid expenses and other current assets	30,133
Property, plant & equipment ⁽ⁱⁱⁱ⁾	113,819
Operating lease assets ^(v)	36,703
Intangible assets, net ⁽ⁱⁱ⁾	787,481

(in 000's)	Amount
Goodwill	527,867
Deferred income taxes ^(iv)	(53,638)
Other assets	42,565
Liabilities	
Accounts payable	(43,580)
Accrued compensation	(22,380)
Warranty	(10,034)
Income taxes	(332)
Deferred revenue	(57,054)
Other current liabilities	(17,806)
Long-term debt ^(vi)	(290,700)
Long-term operating lease obligation	(32,644)
Deferred income taxes – liability ^(iv)	(633)
Other long-term liabilities	(3,755)
Estimated preliminary aggregate acquisition consideration	\$1,805,864

(i) The unaudited pro forma condensed combined balance sheet has been adjusted to record Veeco's inventories at a preliminary fair value of approximately \$283 million, an increase of \$20 million from the carrying value. The unaudited pro forma condensed combined Statement of Operations for the year ended December 31, 2024 has been adjusted to recognize additional cost of goods sold related to the increased basis. The additional costs are not anticipated to affect the condensed combined Statement of Operations beyond twelve months after the acquisition date.

(ii) Preliminary identifiable intangible assets in the unaudited pro forma condensed combined financial information consists of the following:

(in 000's)	Preliminary Fair Value	Estimated Useful Life
Preliminary fair value of intangible assets acquired:		
Trade names and trademarks	\$ 53,449	8 – 11 Years
Customer relationships	249,428	10 – 12 Years
Developed technology	463,224	10 – 12 Years
Backlog	21,380	2 Years
Intangible assets acquired	\$787,481	

A 10% increase in the valuation of intangible assets would cause a corresponding increase in the amortization expense of approximately \$6 million for the nine months ended September 30, 2025 and \$8 million for the year ended December 31, 2024. Pro forma amortization is preliminary and based on the use of straight-line amortization. The amount of amortization following the Merger may differ significantly between periods based upon the final value assigned and amortization methodology used for each identifiable intangible asset.

The fair value assigned to intangible assets has been estimated based on third-party preliminary valuation studies utilizing a benchmarking analysis to similar transactions in the industry supported by an assessment of management's forecast used to price the deal.

(iii) The unaudited pro forma condensed combined balance sheet has been adjusted to record Veeco's property, plant and equipment consisting of land, buildings and improvements, machinery and equipment, and leasehold improvements and assets manufactured for internal use, which were reclassified to other assets above, at a preliminary fair value of approximately \$114 million and \$40 million, an increase of \$28 million and \$17 million from the carrying value, respectively. The unaudited pro forma condensed combined Statement of Operations have been adjusted to recognize

additional depreciation expense related to the increased basis under cost of goods sold. The additional depreciation expense is computed with the assumption that the various categories of assets will be depreciated over a useful life on a straight-line basis.

- (iv) Deferred tax assets and liabilities were derived based on incremental differences in the book and tax basis created from the preliminary purchase allocation. In addition, as a result of the Merger, Axcelis expects to realize the benefit of certain deferred tax assets where Veeco previously recorded a valuation allowance, therefore the valuation allowance will be reduced in purchase accounting.
- (v) The unaudited pro forma condensed combined balance sheet has been adjusted to remeasure Veeco's right-of-use assets to approximately \$37 million, an increase of \$11 million from the carrying value. The unaudited pro forma condensed combined Statement of Operations has been adjusted to recognize the additional amortization costs related to the increased basis.
- (vi) The unaudited pro forma condensed combined balance sheet has been adjusted to record Veeco's long-term debt at a preliminary fair value of approximately \$291 million, an increase of \$65 million from the carrying value. The unaudited pro forma condensed combined Statement of Operations has been adjusted to recognize the additional amortization costs related to the increased basis.

Note 4 — Adjustments to the Unaudited Pro Forma Condensed Combined Balance Sheet

Adjustments included in the Transaction Accounting Adjustments column in the accompanying unaudited pro forma condensed combined balance sheet as of September 30, 2025 are as follows:

- (a) Reflects adjustment to cash and cash equivalents:

(in 000's)	<u>Amount</u>
<i>Pro forma transaction accounting adjustments:</i>	
Estimated transaction costs ⁽ⁱ⁾	\$(34,977)
Net pro forma transaction accounting adjustment to cash and cash equivalents	<u>\$(34,977)</u>

- (i) Represents additional transaction costs to be incurred by Axcelis subsequent to September 30, 2025. These costs will not affect Axcelis' combined Statement of Operations beyond twelve months after the acquisition date. These costs consist of legal advisory, financial advisory, accounting and consulting costs of Axcelis related to the Merger.
- (b) Reflects the preliminary purchase accounting adjustment for inventories based on the acquisition method of accounting.

(in 000's)	<u>Amount</u>
<i>Pro forma transaction accounting adjustments:</i>	
Elimination of Veeco's historical net book value of inventories	\$(263,311)
Preliminary fair value of acquired inventories	282,962
Net pro forma transaction accounting adjustment to inventories	<u>\$ 19,651</u>

Represents the adjustment of acquired inventories to its preliminary estimated fair value. After the closing, the step up in inventories to fair value will increase cost of goods sold as the inventories are sold, which for purposes of these pro forma financial statements is assumed to occur within the first year after the Merger.

- (c) This pro forma adjustment reflects \$35.0 million of Axcelis transaction costs expected to be incurred after September 30, 2025, as cash, the tax effect of \$3.6 million as an increase to prepaid income taxes.
- (d) Reflects the preliminary purchase accounting adjustment for estimated intangibles based on the acquisition method of accounting. Refer to Note 3 above for additional information on the acquired intangible assets expected to be recognized.

(in 000's)	<u>Amount</u>
<i>Pro forma transaction accounting adjustments:</i>	
Elimination of Veeco's historical net book value of intangible assets	\$ (6,418)
Preliminary fair value of acquired intangibles	787,481
Net pro forma transaction accounting adjustment to intangible assets, net	<u>\$781,063</u>

(e) Reflects the preliminary purchase accounting adjustment for property, plant and equipment based on the acquisition method of accounting.

(in 000's)	<u>Amount</u>
<i>Pro forma transaction accounting adjustments:</i>	
Elimination of Veeco's historical net book value of property, plant & equipment	\$ (86,077)
Preliminary fair value of acquired property, plant & equipment	113,819
Net pro forma transaction accounting adjustments to property, plant & equipment	<u>\$ 27,742</u>

(f) Reflects the preliminary purchase accounting adjustment to goodwill for the excess of the estimated aggregate merger consideration over the preliminary fair value of the underlying assets acquired and liabilities assumed.

(in 000's)	<u>Amount</u>
<i>Pro forma transaction accounting adjustments:</i>	
Elimination of Veeco historical goodwill	\$(214,964)
Goodwill per purchase price allocation (Note 3)	527,867
Net pro forma transaction accounting adjustment to goodwill	<u>\$ 312,903</u>

(g) Reflects the preliminary purchase accounting adjustment to remeasure the operating right-of-use asset.

(in 000's)	<u>Amount</u>
<i>Pro forma transaction accounting adjustments:</i>	
Veeco historical operating lease right-of-use assets	\$(25,275)
Veeco historical operating lease liabilities	36,703
Net pro forma transaction accounting adjustment to operating lease right-of-use assets	<u>\$ 11,428</u>

(h) Reflects the preliminary purchase accounting adjustment for other assets based on the acquisition method of accounting.

(in 000's)	<u>Amount</u>
<i>Pro forma transaction accounting adjustments:</i>	
Elimination of Veeco's historical net book value of assets manufactured for internal use	\$(23,043)
Preliminary fair value of assets manufactured for internal use	40,105
Write-off of unamortized costs related to Veeco's revolving credit facility	(1,220)
Net pro forma transaction accounting adjustment to other assets	<u>\$ 15,842</u>

(i) This pro forma adjustment reflects \$8.8 million of Axcelis transaction costs incurred prior September 30, 2025, the tax effect of \$0.3 million as an increase to Income taxes

(j) Represents the adjustment to deferred income taxes of \$(173,758) associated with the incremental differences in the book and tax basis created from the preliminary purchase allocation, primarily resulting from the preliminary fair value adjustments of identified assets. These adjustments were

based on the blended statutory tax rate with the respective estimated purchase price allocation. The effective tax rate of the combined company could be significantly different (either higher or lower) depending on post-merger activities, including cash needs, the geographical mix of income and changes in tax law. Because the tax rates used for the pro forma financial information are estimated, the blended rate of 22.09% will likely vary from the actual effective rate in periods subsequent to completion of the Merger.

(k) Reflects the preliminary purchase accounting adjustment for long-term debt based on the acquisition method of accounting.

(in 000's)	Amount
<i>Pro forma transaction accounting adjustments:</i>	
Elimination of Veeco's historical long-term debt	\$(225,723)
Preliminary fair value of acquired long-term debt	290,700
Net pro forma transaction accounting adjustments to long-term debt	<u><u>\$ 64,977</u></u>

(l) Reflects the adjustments to Stockholders' equity:

(in 000's)	Preferred Stock	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated other comprehensive loss
<i>Pro forma transaction accounting adjustments:</i>					
Elimination of Veeco's historical equity	\$ —	\$(602)	\$(1,297,743)	\$424,179	\$(1,804)
Estimated shares of Axcelis common stock issued to Veeco stockholders	—	—	1,772,812	—	—
Estimated converted Veeco equity awards attributable to pre-combination services	—	—	33,052	—	—
Estimated transaction costs ⁽ⁱ⁾	—	—	—	(34,977)	—
Estimated tax impact on estimated transaction costs	—	—	—	3,361	—
Net pro forma transaction accounting adjustments to equity	<u><u>\$ —</u></u>	<u><u>\$(602)</u></u>	<u><u>\$ 508,121</u></u>	<u><u>\$392,563</u></u>	<u><u>\$(1,804)</u></u>

(i) These costs consist of financial advisory, legal advisory, accounting and consulting costs.

Note 5 — Pro Forma Adjustments to the Unaudited Condensed Combined Statement of Operations

Adjustments included in the Veeco Transaction Accounting Adjustments column in the accompanying unaudited pro forma condensed combined Statement of Operations for the nine months ended September 30, 2025 and fiscal year ended December 31, 2024 are as follows:

(a) Reflects the adjustments to product cost of revenue, including the estimated fair value of inventories recognized through product costs during the first year after the Merger, the incremental amortization expense from the fair value adjustment to the developed technology intangibles, the incremental depreciation expense from the fair value adjustment to property, plant and equipment, and the incremental operating lease expense from the remeasurement of the operating lease right-of-use asset.

(in 000's)	For the nine months Ended September 30, 2025	For the Year Ended December 31, 2024
<i>Pro forma transaction accounting adjustments:</i>		
Inventory step-up flowing through cost of goods sold ⁽ⁱ⁾	\$ —	\$19,651
Step-up of intangible asset amortization	30,249	38,379
Property, plant and equipment depreciation step-up	438	399
Incremental operating lease expense	834	1,111
Net pro forma transaction accounting adjustment to product costs . . .	<u><u>\$31,521</u></u>	<u><u>\$59,540</u></u>

(i) These costs are non-recurring in nature and not anticipated to affect the condensed combined Statement of Operations beyond twelve months after the acquisition date.

(b) Reflects the adjustments to services cost of revenue, including the incremental depreciation expense from the fair value adjustment to property, plant and equipment and the incremental operating lease expense from the remeasurement of the operating lease right-of-use asset.

(in 000's)	For the nine months Ended September 30, 2025	For the Year Ended December 31, 2024
<i>Pro forma transaction accounting adjustments:</i>		
Property, plant and equipment depreciation step-up	13	11
Incremental operating lease expense	23	32
Net pro forma transaction accounting adjustment to service costs . . .	<u><u>\$36</u></u>	<u><u>\$43</u></u>

(c) Reflects the adjustments to Amortization of intangible assets regarding the amortization of the estimated fair value of the customer relationships, backlog and trade names and trademarks intangibles.

(in 000's)	For the nine months Ended September 30, 2025	For the Year Ended December 31, 2024
<i>Pro forma transaction accounting adjustments:</i>		
Step-up of intangible asset amortization	28,088	35,638
Net pro forma transaction accounting adjustment to amortization . . .	<u><u>\$28,088</u></u>	<u><u>\$35,638</u></u>

(d) Reflects the adjustments to research and development expenses (“R&D”) including the change in depreciation expense.

(in 000's)	For the nine months Ended September 30, 2025	For the Year Ended December 31, 2024
<i>Pro forma transaction accounting adjustments</i>		
Property plant and equipment depreciation expense step-up flowing through R&D	\$713	\$1,001
Net pro forma transaction accounting adjustment to R&D	<u><u>\$713</u></u>	<u><u>\$1,001</u></u>

(e) Reflects the adjustments to selling and marketing the change in depreciation expense.

(in 000's)	For the nine months Ended September 30, 2025	For the Year Ended December 31, 2024
<i>Pro forma transaction accounting adjustments</i>		
Property plant and equipment depreciation expense step-up flowing through selling and marketing	\$234	\$377
Net pro forma transaction accounting adjustment to selling and marketing	\$234	\$377

(f) Reflects the adjustments to general and administrative expenses (“G&A”) for the step up in depreciation expense and estimated transaction costs.

(in 000's)	For the nine months Ended September 30, 2025	For the Year Ended December 31, 2024
<i>Pro forma transaction accounting adjustments</i>		
Property plant and equipment depreciation expense step-up flowing through G&A	\$488	\$ 717
Estimated transaction costs	\$ —	\$34,977
Net pro forma transaction accounting adjustment to G&A	\$488	\$35,694

(g) To record the income tax impact of the pro forma adjustments of \$(31,737) and \$(15,220) utilizing a blended statutory income tax rate in effect of 22.09% for the year ended December 31, 2024 and for the nine months ended September 30, 2025, respectively. The effective tax rate of the combined company could be significantly different (either higher or lower) depending on post-merger activities, including cash needs, the geographical mix of income and changes in tax law. Because the tax rates used for the pro forma financial information are estimated, the blended rate will likely vary from the actual effective rate in periods subsequent to completion of the Merger.

(h) Reflects the adjustment to Interest Expense regarding the incremental expense related to the estimated fair value of long-term debt. The adjustment to interest expense represents an estimate of interest expense calculated using the effective interest rate method on the fair value of long-term debt. The adjustment to interest expense is calculated using a fixed interest rate of 2.875%.

(in 000's)	For the nine months Ended September 30, 2025	For the Year Ended December 31, 2024
<i>Pro forma transaction accounting adjustments:</i>		
Incremental interest expense related to the fair value of long-term debt	\$9,052	\$11,381
Net pro forma transaction accounting adjustments to interest expense	9,052	11,381

(i) The pro forma basic and diluted weighted average shares outstanding are a combination of historic weighted average shares of Axcelis common stock and issuances of shares in connection with the Merger. In connection with the Merger, Axcelis agreed to convert certain equity awards held by Veeco employees into Axcelis equity awards. The pro forma basic and diluted weighted average shares outstanding are as follows:

	For the nine months Ended September 30, 2025	For the Year Ended December 31, 2024
Numerator:		
Pro forma net income	<u><u>\$65,305,000</u></u>	<u><u>\$162,769,000</u></u>
Denominator:		
Issuance of shares to Veeco	\$21,506,882	\$ 21,506,882
Historical weighted average Axcelis common stock shares outstanding	<u>31,795,802</u>	<u>32,552,000</u>
Pro forma weighted average Axcelis shares outstanding – basic	<u><u>\$53,302,684</u></u>	<u><u>\$ 54,058,882</u></u>
Dilutive effect of Veeco equity based awards exchanged for Axcelis equity-based awards	\$ 197,340	\$ 197,340
Dilutive effect of Veeco convertible notes	318,533	318,533
Dilutive effect of Axcelis RSUs	<u>162,356</u>	<u>152,000</u>
Pro forma weighted average shares outstanding – dilutive⁽ⁱ⁾	<u><u>\$53,980,912</u></u>	<u><u>\$ 54,726,755</u></u>
Earnings per share – basic	\$ 1.23	\$ 3.01
Earnings per share – diluted	\$ 1.21	\$ 2.97

(i) 268,357 and 122,294 historical dilutive common stock equivalents of Axcelis and 251,680 shares of Axcelis issuable to Veeco stockholders were excluded from the computation of pro forma diluted weighted average shares for the nine months ended September 30, 2025 and for the year ended December 31, 2024, respectively, as their effect would be anti-dilutive.

INTERESTS OF AXCELIS' DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER

In considering the recommendations of the Axcelis board of directors to vote for the Axcelis merger proposal and the Axcelis adjournment proposal, Axcelis stockholders should be aware that Axcelis directors and executive officers may have interests in the merger, including financial interests that may be different from, or in addition to, the interests of other Axcelis stockholders generally. The Axcelis board of directors was aware of and considered such interests, among other matters, in making its recommendation that Axcelis stockholders vote to approve the Axcelis share issuance proposal, the Axcelis adjournment proposal and the transactions contemplated by the merger agreement. See “**The Merger — Background of the Merger**” and “**The Merger — Recommendation of the Axcelis Board of Directors; Axcelis’ Reasons for the Merger**” beginning on pages 63 and 83, respectively, of this joint proxy statement/prospectus. These interests include:

- certain members of the Axcelis board of directors and executive officers will continue to serve as directors or executive officers, as applicable, of the combined company following the merger; and
- Axcelis directors and executive officers are entitled to continued indemnification and insurance coverage under their existing agreements with Axcelis.

INTERESTS OF VEECO'S DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER

In considering the recommendations of the Veeco board of directors to vote for the Veeco merger agreement proposal, the Veeco compensation proposal, and the Veeco adjournment proposal, Veeco stockholders should be aware that Veeco directors and executive officers may have interests in the merger, including financial interests, which may be different from, or in addition to, the interests of Veeco stockholders generally. These interests are described in more detail below and, with respect to Veeco named executive officers, are quantified under “**Quantification of Payments and Benefits to Veeco Named Executive Officers**,” of this joint proxy statement/prospectus. The Veeco board of directors was aware of and considered these interests, among other matters, in reaching its determination that the merger is fair to and in the best interests of Veeco and the Veeco stockholders, approving and declaring advisable the merger agreement and the transactions contemplated thereby, including the merger, and recommending that Veeco stockholders approve the Veeco merger agreement proposal, the Veeco compensation proposal, and the Veeco adjournment proposal. See “**The Merger — Background of the Merger**” and “**The Merger — Recommendation of the Veeco Board of Directors; Veeco’s Reasons for the Merger**.”

Executive Officers

For purposes of this disclosure, Veeco’s executive officers (all of whom are Veeco’s “named executive officers”) are:

- William J. Miller, Ph.D., Chief Executive Officer;
- John P. Kiernan, Senior Vice President, Chief Financial Officer;
- Adrian Devasahayam, Ph.D., Senior Vice President, Product Line Management;
- Peter Porshnev, Ph.D., Senior Vice President, Unified Engineering; and
- Susan Wilkerson, Senior Vice President, Global Sales & Services.

Veeco’s non-employee directors since the beginning of Veeco’s prior fiscal year are Kathleen A. Bayless, Sujeev Chand, Ph.D., Richard A. D’Amore, Gordon Hunter, Keith D. Jackson, Lena Nicolaides, Ph.D., Mary Jane Raymond and Thomas St. Dennis.

Service as Directors on the Combined Company Board of Directors

As of the effective time, the board of directors of the combined company will consist of eleven directors, including:

- Thomas St. Dennis, who will serve as the chairman of the board of directors of the combined company;
- Six directors designated by Axcelis, who are referred to as the Axcelis designees, including:
 - Russell J. Low, Ph.D., the Axcelis CEO, and who will be the chief executive officer of the combined company;
 - Jorge Titinger, the chairperson of the Axcelis board of directors; and
 - four additional directors to be designated by Axcelis prior to completion of the merger.
- Four directors designated by Veeco, who are referred to as the Veeco designees, including:
 - William J. Miller, Ph.D., the Veeco CEO;
 - Keith D. Jackson;
 - Lena Nicolaides, Ph.D.; and
 - Sujeev Chand, Ph.D.

Each of the Axcelis designees, other than the Axcelis CEO, and each of the Veeco designees, other than the Veeco CEO, will meet the independence standards of Nasdaq with respect to the combined company as of the effective time. Except for Drs. Low and Miller and Messrs. St. Dennis and Titinger, none of the

designees for service on the board of directors of the combined company were determined prior to the effective time of the merger agreement.

Veeco Change in Control

The transaction will be treated as a change in control for purposes of Veeco's compensation plans and arrangements, including its equity awards and severance agreements described below.

Certain Assumptions

Except as otherwise specifically noted, for purposes of quantifying the potential payments and benefits described in this section, the following assumptions were used:

- the effective time is December 26, 2025, which is the assumed date of the closing of the merger solely for purposes of the disclosure in this section;
- the relevant price per share of Veeco common stock is \$31.65, which is the average closing market price per share of Veeco common stock over the five business day period following the first public announcement of the merger on October 1, 2025;
- each executive officer of Veeco experiences a qualifying termination of employment (i.e., a termination of employment by Veeco and/or Axcelis without "cause" or, to the extent applicable, by the executive officer for "good reason," as such terms are defined in the relevant plans and agreements) immediately following the assumed effective time of December 26, 2025;
- at the effective time, the performance metrics applicable to Veeco PSUs will be deemed to have been achieved at the maximum level of performance when such PSUs convert to time-vesting Axcelis RSUs;
- the potential payments and benefits described in this section are not subject to a "cutback" to avoid the "golden parachute" excise tax that may be imposed under Section 4999 of the Code;
- executive officers' salary and total eligible target cash bonus levels are as in effect as of the date of this proxy statement/prospectus; and
- amounts included herein do not attempt to forecast any additional equity grants or other awards or forfeitures that may occur prior to the closing date following the assumed effective time of December 26, 2025.

As the amounts indicated below are estimates based on multiple assumptions that may or may not actually occur or be accurate as of the date referenced, the actual amounts, if any, that may be paid or become payable may materially differ from the amounts set forth below.

Treatment of Veeco Equity Awards

Veeco RSUs

Each Vested Veeco RSU will be canceled, and the holder thereof will be entitled to receive, subject to any applicable tax withholding (i) the merger consideration in respect of each share of Veeco common stock subject to such Vested Veeco RSU immediately prior to the effective time and (ii) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Vested Veeco RSU.

Each Unvested Veeco RSU will be assumed by Axcelis and converted into an Axcelis RSU with the same terms and conditions as applied to the Unvested Veeco RSU immediately prior to the effective time, except that such Unvested Veeco RSUs will cover the number of whole shares of Axcelis common stock (rounded down to the nearest whole share) equal to the product of (i) the number of shares of Veeco common stock subject to such Unvested Veeco RSU and (ii) the exchange ratio. All dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Unvested Veeco RSU will also be assumed and become an obligation of Axcelis in connection with the applicable Axcelis RSU.

Veeco PSUs

Each Vested Veeco PSU will be canceled, and the holder thereof will be entitled to receive, subject to any applicable tax withholding (i) the merger consideration in respect of each share of Veeco common stock subject to such Vested Veeco PSU immediately prior to the effective time (based on the achievement of the applicable performance metrics (y) for those Vested Veeco PSUs where the applicable performance period has elapsed prior to the effective time, at the actual level of performance as determined by the Veeco compensation committee in the ordinary course of business consistent with past practice at the conclusion of such performance period and (z) for those Vested Veeco PSUs where the applicable performance period has not elapsed prior to the effective time, at the greater of (A) target level of performance or (B) actual performance through the most recent practicable date prior to the closing date, as determined in good faith and consistent with past practice by the Veeco compensation committee) and (ii) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Vested Veeco PSU.

Each Unvested Veeco PSU will be assumed by Axcelis and converted into an Axcelis RSU covering Axcelis common stock with the same terms and conditions as applied to the Unvested Veeco PSU immediately prior to the effective time, except that each such Axcelis RSU will be subject solely to the service-based conditions applicable to the corresponding Unvested Veeco PSU and will cover that number of whole shares of Axcelis common stock (rounded down to the nearest whole share) equal to the product of (i) the number of shares of Veeco common stock subject to such Unvested Veeco PSU (based on the achievement of the applicable performance metrics at the greater of (y) target level of performance or (z) actual performance through the most recent practicable date prior to the closing date, as determined in good faith and consistent with past practice by the Veeco compensation committee) and (ii) the exchange ratio. All dividend equivalents, if any, accrued but unpaid as of the effective time with respect to each such Unvested Veeco PSU will also be assumed and become an obligation of Axcelis in connection with the applicable Axcelis RSU.

Veeco RSAs

Each Veeco Director RSA, will, to the extent not vested, become fully vested and canceled, and the holder thereof will be entitled to receive the merger consideration in respect of each share of Veeco common stock subject to such Veeco Director RSA immediately prior to the effective time.

Each Veeco RSA that is not a Veeco Director RSA will be automatically, and without any required action on the part of the holder thereof, assumed by Axcelis and converted into an Axcelis RSA, with the same terms and conditions as were applicable to such Veeco RSA immediately prior to the effective time, except that such awards will, after the effective time, relate to the number of shares of Axcelis common stock equal to the product of (i) the number of shares of Veeco common stock subject to the Veeco RSA, as of immediately prior to the effective time and (ii) the exchange ratio (rounded down to the nearest whole share).

The table below summarizes the number of Unvested Veeco RSUs, Unvested Veeco PSUs, and Veeco RSAs held by Veeco executive officers and directors as of December 26, 2025, and the estimated aggregate value of such Unvested Veeco RSUs, Unvested Veeco PSUs, and Veeco RSAs, with such numbers and amounts calculated based on maximum-level performance with respect to Veeco PSUs and calculated based on the average closing market price of Veeco common stock over the five business day period following the first public announcement of the merger, which was \$31.65. As of December 26, 2025, Veeco executive officers and directors do not hold any Vested Veeco RSUs or Vested Veeco PSUs.

Name	Number of Unvested Veeco RSUs (#)	Estimated Value of Unvested Veeco RSUs (\$)	Number of Unvested Veeco PSUs (#)	Estimated Value of Unvested Veeco PSUs (\$)	Number of Veeco Restricted Stock Awards (#)	Estimated Value of Veeco Restricted Stock Awards (\$)
Executive Officers						
William J. Miller, Ph.D.	93,918	2,972,505	513,500	16,252,275	—	—
John P. Kiernan	25,317	801,283	132,600	4,196,790	—	—
Adrian Devasahayam, Ph.D. . . .	16,534	523,301	110,400	3,494,160	—	—
Peter Porshnev, Ph.D.	16,534	523,301	110,400	3,494,160	—	—
Susan Wilkerson	16,534	523,301	110,400	3,494,160	—	—
Non-Employee Directors						
Kathleen A. Bayless	—	—	—	—	8,291	262,410
Sujeet Chan	—	—	—	—	8,291	262,410
Richard A. D'Amore	—	—	—	—	8,291	262,410
Gordon Hunter	—	—	—	—	8,291	262,410
Keith D. Jackson	—	—	—	—	8,291	262,410
Lena Nicolaides	—	—	—	—	8,291	262,410
Mary Jane Raymond	—	—	—	—	8,291	262,410
Thomas St. Dennis	—	—	—	—	8,291	262,410

Treatment of Veeco's ESPP

Employees who are not currently participants may not become participants in the Veeco ESPP with respect to the Current Purchase Period and current participants in the Veeco ESPP are prohibited from increasing their payroll deduction elections or from making separate non-payroll contributions to the Veeco ESPP in respect of the Current Purchase Period. Prior to the effective time:

- the Purchase Period that is in effect at the Final Purchase Period will be terminated no later than ten (10) business days prior to the date on which the effective time occurs;
- any pro rata adjustments that may be necessary to reflect the Final Purchase Period will be made, but otherwise the Final Purchase Period will be a fully effective and completed Purchase Period for all purposes pursuant to the Veeco ESPP; and
- each outstanding purchase right pursuant to the Veeco ESPP will be exercised (as of no later than ten (10) business days prior to the date on which the effective time occurs). On such exercise date, Veeco will apply the funds credited as of such date pursuant to the Veeco ESPP within each participant's payroll withholding account to the purchase of whole shares of Veeco common stock and such shares shall be entitled to the merger consideration.

The Veeco ESPP will be terminated immediately prior to and effective as of the effective time (but subject to the consummation of the Merger).

Indemnification; Directors' and Officers' Insurance

The merger agreement provides that Axcelis will, and will cause the surviving company to, from and after the effective time, indemnify, defend and hold harmless (including advancing expenses as incurred) to the fullest extent permitted under (i) Veeco's and its subsidiaries' organizational documents and (ii) any contract of Veeco in effect as of the date of this the merger agreement, each present and former director and officer of Veeco in all present and former directors and officers of Veeco against any costs, expenses (including reasonable attorneys' fees), judgments, settlements, fines, losses, claims, damages, or liabilities incurred in connection with any legal proceeding arising out of or pertaining to matters existing or occurring at or prior to the effective time, including in connection with the merger agreement and the transactions

contemplated thereby. All rights to exculpation, indemnification or advancement of expenses for acts or omissions occurring prior to the effective time, now existing in favor of the indemnified parties as provided in their respective certificate of incorporation or bylaws (or other organizational documents) will survive the merger and the other transactions contemplated by the merger agreement and will continue in full force and effect.

For six years from and after the effective time, Axcelis will maintain in effect the exculpation, indemnification and advancement of expenses provisions in the Veeco and its subsidiaries' organizational documents that are in existence on the date of the merger agreement, and no such provision will be amended, modified or repealed in any manner that would adversely affect the rights or protections thereunder of any such indemnified party who immediately before the effective time were current or former directors or officers of Veeco.

Axcelis will maintain, for a period of six years from and after the effective time, for the benefit of the Veeco indemnified parties, directors' and officers' indemnification policies that provide coverage for events occurring prior to the closing that are no less favorable than Veeco's existing policies, as applicable, or, if substantially equivalent insurance coverage is unavailable, the best available coverage, except that Axcelis will not be required to pay an annual premium for the D&O Insurance in excess of 300% of the last annual premium paid prior to the date of the merger agreement.

Veeco Change in Control Arrangements with Executive Officers

Veeco adopted a Senior Executive Change in Control Policy, which is referred to as the Veeco CIC Policy, in 2008, which was amended and restated as of July 29, 2025. The Veeco CIC Policy provides certain severance and other benefits to designated senior executives of Veeco, including the executive officers. Under the Veeco CIC Policy, if an executive's employment is terminated without cause or the executive resigns for good reason, within three months prior to or 18 months following a change in control, the executive is entitled to the following:

- (i) a lump sum amount equal to the sum of the executive's (1) then-current annual base salary and (2) the target annual bonus with respect to the fiscal year ending immediately prior to the date of termination, multiplied by 2, in the case of Dr. Miller, and 1.5, in the case of all other designated executive officers;
- (ii) accelerated vesting of all equity awards held by the executive, and any outstanding stock options then held by the executive shall remain exercisable until the earlier of (x) 12 months following the date of termination of the employee's employment and (y) the expiration of the original term of such options;
- (iii) continued health and welfare benefits until the 18-month anniversary of the date of termination; and
- (iv) a pro-rated annual bonus for the fiscal year in which the date of termination occurs.

Veeco entered into a letter agreement with Dr. Miller dated August 29, 2018, providing that Dr. Miller is entitled to severance benefits as set forth in the Veeco CIC Policy, except that the multiple applicable to Dr. Miller's lump sum of base salary and target annual bonus is 2, in lieu of 1.5.

Payment of the benefits described above is conditioned on the executive's release of claims against Veeco and on acceptance of non-competition and non-solicitation provisions applicable during the 18-month period following termination of the executive's employment. Under the Veeco CIC Policy, "cause" generally includes the executive's willful and substantial misconduct in performing the executive's duties, the executive's willful failure to perform the executive's duties, a material breach of restrictive covenants, commission of fraud, or a conviction or plea of *nolo contendere* to a felony, and "good reason" generally includes any reduction in the executive's base salary or target bonus or a relocation of more than 50 miles from the executive's principal work location. For Dr. Miller, "good reason" also includes an involuntary diminution in his position, title, responsibilities, authority, or reporting responsibilities.

280G Mitigation Actions

The Veeco CIC Policy includes a “best net” provision, such that if the payment of any amounts to the executive would subject the executive to the excise tax provisions of Sections 280G and 4999 of the Code, the payments would be reduced to an amount that is \$10.00 below the threshold at which such penalty tax provisions apply if such a reduction (and the avoidance of such penalty taxes) would be more favorable to the executive on an after-tax basis. Veeco may take actions to mitigate the potential impact of Sections 280G and 4999 of the Code on the payments and benefits received or to be received by the executive officers, which may include causing all or a portion of equity awards that otherwise would vest in later years to vest in 2025. As of the date of this joint proxy statement/prospectus, no specific actions have been approved by the Veeco compensation committee to mitigate the anticipated impact of Section 280G of the Code on Veeco and any executive officers, but we can provide no assurances that the Veeco compensation committee will not take actions to mitigate the impacts of Section 280G in the future. Executive officers are not entitled to receive gross-ups or tax reimbursements from Veeco with respect to any potential excise taxes.

Other Arrangements with Axcelis

Except as otherwise set forth herein, as of the date of this proxy statement, none of our executive officers has entered into any agreement with Axcelis regarding employment with, or compensation to be received from, Axcelis on a going-forward basis following the closing of the merger and there have been no discussions of any such arrangements between Axcelis and any of our executive officers.

Quantification of Payments and Benefits to Veeco Named Executive Officers

In accordance with Item 402(t) of Regulation S-K, the following information, table and the related footnotes present information about the compensation payable to Veeco named executive officers in connection with the merger. This compensation is referred to as “golden parachute” compensation by the applicable SEC disclosure rules, and in this section we use such term to describe the merger-related compensation payable to the named executive officers of Veeco.

Golden Parachute Compensation

The narrative and tables that follow are estimates based on multiple assumptions described above that may or may not actually occur. They describe potential payments and benefits to the named executive officers under their existing plans and agreements, including payments and benefits that would be due to them in connection with the occurrence of a change of control, assuming the closing date occurred on December 26, 2025 and that each named executive officer experienced a qualifying termination of employment on such closing date. The equity award values reflected in the table are calculated based on the average closing market price of Veeco common stock over the five business-day period following the first public announcement of the merger, which was \$31.65. The actual amounts, if any, to be received by a named executive officer may differ from the amounts set forth below.

Name	Cash (\$) ⁽¹⁾	Equity (\$) ⁽²⁾	Perquisites/ Benefits (\$) ⁽³⁾	Total (\$) ⁽⁴⁾
William J. Miller, Ph.D.	3,589,128	19,224,780	21,492	22,835,399
John P. Kiernan	1,486,917	4,998,073	31,068	6,516,058
Adrian Devasahayam, Ph.D.	1,243,700	4,017,461	—	5,261,161
Peter Porshnev, Ph.D.	1,323,033	4,017,461	31,068	5,371,562
Susan Wilkerson	1,447,646	4,017,461	14,688	5,479,795

(1) *Cash.* Represents the cash severance payment (based on the executive’s then-current base salary and their prior year annual target bonus, multiplied by 2 for Dr. Miller and 1.5 for all other named executive officers) and the prorated annual bonus (based on the executive’s 2025 target annual bonus and prorated assuming a closing and termination date of December 26, 2025) that the executives are eligible to receive pursuant to the terms of the Veeco CIC Policy, payable in connection with a qualifying

termination of employment following a change of control (including the merger). These amounts are considered “double trigger” payments, which means that the amounts will become payable only upon a qualifying termination of employment within three (3) months prior to and eighteen (18) months following the closing of the merger. For further details regarding the cash amounts that may become payable to Veeco’s named executive officers, see “— Interests of Veeco’s Directors and Executive Officers in the Merger — Veeco Change in Control Arrangements with Executive Officers.”

Name	Base Salary Severance (\$)	Annual Target Bonus Severance (\$)	Prorated Annual Target Bonus (\$)	Total (\$)
William J. Miller, Ph.D.	1,370,000	1,474,000	745,128	3,589,128
John P. Kiernan	667,500	489,375	330,042	1,486,917
Adrian Devasahayam, Ph.D.	630,000	364,500	364,500	1,243,700
Peter Porshnev, Ph.D.	667,500	391,500	391,500	1,323,033
Susan Wilkerson	648,750	478,125	478,125	1,447,646

(2) *Equity.* Represents the value of accelerated vesting of outstanding unvested Veeco RSUs and PSUs (based on the assumptions described below). As described above, certain of these equity awards will be assumed by Axcelis and converted into Axcelis awards. The values in the table below and in the equity column of the table above reflect the accelerated vesting terms of the Veeco CIC Policy and the following assumptions:

- the named executive officer’s employment is terminated by Veeco without cause or by the officer for good reason, as applicable, such that the named executive officer’s outstanding and unvested assumed Veeco equity awards will vest in full, which is a “double-trigger” benefit, which means that these awards will vest and become payable only upon a qualifying termination of employment within three (3) months prior to and eighteen (18) months following the closing of the merger;
- the equity award values are calculated based on a price per share value of \$31.65, which was the average closing market price of Veeco common stock over the five business-day period following the first public announcement of the merger; and
- the values for Veeco PSUs that are subject to performance measures reflect amounts determined based on maximum level performance.

For further details regarding the treatment of the Veeco equity awards held by the named executive officers, see “— Interests of Veeco’s Directors and Executive Officers in the Merger — Treatment of Veeco Equity Awards” and “— Interests of Veeco’s Directors and Executive Officers in the Merger — Veeco Change in Control Arrangements with Executive Officers.”

Name	Value of RSUs (\$)	Value of PSUs (\$)	Total (\$)
William J. Miller, Ph.D.	2,972,505	16,252,275	19,224,780
John P. Kiernan	801,283	4,196,790	4,998,073
Adrian Devasahayam, Ph.D.	523,301	3,494,160	4,017,461
Peter Porshnev, Ph.D.	523,301	3,494,160	4,017,461
Susan Wilkerson	523,301	3,494,160	4,017,461

(3) *Perquisites/Benefits.* Represents eighteen (18) months’ continuation of the monthly COBRA premium Veeco pays for its active employees and their eligible dependents that the executives are eligible to receive pursuant to the terms of the Veeco CIC Policy, which becomes payable upon a qualifying termination of employment following a change in control (including the merger). These amounts are considered “double trigger” payments which means that the amounts will become payable only upon a qualifying termination of employment within three (3) months prior to and eighteen (18) months following the closing of the merger. For further details regarding the health benefits that may become payable to Veeco’s named executive officers, see “— Interests of Veeco’s Directors and Executive Officers in the Merger — Veeco Change in Control Arrangements with Executive Officers.”

(4) *Total.* This amount includes the aggregate dollar value of the sum of all amounts reported in the preceding columns. If any payment or benefit received by a named executive officer in connection with the merger would be subject to excise taxes imposed under Section 4999 of the Code, the amount of such payments or benefits provided would be reduced if such reduction results in a greater after-tax benefit to the named executive officer. The amounts reflected above have not been reduced. A definitive analysis of the need, if any, for such reductions will depend on the effective time, the date of termination (if any) of the named executive officer and certain other assumptions used in the applicable calculations.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER

The following is a summary of material U.S. federal income tax consequences generally applicable to a “U.S. holder” (as defined below) of Veeco common stock that receives Axcelis common stock pursuant to the merger. This discussion is based upon the Code, Treasury Regulations promulgated thereunder, administrative rulings and judicial decisions in effect as of the date of this joint proxy statement/prospectus, all of which are subject to change at any time, possibly with retroactive effect. Any such change could affect the accuracy of the statements and conclusions set forth in this discussion. The discussion of the material U.S. federal income tax consequences contained in this joint proxy statement/prospectus is intended to provide only a general discussion and is not a complete analysis or description of all potential U.S. federal income tax consequences. This discussion does not address any state, local or non-U.S. tax considerations or any U.S. federal non-income taxes (such as estate or gift taxes).

The following discussion applies only to U.S. holders of Veeco common stock who hold shares of Veeco common stock as “capital assets” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address the tax consequences of owning or disposing of Axcelis common stock received in the merger and does not address any tax consequences arising under the Foreign Account Tax Compliance Act of 2010 (including the Treasury Regulations promulgated thereunder and intergovernmental agreements entered into pursuant thereto or in connection therewith). Further, this discussion does not address all aspects of U.S. federal income taxation that might be relevant to U.S. holders in light of their specific circumstances (including consequences arising under any alternative minimum tax and the Medicare contribution tax on net investment income) and does not address U.S. holders subject to special rules under the U.S. federal income tax laws, including (but not limited to) dealers or brokers in securities, commodities or foreign currencies, traders in securities that elect to apply a mark-to-market method of accounting, banks and certain other financial institutions, insurance companies, mutual funds, tax-exempt organizations, partnerships, S corporations or other pass-through entities (or investors in such partnerships, S corporations or other such pass-through entities), regulated investment companies, real estate investment trusts, former citizens or residents of the United States, holders whose functional currency is not the U.S. dollar, holders who hold shares of Veeco common stock as part of a hedge, straddle, constructive sale, conversion transaction or other integrated transaction, holders who acquired Veeco common stock pursuant to the exercise of employee stock options, through a tax qualified retirement plan or otherwise as compensation, holders required to accelerate the recognition of any item of gross income with respect to their shares of Veeco common stock as a result of such income being recognized on an applicable financial statement, or holders who actually or constructively own more than 5% of the outstanding shares of Veeco common stock).

For purposes of this discussion, a “U.S. holder” is a beneficial owner of Veeco common stock that is, for U.S. federal income tax purposes, (i) an individual citizen or resident of the United States, (ii) a corporation, or entity treated as a corporation, organized in or under the laws of the United States or any political subdivision thereof, (iii) an estate, the income of which is includible in gross income for U.S. federal income tax purposes, regardless of its source or (iv) a trust if (y) a court within the United States is able to exercise primary supervision over the trust’s administration and one or more U.S. persons have the authority to control all of the trust’s substantial decisions or (z) such trust has a valid election in effect to be treated as a U.S. person for U.S. federal income tax purposes.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds Veeco common stock, the tax treatment of a partner in such partnership will generally depend on the status of the partner and the activities of the partner and the partnership. Any entity or arrangement treated as a partnership for U.S. federal income tax purposes that holds Veeco common stock, and any partners in such partnership, should consult their tax advisors regarding the tax consequences of the merger to their specific circumstances.

The tax consequence of the merger to any holder of Veeco common stock that is not a U.S. holder are not discussed in this joint proxy statement/prospectus. Such holders should consult their own tax advisors regarding the tax consequences of the merger to them in light of their specific circumstances.

THIS DISCUSSION OF UNITED STATES FEDERAL INCOME TAX CONSEQUENCES IS FOR GENERAL INFORMATION PURPOSES ONLY AND IS NOT INTENDED TO BE, AND SHOULD NOT BE CONSTRUED AS, TAX ADVICE. VEECO STOCKHOLDERS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE SPECIFIC TAX CONSEQUENCES OF THE MERGER TO THEM, INCLUDING THE APPLICABILITY AND EFFECT OF U.S. FEDERAL, STATE, LOCAL AND NON-U.S. INCOME AND OTHER TAX LAWS, IN LIGHT OF THEIR PARTICULAR CIRCUMSTANCES.

Consequences if the Merger Qualifies as a Reorganization

Axcelis and Veeco intend for (and have agreed to use their respective commercially reasonable efforts to cause) the merger to qualify as a “reorganization” within the meaning of Section 368(a) of the Code. However, it is not a condition to Axcelis’ obligation or Veeco’s obligation to complete the merger that the merger qualifies as a “reorganization.” However, in connection with the effectiveness of the registration statement of which this joint proxy statement/prospectus is a part, Morrison & Foerster LLP, counsel to Veeco, will deliver a legal opinion to the effect that the merger will qualify as a “reorganization” within the meaning of Section 368(a) of the Code. This opinion is based upon currently applicable U.S. federal income tax law and relies on customary assumptions, representations and warranties, including those contained in the merger agreement and in the officer’s certificates provided by or on behalf of Axcelis and Veeco, as well as certain covenants and undertakings by Axcelis and Veeco.

In the event of a change in applicable laws, or if any of these assumptions, representations and warranties, and covenants and undertakings underlying the tax opinion described above is or becomes incorrect, incomplete, inaccurate or is violated, the validity of, and the conclusion reached in, such opinion may be affected or jeopardized. In addition, the opinion is subject to certain qualifications and limitations as set forth therein. Because the opinion is being delivered in connection with the effectiveness of the registration statement, there can be no assurance that it will continue to remain valid at the effective time of the merger, and the closing of the merger is not conditioned on the continuing validity of the opinion. An opinion of counsel represents such counsel’s judgment and is not binding on the IRS or any court. Moreover, neither Axcelis nor Veeco will request a ruling from the IRS with respect to the tax treatment of the merger, and as a result, no assurance can be given that the IRS will not challenge the treatment of the merger as a “reorganization” within the meaning of Section 368(a) of the Code or that a court would not sustain such a challenge.

If the IRS were to challenge the “reorganization” status of the merger successfully or the form or structure of the merger was changed in a manner such that it did not qualify as a “reorganization,” holders of Veeco common stock could be subject to U.S. federal income tax upon the receipt of Axcelis common stock in the merger.

Provided that the merger qualifies as a “reorganization” within the meaning of Section 368(a) of the Code, the material U.S. federal income tax consequences of the merger will generally be as follows:

Exchange of Shares of Veeco Common Stock for Shares of Axcelis Common Stock

Upon the exchange of a U.S. holder’s Veeco common stock for Axcelis common stock in the merger, a U.S. holder will generally not recognize gain or loss, except with respect to cash received in lieu of fractional shares of Axcelis common stock (as discussed below). Further, such holder will have an aggregate tax basis in the Axcelis common stock received in the merger (including any fractional shares of Axcelis common stock deemed received and exchanged for cash as described below) equal to such U.S. holder’s aggregate adjusted tax basis in the Veeco common stock surrendered in exchange therefor. A U.S. holder of Veeco common stock will have a holding period for the shares of Axcelis common stock received in the merger (including any fractional shares deemed received and exchanged for cash as described below) that includes the holding period of the shares of Veeco common stock surrendered in the merger.

A U.S. holder that acquired different blocks of Veeco common stock at different times or different prices should consult its own tax advisor regarding the manner in which the basis and holding period should be allocated among the U.S. holder’s Veeco common stock in light of the U.S. holder’s specific circumstance.

Receipt of Cash in Lieu of Fractional Shares

If a U.S. holder of Veeco common stock receives cash in lieu of a fractional share of Axcelis common stock, the U.S. holder will generally be treated as having received such fractional share of Axcelis common stock pursuant to the merger and then as having sold such fractional share of Axcelis common stock for cash. As a result, the U.S. holder will generally recognize gain or loss equal to the difference between the amount of cash received in lieu of a fractional share and the U.S. holder's basis in the fractional share of Axcelis common stock. Such gain or loss will generally be capital gain or loss and will be long-term capital gain or loss if, as of the effective time, the U.S. holder's holding period for such fractional share (including the holding period of shares of Veeco common stock surrendered therefor) exceeds one year. For U.S. holders of shares of Veeco common stock that are non-corporate holders, long-term capital gain generally will be taxed at a U.S. federal income tax rate that is lower than the rate for ordinary income or for short-term capital gains. The deductibility of capital losses is subject to limitations.

Backup Withholding and Information Reporting

Payments of any cash in lieu of a fractional share of Axcelis common stock are subject to information reporting unless the U.S. holder is an exempt recipient and may, under certain circumstances, be subject to backup withholding (currently, at a rate of 24%), unless such holder provides the withholding agent with its taxpayer identification number and otherwise complies with the backup withholding rules. Any amounts withheld from payments to a U.S. holder of shares of Veeco common stock under the backup withholding rules are not additional tax and generally will be allowed as a refund or credit against such U.S. holder's U.S. federal income tax liability; provided that such U.S. holder timely furnishes the required information to the IRS.

Consequences if the Merger Fails to Qualify as a Reorganization

If the merger does not so qualify as a "reorganization" within the meaning of Section 368(a) of the Code for U.S. federal income tax purposes and is therefore taxable for U.S. federal income tax purposes, then a U.S. holder of Veeco common stock that exchanges such shares of Veeco common stock for Axcelis common stock and cash in lieu of a fractional share will generally recognize gain or loss equal to the difference, if any, between (i) the sum of any cash received in lieu of a fractional share of Axcelis common stock and the fair market value of the Axcelis common stock actually received by such U.S. holder and (ii) such U.S. holder's adjusted tax basis in the Veeco common stock exchanged therefor. Gain or loss must be calculated separately for each block of Veeco common stock exchanged by such U.S. holder if such blocks were acquired at different times or for different prices. Any gain or loss so recognized will be long-term capital gain or loss if the U.S. holder's holding period in a particular block of Veeco common stock exceeds one year at the effective time of the merger. Long-term capital gain is taxed at reduced rates for non-corporate holders. The deductibility of capital losses is subject to limitations. A U.S. holder's aggregate tax basis in the Axcelis common stock received in the merger will equal the fair market value of such Axcelis common stock as of the effective time of the merger, and the holding period of such Axcelis common stock will begin on the date after the merger.

This discussion of material U.S. federal income tax consequences of the merger is for general information purposes only and is not intended to be, and should not be construed as, tax advice. Determining the actual tax consequences of the merger to you may be complex and will depend on your specific situation and on factors that are not within Axcelis' nor Veeco's knowledge or control. You should consult your tax advisors with respect to the application of U.S. federal income tax laws to your specific situation as well as any tax consequences arising under the U.S. federal estate or gift tax rules or under the laws of any state, local, non-U.S. or other taxing jurisdiction.

COMPARISON OF STOCKHOLDERS' RIGHTS

If the merger is completed, Veeco stockholders will receive Axcelis common stock. Subject to the approval by Axcelis stockholders, the charter of Axcelis may be amended at the election of Axcelis' board of directors, separate from and independent of the closing of the merger. The Axcelis charter, which is referred to in this section as the combined company charter, is attached to this joint proxy statement/prospectus as Exhibit 3.1. At the effective time of the merger, the Axcelis bylaws, which are attached to this joint proxy statement/prospectus as Exhibit 3.3, will become the combined company bylaws, which are referred to in this section as the combined company bylaws.

Axcelis and Veeco are both Delaware corporations subject to the DGCL. If the merger is completed, the rights of Axcelis stockholders and Veeco stockholders who become Axcelis stockholders in connection with the merger will continue to be governed by the DGCL, but will also be governed by the combined company charter and the combined company bylaws.

The following description summarizes certain material differences between the current rights of Veeco stockholders, the current rights of Axcelis stockholders, and the rights of Axcelis stockholders immediately following the completion of the merger and the other transactions contemplated by the merger agreement (i.e., stockholders of the combined company). The current rights of Axcelis stockholders are the same as the rights immediately following the completion of the merger unless otherwise indicated in the following description. This does not purport to be a complete statement of all those differences, or a complete description of the specific provisions referred to in this summary and is qualified in its entirety by reference to the complete text of the applicable provision or statute. The identification of specific differences is not intended to indicate that other equally significant or more significant differences do not exist. Stockholders should read carefully the relevant provisions of the DGCL, the combined company charter, the combined company bylaws, the Veeco charter and the Veeco bylaws. Copies of the Veeco charter and the Veeco bylaws may be obtained as described under the section entitled "**Where You Can Find More Information**" beginning on page 189 of this joint proxy statement/prospectus.

Veeco	Combined Company
<i>Authorized Capital Stock</i>	
Veeco's authorized capital stock consists of 120,000,000 shares of common stock, par value \$0.01 per share and 500,000 shares of preferred stock with a par value of \$0.01 per share.	The combined company will be authorized to issue 105,000,000 shares of capital stock, 75,000,000 of which will be shares common stock, par value \$0.001 per share, and 30,000,000 shares of preferred stock, par value \$0.001 per share.
As of the close of business on the Veeco record date, Veeco had 60,297,087 shares of common stock issued and outstanding and no shares of preferred stock issued and outstanding.	As of the close of business on the Axcelis record date, Axcelis had 30,699,201 shares of common stock and no shares of preferred stock issued and outstanding.
<i>Rights of Preferred Stock</i>	
The Veeco board of directors is authorized, without stockholder approval, to issue shares of preferred stock in one or more series, to determine the number of shares to be included in each such series and to fix the designation, powers, preferences, rights, qualifications, limitations or restrictions of the shares of any series.	The combined company charter provides authorization to provide by resolution or resolutions from time to time for the issue of the preferred stock in one or more series, the shares of each of which series may have such voting powers, full or limited, or no voting powers, and such designations, preferences and relative, participating,

Veeco	Combined Company
No shares of Veeco preferred stock were outstanding as of the date of this joint proxy statement/prospectus.	optional or other special rights, and qualifications, limitations or restrictions thereon, to the fullest extent permitted under the DGCL and as shall be stated in the resolution or resolutions providing for the issuance of such stock adopted by the Board of Directors.

The holders of Veeco common stock are entitled to one vote for each share of Veeco common stock held by such stockholder.

Voting Rights

For votes on matters other than for the election of directors, a majority of the votes cast at a meeting is required to authorize such corporate action (unless otherwise provided by law, the Veeco charter, the Veeco bylaws or the rules or regulations of any stock exchange applicable to Veeco).

No shares of Axcelis preferred stock were outstanding as of the date of this joint proxy statement/prospectus.

Voting — Other than for Election of Directors

The Veeco bylaws provide that, at any meeting of Veeco stockholders, the presence in person or by proxy of the holders of a majority of the shares entitled to vote constitutes a quorum for the transaction of business.

Quorum

The combined company bylaws provide that the holders of a majority in interest of all stock issued and outstanding and entitled to vote upon a question to be considered at the meeting, present in person or represented by proxy, constitutes a quorum for the consideration of such question, but in the absence of a quorum a smaller group may adjourn any meeting from time to time.

Stockholder Inspection Rights; Stockholder Lists

Under Section 220 of the DGCL, a stockholder or his, her or its agent has a right to inspect Veeco's stock ledger, a list of all of its stockholders and its other books and records during the usual hours of business upon written demand stating his, her or its proper purpose (which must be reasonably related to such person's interest as a stockholder). If Veeco refuses to permit such inspection or refuses to reply to the request within five business days of the demand, the stockholder may apply to the Delaware Court of Chancery for an order to compel such inspection.

The Veeco bylaws provide that at least 10 days before any meeting of stockholders, Veeco's secretary must prepare a complete list of stockholders entitled to vote at the meeting, arranged alphabetically and showing each stockholder's address and the number of shares registered in his, her or its name. The list must be

Under Section 220 of the DGCL, a stockholder or his, her or its agent has a right to inspect the combined company's stock ledger, a list of all of its stockholders and its other books and records during the usual hours of business upon written demand stating his, her or its purpose (which must be reasonably related to such person's interest as a stockholder). If the combined company refuses to permit such inspection or refuses to reply to the request within five business days of the demand, the stockholder may apply to the Delaware Court of Chancery for an order to compel such inspection.

The combined company bylaws provide that the combined company must prepare, at least 10 days before every meeting of stockholders, a complete list of the stockholders, arranged in alphabetical order and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list must be open to the

Veeco	Combined Company
<p>open to examination by any stockholder for purposes germane to the meeting for at least 10 days prior to the meeting, either (i) on a reasonably accessible electronic network with the access information provided in the meeting notice or (ii) during ordinary business hours at a location within the city where the meeting is to be held, if specified in the meeting notice, or if not, at the place of the meeting itself.</p>	<p>examination of any stockholder for any purpose germane to the meeting, during ordinary business hours, for a period of at least 10 days before the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or if not so specified, at the place where the meeting is to be held. The list must also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. The stock ledger is the only evidence as to who are the stockholders entitled to examine the stock ledger, the list required as described above or the books of the combined company, or to vote at any meeting of stockholders.</p>
<p>If the list is made available electronically, Veeco may take reasonable steps to ensure access is limited to stockholders. For meetings held at a physical location, the list must be produced and kept at the meeting site throughout the meeting for inspection by any stockholder present. For meetings conducted solely by remote communication, the list must be available for inspection by stockholders on a reasonably accessible electronic network during the meeting, with access information provided in the notice. Except as otherwise provided by law, the list serves as the sole evidence of the stockholders entitled to examine it or to vote in person or by proxy at any meeting.</p>	
<p>Classified Board The Veeco charter provides that the board of directors are divided into three staggered classes, with each class serving a three-year term.</p>	<p>Classified Board Not applicable.</p>
<p>Number of Directors The Veeco bylaws provide for the number of directors constituting the board of directors to be no less than three and no more than eleven, with the exact number to be determined by resolution of the Veeco board of directors. The Veeco board of directors currently has nine members.</p>	<p>Number of Directors The combined company charter and the combined company bylaws provide for the number of directors constituting the board of directors to be determined by resolution of the board of directors.</p>
<p>Election of Directors The Veeco bylaws provide that a nominee for director will be elected to the Veeco board of directors by a majority of the votes cast with respect to the director at any meeting for the election of directors at which a quorum is present, provided that if the number of nominees exceeds the number of directors to be elected, the directors will be elected by the vote of a plurality of the shares represented in person or by proxy at any such meeting and entitled to vote on the election of directors. Abstentions and broker non-votes are not counted as votes cast either "for" or "against" a director's election.</p>	<p>Election of Directors The combined company board of directors will have eleven members.</p>
	<p>Nominations of persons for election as directors may be made only by or at the direction of the Board of Directors, or by a qualifying stockholder at any annual meeting of stockholders or at any special meeting for which the election of directors is a purpose specified in the notice of meeting given by the person calling the special meeting. Any election by stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote at the election.</p>

Filling Vacancies on the Board of Directors

The Veeco charter provides that any vacancy on the Veeco board of directors, including one created by an increase in the number of directors, may be filled for the unexpired term by a majority vote of the remaining directors, even if less than a quorum.

The combined company charter provides that any vacancy on the board of directors that results from an increase in the number of directors may be filled only by a majority of the board of directors then in office, provided that a quorum is present, and any other vacancy occurring in the board of directors may be filled by a majority of the directors then in office, even if less than a quorum, or by a sole remaining director.

See also the sections entitled “**Election of Directors**” and “**The Merger — Governance of the Combined Company**” of this joint proxy statement/prospectus.

Cumulative Voting

Under the DGCL, stockholders may cumulate their votes and either cast them for one candidate or distribute them among two or more candidates in the election of directors only if expressly authorized in a corporation’s certificate of incorporation. The Veeco charter does not authorize cumulative voting.

Under the DGCL, stockholders may cumulate their votes and either cast them for one candidate or distribute them among two or more candidates in the election of directors only if expressly authorized in a corporation’s certificate of incorporation. The combined company charter does not authorize cumulative voting.

Removal of Directors

The Veeco bylaws provide that any or all of the directors may be removed, but only for cause, by vote of the stockholders at a meeting duly called for such purpose.

The combined company charter states that, subject to the special rights of the holders of one or more outstanding series of preferred stock to elect directors, any director or directors may be removed from office only (i) for cause by the affirmative vote of at least a majority of the voting power of all of the then outstanding shares of stock entitled to vote generally in the election of directors or (ii) without cause by the affirmative vote of the holders of at least seventy-five percent (75%) of the voting power of all of the then outstanding shares of stock entitled to vote generally in the election of directors.

Director Nominations by Stockholders

The Veeco bylaws provide that, to be valid, a stockholder’s nomination must be made by timely written notice to the secretary of Veeco. For annual meetings, the notice generally must be received not less than 90 nor more than 120 days before the anniversary of the previous year’s annual meeting, provided that in the event that the annual meeting occurs on a date that is not within 30 days before or 60 days after such anniversary date, in order to be timely, notice by the stockholder must be received no later than the close of business on the 10th day following the day (i) on which notice of the date of the annual meeting was mailed or (ii) public disclosure of the date of the annual meeting was made, whichever occurs first. For special meetings,

The combined company bylaws provide that a stockholder must provide timely notice to the secretary of the combined company of a director nomination. For a director nomination to be timely, a notice of such nomination with the information specified below must be received not less than 90 nor more than 120 days before the anniversary of the previous year’s annual meeting, provided that in the event that the annual meeting occurs on a date that is not within 30 days before or after such anniversary date, the notice must be received by the combined company between (i) the date that is 120 days before the annual meeting and (ii) the later of (y) 90 days before the annual meeting date and (z) the date that is 10 days after the public

Veeco	Combined Company
<p>the notice must be received no later than the close of business on the 10th day following the day (i) on which notice of the date of the special meeting was mailed or (ii) public disclosure of the date of the special meeting was made, whichever occurs first. The postponement or adjournment of a meeting does not reset the notice requirements.</p> <p>The following information must be provided in the written notice with respect to (i) the nominating stockholder, each beneficial owner, if any, on whose behalf the nomination is being made and any affiliate or associate thereof acting in concert therewith and (ii) each person whom the nominating persons proposes to nominate:</p> <ul style="list-style-type: none"> • the name and address of the person (including, if applicable, the name and address that appear on the Veeco's books and records); • the class or series and number of shares of Veeco that are, directly or indirectly, owned of record or beneficially owned by the person; • a representation that the person is a holder of record of Veeco stock entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person(s) named in its notice; • a description of any derivative, swap or other transaction or series of transactions engaged in, directly or indirectly, by such person, the purpose or effect of which is to give such person economic risk similar to ownership of shares of any class or series of Veeco, including due to the fact that the value of such derivative, swap or other transactions are determined by reference to the price, value or volatility of any shares of any class or series of Veeco, or which derivative, swap or other transactions provide, directly or indirectly, the opportunity to profit from any increase in the price or value of shares of any class or series of Veeco; • a description of any proxy, agreement, arrangement, understanding or relationship pursuant to which such person has or shares a right to vote any shares of any class or series of Veeco; • a description of any agreement, arrangement, understanding or relationship, including any repurchase or similar so-called "stock borrowing" agreement or arrangement, engaged in, directly or indirectly, by such person, the purpose or effect of which is to mitigate loss to, reduce the economic risk (of ownership or otherwise) of shares of any class or series of Veeco by, manage the risk of 	<p>announcement of the annual meeting date.</p> <p>As to each person whom the stockholder proposes to nominate for election or reelection or re-election as a director:</p> <ul style="list-style-type: none"> • the name, age, business address and residence address of the person; • the principal occupation or employment of the person; • the class and number of shares of capital stock of the corporation that are, directly or indirectly, owned, beneficially or of record, by the person and/or the person's affiliates and associates; • a description of all direct and indirect compensation and other material monetary agreements, arrangements and understandings during the past three years, and any other material relationships, between or among (i) the nominating stockholder, each other beneficial owner of the corporation's capital stock, if any, on whose behalf the nomination is being made and the respective affiliates and associates of, or others acting in concert with, such stockholder and any such other such beneficial owner, on the one hand, and (ii) each proposed nominee and his or her respective affiliates and associates, or others acting in concert with such nominee(s), on the other hand, including all information that would be required to be disclosed pursuant to Item 404 of Regulation S-K if the nominating stockholder and any such beneficial owner or any affiliate or associate thereof or person acting in concert therewith were the "registrant" for purposes of such Item and the proposed nominee were a director of such registrant; and • any other information relating to the proposed nominee and his or her affiliates and associates that is required to be disclosed in solicitations for proxies for election of directors pursuant to Regulation 14A under the Exchange Act. <p>As to the nominating stockholder and each beneficial owner, if any, on whose behalf the nomination is being made:</p> <ul style="list-style-type: none"> • the name, address and principal occupation or business activity of such stockholder and each such beneficial owner; • the class, series, and number of shares of capital stock of the combined company that are, directly or indirectly, owned, beneficially or of record, by such stockholder and each such beneficial owner

Veeco	Combined Company
<p>share price changes for, or increase or decrease the voting power of, such person with respect to the shares of any class or series of Veeco, or that provides, directly or indirectly, the opportunity to profit from any decrease in the price or value of the shares of any class or series of Veeco;</p> <ul style="list-style-type: none"> • a description of any rights to dividends on the shares of any class or series of Veeco owned beneficially by such person that are separated or separable from the underlying shares of Veeco; • a description of any performance related fees (other than an asset based fee) that such person is entitled to based on any increase or decrease in the price or value of shares of any class or series of Veeco, or any other interests, if any; • a description of any transactions that hedge or mitigate the economic effect of such derivative, swap or other transactions; and • any other information relating to such person that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies or consents by such person pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder. <p>The following information must also be provided in the notice regarding each person whom the stockholder proposes to nominate:</p> <ul style="list-style-type: none"> • if applicable, a statement that such person intends to solicit holders of at least 67% of the corporation's outstanding voting stock in support of nominees other than the corporation's nominees; and • a representation as to whether the nominating person intends to solicit proxies or votes in accordance with Rule 14a-19 under the Exchange Act. <p>Each proposed nominee must also deliver a written agreement representing that that he or she:</p> <ul style="list-style-type: none"> • is not party to any undisclosed agreement or commitment regarding their actions or votes as a director or that could limit or interfere with such proposed nominee's ability to comply, if elected as a director of Veeco, with such proposed nominee's fiduciary duties under applicable law; is not, and will not become, a party to any agreement, arrangement or understanding with any person or entity other than Veeco with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director that has not been disclosed to 	<p>and their respective affiliates and associates;</p> <ul style="list-style-type: none"> • a description of any agreement, arrangement or understanding between or among such stockholder and/or such beneficial owner and/or their respective affiliates and associates and each proposed nominee, the nominee's affiliates and associates and any other person or persons (including their names) pursuant to which the nomination(s) are being made or who may participate in the solicitation of proxies in favor of electing such nominee(s); • a description of any agreement, arrangement or understanding (including any derivative or short positions, swaps, profits interests, options, warrants, convertible securities, stock appreciation or similar rights, hedging transactions, and borrowed or loaned shares) that has been entered into by, or on behalf of, such stockholder or any such beneficial owner, or any of their respective affiliates and associates, the effect or intent of which is to mitigate loss to, manage risk or benefit of share price changes for, or increase or decrease the voting power of, such stockholder or any such beneficial owner or any of their respective affiliates and associates with respect to shares of stock of the combined company; • a description of any material pending or threatened legal proceeding in which such stockholder or any such beneficial owner or any of their respective affiliates and associates is a party or material participant involving the combined company or any affiliate of the combined company; • any other material relationship between such stockholder or any such beneficial owner or any of their respective affiliates and associates, on the one hand, and the combined company, any affiliate of the combined company, or any principal competitor of the combined company, on the other hand; • any direct or indirect material interest of such stockholder or any such beneficial owner or any of their respective affiliates and associates in any material contract or agreement with the combined company, any affiliate of the combined company or any principal competitor of the combined company; • any other information relating to such stockholder and any such beneficial owner and their respective affiliates and associates that would be required to be disclosed in a proxy statement or other filings

Veeco	Combined Company
<p>Veeco;</p> <ul style="list-style-type: none"> • represents that he or she will, upon request of Veeco, participate in one or more interviews with one or more directors within 10 calendar days after being requested to do so; and • will comply, if elected as directors, with all corporate governance, conflict of interest, confidentiality, and stock ownership policies applicable to directors. 	<p>required to be made in connection with solicitations of proxies for the election of directors in a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder;</p> <ul style="list-style-type: none"> • a representation that such stockholder is entitled to vote for the election of directors at the meeting and intends to appear in person or by proxy at the meeting to nominate the person(s) named in its notice, and • a representation whether such stockholder and/or any such beneficial owner intends or is part of a group that intends (i) to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the combined company's outstanding capital stock reasonably believed by such stockholder or such beneficial owner to be sufficient to elect the nominee (and such representation shall be included in any such proxy statement and form of proxy) and/or (ii) otherwise to solicit proxies from stockholders in support of such nomination (and such representation shall be included in any such solicitation materials).

Stockholder Proposals

The Veeco bylaws provide that for business to be properly brought before an annual or special meeting by a Veeco stockholder, such stockholder must have given timely written notice to the secretary of Veeco. For annual meetings, the notice generally must be received not less than 90 nor more than 120 days before the anniversary of the previous year's annual meeting, provided that in the event that the annual meeting occurs on a date that is not within 30 days before or 60 days after such anniversary date, in order to be timely, notice by the stockholder must be received no later than the close of business on the 10th day following the day (i) on which notice of the date of the annual meeting was mailed or (ii) public disclosure of the date of the annual meeting was made, whichever occurs first. For special meetings, the notice must be received no later than the close of business on the 10th day following the day (i) on which notice of the date of the special meeting was mailed or (ii) public disclosure of the date of the special meeting was made, whichever occurs first. Postponement or adjournment of a meeting does not reset the notice requirements.

The following information must be provided in the written notice with respect to the stockholder providing the notice, each beneficial owner, if any, on whose behalf the proposal is being made and any

The combined company bylaws provide that a stockholder must give timely notice (in the time period described under "**—Director Nominations by Stockholders**") to the chairperson of the combined company's board of directors or the chief executive officer, president or secretary of the combined company, of any proposal for business to be transacted at an annual meeting of stockholders.

Any stockholder notice relating to a matter other than the nomination of directors must contain:

- a brief description of the business desired to be brought before the annual meeting;
- the text of the proposal (including the exact text of any resolution(s) proposed for consideration and, in the event that such business includes a proposal to amend the combined company bylaws, the exact text of the proposed amendment);
- the reasons for conducting such business at the annual meeting; and
- as to the proposing stockholder and each beneficial owner, if any, on whose behalf the proposal is being made:
- the name, address and principal occupation or business activity of such stockholder and each such beneficial owner;

Veeco	Combined Company
<p>affiliate or associate thereof acting in concert therewith:</p> <ul style="list-style-type: none"> • the name and address of the person (including, if applicable, the name and address that appear on the Veeco's books and records); • the class or series and number of shares of Veeco that are, directly or indirectly, owned of record or beneficially owned by the person; • a representation that the person is a holder of record of Veeco stock entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person(s) named in its notice; • a description of any derivative, swap or other transaction or series of transactions engaged in, directly or indirectly, by such person, the purpose or effect of which is to give such person economic risk similar to ownership of shares of any class or series of Veeco, including due to the fact that the value of such derivative, swap or other transactions are determined by reference to the price, value or volatility of any shares of any class or series of Veeco, or which derivative, swap or other transactions provide, directly or indirectly, the opportunity to profit from any increase in the price or value of shares of any class or series of Veeco; • a description of any proxy, agreement, arrangement, understanding or relationship pursuant to which such person has or shares a right to vote any shares of any class or series of Veeco; • a description of any agreement, arrangement, understanding or relationship, including any repurchase or similar so-called "stock borrowing" agreement or arrangement, engaged in, directly or indirectly, by such person, the purpose or effect of which is to mitigate loss to, reduce the economic risk (of ownership or otherwise) of shares of any class or series of Veeco by, manage the risk of share price changes for, or increase or decrease the voting power of, such person with respect to the shares of any class or series of Veeco, or that provides, directly or indirectly, the opportunity to profit from any decrease in the price or value of the shares of any class or series of Veeco; • a description of any rights to dividends on the shares of any class or series of Veeco owned beneficially by such person that are separated or separable from the underlying shares of Veeco; 	<p>the class, series, and number of shares of capital stock of the combined company that are, directly or indirectly, owned, beneficially or of record, by such stockholder and each such beneficial owner and their respective affiliates and associates;</p> <ul style="list-style-type: none"> • a description of any material interest of such stockholder and of any such beneficial owner and the respective affiliates and associates of, or others acting in concert with, such stockholder or such beneficial owner in the business desired to be brought before the annual meeting; • a description of any agreement, arrangement or understanding between or among such stockholder and/or such beneficial owner and any other person or persons (including their names) in connection with the proposal of such business or who may participate in the solicitation of proxies in favor of such proposal; • the stockholder information (any direct or indirect material interest of such stockholder or any such beneficial owner or any of their respective affiliates and associates in any material contract or agreement with the combined company, any affiliate of the combined company or any principal competitor of the combined company; • any other information relating to such stockholder and any such beneficial owner that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for the business proposed pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder; • a representation that such stockholder is entitled to vote on the proposed business at the meeting and intends to appear in person or by proxy at the meeting to bring such business before the meeting; • a representation whether such stockholder and/or any such beneficial owner intends or is part of a group that intends (i) to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the combined company's outstanding capital stock reasonably believed by such stockholder or such beneficial owner to be sufficient to approve or adopt the proposal (and such representation shall be included in any such proxy statement and form of proxy) and/or (ii) otherwise to solicit proxies from stockholders in support of such proposal (and such representation shall be included in any such

Veeco	Combined Company
<ul style="list-style-type: none"> • a description of any performance related fees (other than an asset based fee) that such person is entitled to based on any increase or decrease in the price or value of shares of any class or series of Veeco, or any other interests, if any; • a description of any transactions that hedge or mitigate the economic effect of such derivative, swap or other transactions; and • any other information relating to such person that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies or consents by such person pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder. 	<p style="text-align: center;">solicitation materials).</p> <p>Not later than each of (i) five days after the record date for the meeting and (ii) eight days before the meeting, the nominating stockholder and the proposed nominee shall supplement the information, as applicable, by providing to the secretary at the principal executive offices of the combined company updated information current as of the record date and as of the tenth day before the meeting, respectively.</p>

The following information must also be provided in the notice regarding each item of business being proposed by the stockholder:

- a reasonably brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting and any material interest in such business;
- the text of the proposal or business (including the text of any resolutions proposed for consideration); and
- a reasonably detailed description of all agreements, arrangements and understandings
 - (i) between or among any of those proposing the business to be brought before the meeting or
 - (ii) between or among any those proposing the business to be brought before the meeting and any other person or persons (including their names) in connection with the proposal.

Special Meetings of Stockholders

The Veeco charter and the Veeco bylaws each provide that special meetings of stockholders may be called by resolution of the Veeco board of directors or by the chief executive officer and must be called by the chief executive officer or secretary upon the written request (stating the purpose or purposes of the meeting) of a majority of the directors then in office or of the holders of 50% of the outstanding shares entitled to vote.

No business may be transacted at a special meeting other than specified in Veeco's notice of such meeting.

Notice of Meetings of Stockholders

The Veeco bylaws provide that, except if a stockholder has submitted a signed waiver of notice before or after the meeting or as otherwise provided

The combined company charter provides that special meetings of stockholders may be called for any purpose or purposes, at any time only by or at the direction of the chairperson of the board of directors, the chief executive officer, or by the board of directors.

No business may be transacted at a special meeting other than specified in the combined company's notice of such meeting.

Under the combined company bylaws, and except where some other notice is required by law, notice of the time and place of special meetings must be

Veeco

by law or by the Veeco bylaws, written notice of each meeting of stockholders must be given to each stockholder entitled to vote at the meeting, personally or by mail, not less than 10 and not more than 60 days before the meeting.

The notice must state:

- the date, time and place, if any, of the meeting;
- the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting; and
- except for the annual meeting, must state at whose direction or request the meeting is called and the purposes for which it is called.

Any notice to stockholders given under any provision of the DGCL, the Veeco charter or the Veeco bylaws will be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given, to the extent that such consent is required by law. Any such consent is revocable by the stockholder by written notice to Veeco and will be deemed revoked if (i) Veeco is unable to deliver two consecutive notices by electronic transmission in accordance with such consent and (ii) such inability becomes known to the secretary, an assistant secretary, Veeco's transfer agent or other person responsible for the giving of notice. However, the inadvertent failure to treat such inability to deliver the notice as a revocation will not invalidate any meeting or other action.

Combined Company

written and:

- state the place, date and hour thereof and the purposes for which the meeting is called;
- must be given by the Secretary of the combined company not less than 10 nor more than 60 days before the date fixed for such meeting, to each stockholder of record entitled to vote at such meeting;
- must be given personally to each stockholder or left at his or her residence or usual place of business or mailed postage prepaid and addressed to the stockholder at his or her address as it appears upon the records of the corporation; and
- in case of the death, absence, incapacity or refusal of the Secretary of the combined company, such notice may be given by a person designated either by the Secretary or by the person or persons calling the meeting or by the combined company board of directors.

A waiver of such notice in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, will be deemed equivalent to such notice.

Attendance of a person at a meeting of stockholders will constitute a waiver of notice of such meeting, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

If mailed, any notice is deemed given when deposited in the United States mail with prepaid postage and directed to the stockholder at his, her or its address as it appears on Veeco's records. Any electronic notice is deemed given:

- if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice;
- if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice;
- if by a posting on an electronic network together with separate notice to the stockholder of the posting, upon the later of the posting and the giving of the separate notice; and
- if by any other form of electronic transmission, when directed to the stockholder.

Except as otherwise prohibited by law and without limiting the manner by which notice otherwise may be given to stockholders, any notice to stockholders given under any provision of the DGCL, the Veeco charter or the Veeco bylaws may be given by a single written notice to stockholders who share an address if consented to by the stockholders. The consent shall have been deemed to have been given if a stockholder fails to object in writing within 60 days of having been given written notice by Veeco of its intention to send the single notice. Any such consent is revocable by the stockholders by written notice to Veeco.

An affidavit of the secretary, an assistant secretary, Veeco's transfer agent or other agent that the notice has been given is, in the absence of fraud, *prima facie* evidence of the facts stated in such affidavit.

Stockholder Action by Written Consent

The DGCL provides that, unless otherwise stated in the certificate of incorporation, any action which may be taken at an annual meeting or special meeting of stockholders may be taken without a meeting, if a consent in writing is signed by the holders of the outstanding stock having the minimum number of votes necessary to authorize the action at a meeting of stockholders. The Veeco charter expressly provides that no action required or permitted to be taken at any meeting of stockholders may be taken by written consent without a meeting.

The DGCL provides that, unless otherwise stated in the certificate of incorporation, any action which may be taken at an annual meeting or special meeting of stockholders may be taken without a meeting, if a consent in writing is signed by the holders of the outstanding stock having the minimum number of votes necessary to authorize the action at a meeting of stockholders. The combined company charter expressly provides that any action required or permitted to be taken by the stockholders of the combined company must be effected at an annual or special meeting of the stockholders of the combined company and may not be taken by written consent in lieu of a meeting.

Certificate of Incorporation Amendments

Veeco

Under Section 242 of the DGCL, the certificate of incorporation may be amended upon a resolution of the board of directors and approved by:

- the holders of a majority of the outstanding shares entitled to vote; and
- a majority of the outstanding shares of each class entitled to a class vote, if any.

Bylaw Amendments

The Veeco charter provides that the Veeco board of directors is expressly authorized to make, alter or repeal the Veeco bylaws. The Veeco bylaws provide that such bylaws may also be adopted, amended, altered or repealed by the affirmative vote of the majority of the Veeco board of directors or by the affirmative vote of the holders of at least a majority of the voting power of the shares entitled to vote at an election of directors, at a meeting duly called for such purpose.

Limitation of Personal Liability of Directors

The Veeco charter provides that no director of Veeco will be personally liable to Veeco or its stockholders for monetary damages for breach of fiduciary duty as a director, except that a director may be liable for (i) any breach of the duty of loyalty to the corporation or its stockholders, (ii) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit.

Indemnification of Directors and Officers

The Veeco charter provides that its directors, officers, employees and agents will be indemnified to the fullest extent authorized by the DGCL.

The Veeco bylaws provide that Veeco will indemnify, to the fullest extent permitted by the DGCL, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person:

- is or was a director or officer of Veeco; or
- is or was serving at the request of Veeco as a director, officer or employee of another corporation or of partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans.

Combined Company

Under Section 242 of the DGCL, the certificate of incorporation may be amended upon a resolution of the board of directors and approved by:

- the holders of a majority of the outstanding shares entitled to vote; and
- a majority of the outstanding shares of each class entitled to a class vote, if any.

Bylaw Amendments

The combined company bylaws provide that such bylaws may be altered, amended or repealed or new bylaws may be adopted by the affirmative vote of a majority of the directors present at any regular or special meeting of the board of directors at which a quorum is present.

In general, Section 203 of the DGCL, subject to certain exceptions set forth therein, prohibits a business combination between a corporation and an interested stockholder within three years of the time such stockholder became an interested stockholder, unless (i) prior to such time, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder, (ii) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, exclusive of shares owned by directors who are also officers and by certain employee stock plans, or (iii) at or subsequent to such time, the business combination is approved by the board of directors of the corporation and authorized by the affirmative vote at a stockholders' meeting of at least 66 $\frac{2}{3}$ % of the outstanding voting stock of the corporation which is not owned by the interested stockholder.

Not applicable.

Change of Control Laws

In general, Section 203 of the DGCL, subject to certain exceptions set forth therein, prohibits a business combination between a corporation and an interested stockholder within three years of the time such stockholder became an interested stockholder, unless (i) prior to such time, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder, (ii) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, exclusive of shares owned by directors who are also officers and by certain employee stock plans, or (iii) at or subsequent to such time, the business combination is approved by the board of directors of the corporation and authorized by the affirmative vote at a stockholders' meeting of at least 66 $\frac{2}{3}$ % of the outstanding voting stock of the corporation which is not owned by the interested stockholder.

Forum Selection

The combined company charter provides that, unless the combined company consents in writing to the selection of an alternative forum, the sole and exclusive forum for certain legal actions will be a state court within the state of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware).

NO APPRAISAL RIGHTS

Appraisal rights are statutory rights that, if applicable under law, enable stockholders to dissent from an extraordinary transaction, such as a merger, and to demand that the corporation pay the fair value for their shares as determined by a court in a judicial proceeding instead of receiving the consideration offered to the stockholders in connection with the transaction. Under the DGCL, stockholders do not have appraisal rights if the shares of stock they hold are either listed on a national securities exchange or held of record by more than 2,000 holders. Notwithstanding the foregoing, appraisal rights are available if stockholders are required by the terms of the merger agreement to accept for their shares anything other than (i) shares of stock of the surviving corporation, (ii) shares of stock of another corporation that will either be listed on a national securities exchange or held of record by more than 2,000 holders, (iii) cash in lieu of fractional shares or (iv) any combination of the foregoing.

Because the merger is of Merger Sub with and into Veeco, and holders of Axcelis common stock will continue to hold their shares following completion of the merger, holders of Axcelis common stock are not entitled to appraisal rights.

Because Veeco stockholders will hold shares listed on a national securities exchange immediately prior to the completion of the merger and are not required by the terms of the merger agreement to accept for their shares anything other than shares of Axcelis common stock (which are listed on a national securities exchange) and cash in lieu of fractional shares, holders of Veeco common stock will not be entitled to appraisal rights in the merger.

LEGAL MATTERS

Skadden, Arps, Slate, Meagher & Flom LLP will pass upon the validity of the shares of Axcelis common stock offered hereby. Certain U.S. federal income tax consequences relating to the transactions have been passed upon for Veeco by Morrison & Foerster LLP.

EXPERTS

The consolidated financial statements of Axcelis Technologies, Inc. appearing in Axcelis Technology Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2024, and the effectiveness of Axcelis Technologies, Inc.'s internal control over financial reporting as of December 31, 2024 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Veeco as of December 31, 2024 and 2023, and for each of the years in the three year period ended December 31, 2024, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2024 have been included (incorporated by reference) herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere (incorporated by reference) herein, and upon the authority of said firm as experts in accounting and auditing.

CERTAIN BENEFICIAL OWNERS OF AXCELIS COMMON STOCK

To Axcelis' knowledge, the following table sets forth certain information regarding the beneficial ownership of Axcelis common stock as of December 26, 2025 (except as noted in the footnotes below) and with respect to:

- each person known by Axcelis to beneficially own 5% or more of the outstanding shares of Axcelis common stock;
- each member of the Axcelis board of directors;
- each named executive officer of Axcelis; and
- the members of the Axcelis board of directors and Axcelis's executive officers as a group.

Axcelis has determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, Axcelis believes, based on the information furnished to Axcelis, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of Axcelis common stock that he, she or it beneficially owns.

For purposes of this table, the Axcelis "named executive officers" are the executive officers of Axcelis appearing in Axcelis's last proxy statement.

Applicable percentage ownership and voting power is based on 30,699,201 shares of Axcelis common stock outstanding as of December 26, 2025.

Security Ownership of Axcelis Directors and Executive Officers

Unless otherwise noted below, the address of each beneficial owner listed in the table below is c/o Axcelis Technologies, Inc., 108 Cherry Hill Drive, Beverly, Massachusetts 01915.

Name of Beneficial Owner ⁽¹⁾	Total Common Stock Beneficially Owned	Percentage of Shares of Common Stock Outstanding
Non-Executive Directors		
Tzu-Yin Chiu	6,817	*
Gregory B. Graves	2,667	*
John T. Kurtzweil	31,464	*
Jeanne Quirk	7,591	*
Necip Sayiner	2,667	*
Thomas St. Dennis	13,569	*
Jorge Titinger	3,891	*
Named Executive Directors		
Russell J. Low, Ph.D.	45,834	*
James G. Coogan	4,287	*
Gregory F. Redinbo	13,541	*
Christopher Tatnall	4,597	*
Gerald M. Blumenstock	0	*
All current Executive Officers and Directors as a Group (12 persons)⁽²⁾⁽³⁾		
	136,925	*

* Represents less than 1%.

(1) Unless otherwise noted, the number of shares beneficially owned by each person listed includes any shares over which the person has sole or shared voting or investment power. In accordance with the rules of the SEC, the shares shown in the table also include shares that the persons named in this table have

the right to acquire on or before February 24, 2026 (60 days after December 26, 2025) by exercising a stock option or other right. Unless otherwise noted, to the knowledge of Axcelis based on information provided to Axcelis or filed with the SEC, each person has sole investment and voting power (or shares that power with his or her spouse) over the shares listed in the table. The percentage ownership of each person listed in the table was calculated using the total number of shares outstanding on December 26, 2025 (30,699,201 shares), plus any shares that person could acquire upon the exercise of any options or other right on or before February 24, 2026. None of the shares owned or rights to acquire shares are held in a margin account or subject to a pledge.

- (2) In addition to the directors and Named Executive Officers currently serving, Eileen J. Evans commenced service as the Executive Vice President (“EVP”), General Counsel and Secretary in December 2024. She holds 1,472 shares as of December 26, 2025, with no restricted stock units expected to vest on or before February 24, 2026. Lynnette C. Fallon, our former EVP and General Counsel, retired as an executive officer in February 2025.
- (3) In addition to the directors and Named Executive Officers currently serving, Robert Mahoney was appointed as the EVP, Global Operations in December 2025. He holds 3,595 shares as of December 26, 2025, with no restricted stock units expected to vest on or before February 24, 2026.

Security Ownership of Other Beneficial Owners

Based on information available to Axcelis as of December 26, 2025, Axcelis knows of no person who beneficially owned more than 5% of Axcelis common stock, except as set forth below:

Name and Address of Beneficial Owner ⁽¹⁾	Amount and Nature of Beneficial Ownership	Percent of Class ⁽¹⁾
BlackRock, Inc.⁽²⁾	4,911,042	15.84%
55 East 52nd Street, New York, NY 10055		
The Vanguard Group⁽³⁾	4,396,134	14.18%
100 Vanguard Blvd., Malvern, PA 19355		

- (1) Unless otherwise noted, the number of shares beneficially owned by each person listed includes any shares over which a person has sole or shared voting or investment power. The percentage ownership of each person listed in the table was calculated using the total number of shares outstanding on December 26, 2025 (30,699,201 shares).
- (2) Based on a Schedule 13G/A filed with the SEC in April 2025 reporting on ownership as of March 31, 2025. This filing states that BlackRock, Inc. is a holding company whose investment management subsidiaries acquired the shares reported. According to the Schedule 13G/A, BlackRock, Inc. has sole voting power over 4,911,042 shares and sole dispositive power of all the shares reported in the table.
- (3) Based on a Schedule 13G filed with the SEC in January 2025 reporting on ownership as of December 31, 2024. This filing reports on beneficial ownership of The Vanguard Group, and states that The Vanguard Group has sole voting power over no shares, shared voting power over 61,181 shares, sole dispositive power over 4,296,319 shares and shared dispositive power over 99,815 shares.

CERTAIN BENEFICIAL OWNERS OF VEECO COMMON STOCK

To Veeco's knowledge, the following table sets forth certain information regarding the beneficial ownership of Veeco common stock as of December 26, 2025 (except as noted in the footnotes below) and with respect to:

- each person known by Veeco to beneficially own 5% or more of the outstanding shares of Veeco common stock;
- each member of the Veeco board of directors;
- each named executive officer of Veeco; and
- the members of the Veeco board of directors and Veeco's executive officers as a group.

Veeco has determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, Veeco believes, based on the information furnished to Veeco, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of Veeco common stock that they beneficially own, subject to applicable community property laws.

For purposes of this table, the Veeco "named executive officers" are the executive officers of Veeco appearing in Veeco's proxy statement filed with the SEC on March 20, 2025.

Applicable percentage ownership and voting power is based on 60,297,087 shares of Veeco common stock outstanding as of December 26, 2025. Veeco has deemed shares of Veeco common stock subject to stock options or Veeco RSUs that are currently exercisable or that will settle within 60 days of December 26, 2025 to be outstanding and to be beneficially owned by the person holding the stock option or Veeco RSU for the purpose of computing the percentage ownership of that person. Veeco did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

At the close of business on December 26, 2025, directors and executive officers of Veeco beneficially owned and were entitled to vote an aggregate of approximately 1,352,038 shares of Veeco common stock, collectively representing 2.24% of the shares of Veeco common stock outstanding on December 26, 2025.

Security Ownership of Veeco Directors and Executive Officers

Unless otherwise noted below, the address of each beneficial owner listed in the table below is c/o Veeco Instruments Inc., 1 Terminal Drive, Plainview, New York 11803.

Name of Beneficial Owner	Total Common Stock Beneficially Owned	Percentage of Shares of Common Stock Outstanding
Non-Executive Directors:		
Kathleen A. Bayless	68,635	*
Sujeet Chand, Ph.D.	30,134	*
Richard A. D'Amore	153,350	*
Gordon Hunter	87,009	*
Keith D. Jackson	83,209	*
Lena Nicolaides, Ph.D.	22,527	*
Mary Jane Raymond	27,022	*
Thomas St. Dennis	60,152	*
Named Executive Officers:		
William J. Miller, Ph.D.	464,543	*
John Kiernan ⁽¹⁾	82,680	*
Adrian Devasahayam, Ph.D.	78,269.208	*
Peter Porshnev, Ph.D.	142,353.306	*
Susan Wilkerson	52,154.525	*
All current Executive Officers and Directors as a Group		
(13 persons)⁽²⁾	1,352,038.039	2.24%

* Represents less than 1%.

(1) Includes 72,642 shares held by a family trust, for which Mr. Kiernan and his wife are co-trustees.

Security Ownership of Other Beneficial Owners

Based on information available to Veeco as of December 26, 2025, Veeco knows of no person who beneficially owned more than 5% of Veeco common stock, except as set forth below:

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class
BlackRock, Inc.⁽¹⁾ 50 Hudson Yards, New York, New York 10001	8,694,097	14.42%
The Vanguard Group⁽²⁾ 100 Vanguard Blvd., Malvern, PA 19355	7,366,435	12.22%
FMR LLC⁽³⁾ 245 Summer Street, Boston, Massachusetts 02210	5,097,556.22	8.45%
Entities affiliated with Neuberger Berman Group LLC⁽⁴⁾ 1290 Avenue of the Americas, New York, New York 10104	3,423,251	5.68%
Entities affiliated with Manulife Financial Corporation⁽⁵⁾ <i>Multiple Addresses⁽⁵⁾</i>	3,215,031	5.33%

(1) Share ownership information is based on information contained in a Schedule 13G/A filed with the SEC on January 22, 2024. Of the 8,694,097 shares of Veeco common stock beneficially owned by this holder, this holder has (i) sole dispositive power with respect to all such shares, (ii) sole voting power with respect to 8,538,311 of such shares and (iii) no voting power with respect to 155,786 of such shares.

(2) Share ownership information is based on information contained in a Schedule 13G/A filed with the SEC on November 12, 2024. Of the 7,366,435 shares of Veeco common stock beneficially owned by this holder, this holder has (i) sole dispositive power with respect to 7,222,640 of such shares, (ii) shared dispositive power with respect to 143,795 of such shares, (iii) shared voting power with respect to 91,462 of such shares and (iv) no voting power with respect to 7,274,973 of such shares.

(3) Share ownership information is based on information contained in a Schedule 13G filed with the SEC on November 5, 2025. Reflects shares of Veeco common stock held by FMR LLC, which is referred to as FMR, which Abigail P. Johnson may also be deemed to beneficially own due to her ability to direct the disposition of such shares. Of the 5,097,556.22 shares of Veeco common stock held by FMR (i) FMR has sole voting power and sole dispositive power with respect to all such shares and (ii) Ms. Johnson has no voting power with respect to any of such shares and sole dispositive power with respect to all such shares.

(4) Share ownership information is based on information contained in a Schedule 13G/A filed with the SEC on February 12, 2024. Reflects shares of Veeco common stock that Neuberger Berman Trust Co N.A., Neuberger Berman Trust Co of Delaware N.A., Neuberger Berman Asia Ltd., Neuberger Berman Canada ULC, and Neuberger Berman Investment Advisers LLC, which is referred to as Neuberger Berman Advisors and, collectively, the Neuberger Berman Fiduciaries, may be deemed to beneficially own in their various fiduciary capacities by virtue of the provisions of Rule 13d-3 under the Exchange Act. Each of the Neuberger Berman Fiduciaries is a direct or indirect subsidiary of Neuberger Berman Group LLC, which is referred to as Neuberger Berman Group, and, therefore, Neuberger Berman Group may be deemed to have beneficial ownership of the shares of Veeco common stock. Of the 3,423,251 shares of Veeco common stock beneficially owned by Neuberger Berman Group and Neuberger Berman Advisors, Neuberger Berman Group and Neuberger Berman Advisors have (i) shared dispositive power with respect to all such shares, (ii) shared voting power with respect to 2,731,370 of such shares and (iii) no voting power with respect to 691,881 of such shares.

(5) Share ownership information is based on information contained in a Schedule 13G/A filed with the SEC on August 13, 2025. Consists of (i) 3,195,268 shares of Veeco common stock held by Manulife Investment Management (US) LLC, which is referred to as MIM (US), and (ii) 19,763 shares of Veeco common stock held by Manulife Investment Management Limited, which is referred to as MIML. MIM (US) and MIML are each indirect, wholly-owned subsidiaries of Manulife Financial Corporation, which is referred to as MFC, and, therefore, MFC may be deemed to have beneficial ownership of the shares held by MIM (US) and MIML. Each of MIM (US) and MIML have sole dispositive power and sole voting power with respect to the shares it holds. The address of MFC and MIML is 200 Bloor Street East, Toronto, Ontario, Canada, M4W 1E5, and the address of MIM (US) is 197 Clarendon Street, Boston, Massachusetts 02116.

STOCKHOLDER PROPOSALS

Axcelis

Stockholder Proposals for 2026 Annual Meeting

Any Axcelis stockholder who intends to present a proposal at the Axcelis 2026 annual meeting of stockholders:

- must have submitted to the Corporate Secretary at Axcelis Technologies, Inc., 108 Cherry Hill Drive, Beverly, Massachusetts 01915, any proposal for inclusion in Axcelis' proxy materials for that meeting pursuant to Rule 14a-8 under the Exchange Act on or before December 17, 2025; or
- must have submitted to the Corporate Secretary at Axcelis Technologies, Inc., 108 Cherry Hill Drive Beverly, Massachusetts 01915, no later than December 17, 2025, any proposal for directors to be nominated or other proposals to be properly presented at Axcelis' 2026 annual meeting that are not to be included in Axcelis' proxy statement for the 2026 annual meeting, in which case the notice of the proposal must have met certain requirements set forth in Axcelis' bylaws and Axcelis will not be required to include the proposal in Axcelis' proxy statement. If, however, Axcelis' 2026 annual meeting of stockholders is called for a date that is not within 30 days before March 17, 2026 or 60 days after March 17, 2026, notice must be received by Axcelis' Corporate Secretary at 108 Cherry Hill Drive, Beverly, Massachusetts 01915, no earlier than the 120th day prior to the 2026 annual meeting or, if later, no later than the 90th day before such annual meeting or the 10th day following the day on which public disclosure of the date of Axcelis' 2026 annual meeting of stockholders is made. All stockholder proposals must comply with Axcelis' bylaws and SEC regulations, including Rule 14a-8.

Veeco

Stockholder Proposals for 2026 Annual Meeting

In accordance with Rule 14a-8 of the Exchange Act, Veeco stockholders who wish to present proposals for inclusion in the proxy materials prepared by Veeco in connection with Veeco's 2026 annual meeting of stockholders must submit their proposals so that they are received by Veeco's Corporate Secretary at 1 Terminal Drive, Plainview, New York 11803 by November 20, 2025. Any such proposal must comply with the requirements of the Veeco bylaws and Rule 14a-8 under the Exchange Act, which lists the requirements for the inclusion of stockholder proposals in company-sponsored proxy materials.

Generally, timely notice of any director nomination or other proposal that any stockholder intends to present at Veeco's 2026 annual meeting of stockholders, but does not intend to have included in the proxy materials prepared by Veeco in connection with Veeco's 2026 annual meeting of stockholders, must be delivered in writing to the Corporate Secretary at the address above not less than 90 days nor more than 120 days before the first anniversary of the prior year's meeting. However, if Veeco holds its 2026 annual meeting of stockholders on a date that is not within 30 days before or 60 days after such anniversary date, Veeco must receive the notice no later than 10 days after the earlier of the date Veeco first provides notice of the meeting to stockholders or announces it publicly. In addition, the stockholder's notice must set forth the information required by the Veeco bylaws with respect to each stockholder making the proposal and each proposal that such stockholder intends to present at Veeco's 2026 annual meeting of stockholders.

For more information, including the information required to be included in a stockholder proposal, please refer to the Veeco bylaws, filed as Exhibit 3.1 to Veeco's Current Report on Form 8-K, filed with the SEC on January 10, 2023.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements and notices with respect to two or more stockholders sharing the same address by delivering a single proxy statement or a single notice addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially means extra convenience for stockholders and provides cost savings for companies. Some brokers household proxy materials, delivering a single proxy statement or notice to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement or notice, or if your household is receiving multiple copies of these documents and you wish to request that future deliveries be limited to a single copy, please notify your broker.

Requests for additional copies of this joint proxy statement/prospectus should be directed to, as applicable: Axcelis Technologies, Inc., 108 Cherry Hill Drive, Beverly, Massachusetts 01915, Telephone: (978) 787-4000, or Veeco Instruments Inc., 1 Terminal Drive, Plainview, New York 11803, Telephone (516) 677-0200.

WHERE YOU CAN FIND MORE INFORMATION

This joint proxy statement/prospectus incorporates documents by reference which are not presented in or delivered with this joint proxy statement/prospectus. Axcelis stockholders and Veeco stockholders should rely only on the information contained in this joint proxy statement/prospectus and in the documents that Axcelis and Veeco have incorporated by reference into this joint proxy statement/prospectus. Axcelis and Veeco have not authorized anyone to provide Axcelis stockholders or Veeco stockholders with information that is different from or in addition to the information contained in this document or incorporated by reference into this joint proxy statement/prospectus.

Axcelis and Veeco file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including both Axcelis and Veeco, which you can access at www.sec.gov. In addition, you may obtain free copies of the documents Axcelis files with the SEC, including the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, by going to Axcelis' Internet website at <https://axcelis.com/>, and you may obtain free copies of the documents Veeco files with the SEC by going to Veeco's Internet website at <https://veeco.com/>. The Internet website addresses of Axcelis and Veeco are provided as inactive textual references only. The information provided on the Internet websites of Axcelis and Veeco, other than copies of the documents listed below that have been filed with the SEC, is not part of this joint proxy statement/prospectus and, therefore, is not incorporated herein by reference.

Statements contained in this joint proxy statement/prospectus, or in any document incorporated by reference into this joint proxy statement/prospectus regarding the contents of any contract or other document, are not necessarily complete and each such statement is qualified in its entirety by reference to the full text of that contract or other document filed as an exhibit with the SEC. The SEC allows Axcelis and Veeco to "incorporate by reference" into this joint proxy statement/prospectus documents Axcelis and Veeco file with the SEC including certain information required to be included in the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part. This means that Axcelis and Veeco can disclose important information to you by referring you to those documents. The information incorporated by reference into this joint proxy statement/prospectus is considered to be a part of this joint proxy statement/prospectus, and later information that Axcelis and Veeco file with the SEC will update and supersede that information. Each of Axcelis and Veeco incorporate by reference the documents listed below and any documents subsequently filed by it pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act and before the date of its applicable special meeting.

Axcelis (SEC File No. 000-30941):

The following documents, which were filed by Axcelis with the SEC, are incorporated by reference into this joint proxy statement/prospectus (other than information furnished pursuant to Item 2.02 or Item 7.01 of a Current Report on Form 8-K, or exhibits thereto under Item 9.01) contain important information about Axcelis' business and Axcelis' financial performance:

- Axcelis' Annual Report on Form 10-K for the year ended December 31, 2024, filed with the SEC on February 28, 2025;
- Axcelis' definitive proxy statement on Form DEF 14A, filed with the SEC on March 31, 2025;
- Axcelis' Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, filed with the SEC on May 6, 2025;
- Axcelis' Quarterly Report on Form 10-Q for the quarter ended June 30, 2025, filed with the SEC on August 5, 2025;
- Axcelis' Quarterly Report on Form 10-Q for the quarter ended September 30, 2025, filed with the SEC on November 6, 2025;
- Axcelis' Current Report on Form 8-K filed with the SEC on January 10, 2025;
- Axcelis' Current Report on Form 8-K filed with the SEC on February 10, 2025;

- Axcelis' Current Report on Form 8-K filed with the SEC on March 12, 2025;
- Axcelis' Current Report on Form 8-K filed with the SEC on May 6, 2025;
- Axcelis' Current Report on Form 8-K filed with the SEC on May 8, 2025;
- Axcelis' Current Report on Form 8-K filed with the SEC on August 5, 2025;
- Axcelis' Current Report on Form 8-K filed with the SEC on October 1, 2025 (Film No. 251365666);
- Axcelis' Current Report on Form 8-K filed with the SEC on October 1, 2025 (Film No. 251362550);
- Axcelis' Current Report on Form 8-K filed with the SEC on November 4, 2025; and
- the description of securities registered under Section 12 of the Exchange Act, incorporated by reference to Exhibit 4.4 of Axcelis' Form 10-K for the year ended December 31, 2019 filed with the SEC on March 2, 2020.

You may request a copy of this joint proxy statement/prospectus or any of the documents incorporated by reference into this joint proxy statement/prospectus or other information concerning Axcelis, without charge, by written or telephonic request to:

Axcelis Technologies, Inc.
108 Cherry Hill Drive
Beverly, Massachusetts 01915
Telephone: (978) 787-4000
Attention: Corporate Secretary

or from the SEC through the SEC website at the address provided above.

Veeco (SEC File No. 0-16244):

The following documents, which were filed by Veeco with the SEC, are incorporated by reference into this joint proxy statement/prospectus (other than information furnished pursuant to Item 2.02 or Item 7.01 of a Current Report on Form 8-K, or exhibits thereto under Item 9.01) contain important information about Veeco's business and Veeco's financial performance:

- Veeco's Annual Report on Form 10-K for the year ended December 31, 2024, filed with the SEC on February 14, 2025;
- Veeco's definitive proxy statement on Form DEF 14A, filed with the SEC on March 20, 2025;
- Veeco's Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, filed with the SEC on May 7, 2025;
- Veeco's Quarterly Report on Form 10-Q for the quarter ended June 30, 2025, filed with the SEC on August 6, 2025;
- Veeco's Quarterly Report on Form 10-Q for the quarter ended September 30, 2025, filed with the SEC on November 5, 2025;
- Veeco's Current Report on Form 8-K filed with the SEC on May 8, 2025;
- Veeco's Current Report on Form 8-K filed with the SEC on May 15, 2025 (solely with respect to Item 3.03 therein);
- Veeco's Current Report on Form 8-K filed with the SEC on June 17, 2025;
- Veeco's Current Report on Form 8-K filed with the SEC on August 6, 2025;
- Veeco's Current Report on Form 8-K filed with the SEC on October 1, 2025; and
- the descriptions of the Veeco common stock contained in Veeco's registration statement on Form 8-A, filed with the SEC under Section 12 of the Exchange Act on November 18, 1994, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of this joint proxy statement/prospectus or any of the documents incorporated by reference into this joint proxy statement/prospectus or other information concerning Veeco, without charge, by written or telephonic request to:

Veeco Instruments Inc.
1 Terminal Drive
Plainview, New York 11803
Telephone: (516) 677-0200
Attention: Corporate Secretary

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AGREEMENT AND PLAN OF MERGER

among

AXCELIS TECHNOLOGIES, INC.,

VICTORY MERGER SUB, INC.,

and

VEECO INSTRUMENTS INC.

Dated as of September 30, 2025

TABLE OF CONTENTS

	<u>Page</u>
ARTICLE 1	
The Merger	
1.1	The Merger
1.2	Closing
1.3	Effective Time
1.4	Surviving Corporation Certificate of Incorporation and Bylaws
1.5	Directors and Officers of the Surviving Corporation
1.6	Combined Parent Company Governance
ARTICLE 2	
Conversion of Securities in the Merger	
2.1	Effect on Capital Stock of Veeco; Conversion of Veeco Common Stock and Merger Sub Common Stock
2.2	Effect on Axcelis Common Stock
2.3	Certain Adjustments
2.4	Fractional Shares
2.5	Exchange of Certificates and Book-Entry Shares
2.6	Stock-Based Awards
2.7	Veeco Convertible Notes
2.8	No Appraisal Rights
2.9	Withholding Rights
ARTICLE 3	
Representations and Warranties of Veeco	
3.1	Corporate Organization
3.2	Veeco Capitalization
3.3	Authority; Execution and Delivery; Enforceability
3.4	No Conflicts
3.5	SEC Documents; Financial Statements; Undisclosed Liabilities
3.6	Absence of Certain Changes or Events
3.7	Information Supplied
3.8	Legal Proceedings
3.9	Compliance with Laws
3.10	Permits
3.11	Employee Benefit Plans
3.12	Employee and Labor Matters
3.13	Environmental Matters
3.14	Real Property
3.15	Tax Matters
3.16	Material Contracts

	<u>Page</u>
3.17 Intellectual Property	A-22
3.18 Data Privacy	A-24
3.19 Broker's Fees	A-24
3.20 Opinion of Veeco's Financial Advisor	A-24
3.21 Ownership of Veeco Common Stock	A-25
3.22 Insurance	A-25
3.23 Takeover Provisions	A-25
3.24 Assets	A-25
3.25 Top Customers and Suppliers	A-25
3.26 Product Defects and Warranties	A-26
3.27 No Other Representations or Warranties	A-26

ARTICLE 4

Representations and Warranties of Axcelis

4.1 Corporate Organization	A-26
4.2 Axcelis Capitalization	A-27
4.3 Authority; Execution and Delivery; Enforceability	A-28
4.4 No Conflicts	A-28
4.5 SEC Documents; Financial Statements; Undisclosed Liabilities	A-29
4.6 Absence of Certain Changes or Events	A-30
4.7 Information Supplied	A-30
4.8 Legal Proceedings	A-31
4.9 Compliance with Laws	A-31
4.10 Permits	A-32
4.11 Employee Benefit Plans	A-32
4.12 Employee and Labor Matters	A-34
4.13 Environmental Matters	A-35
4.14 Real Property	A-35
4.15 Tax Matters	A-36
4.16 Material Contracts	A-37
4.17 Intellectual Property	A-39
4.18 Data Privacy	A-41
4.19 Broker's Fees	A-41
4.20 Opinion of Axcelis's Financial Advisor	A-41
4.21 Ownership of Veeco Common Stock	A-41
4.22 Insurance	A-41
4.23 Takeover Provisions	A-42
4.24 Assets	A-42
4.25 Top Customers and Suppliers	A-42
4.26 Product Defects and Warranties	A-42
4.27 Merger Sub	A-43
4.28 No Other Representations or Warranties	A-43

ARTICLE 5

Covenants

5.1	Conduct of Business by Veeco and its Subsidiaries Pending the Effective Time	A-43
5.2	Conduct of Business by Acelis and its Subsidiaries Pending the Effective Time	A-46
5.3	Preparation of the Form S-4 and the Joint Proxy Statement; Stockholders Meetings	A-49
5.4	No Solicitation of Transactions	A-51
5.5	Access to Information; Confidentiality	A-55
5.6	Appropriate Action	A-55
5.7	Certain Notices	A-57
5.8	Public Announcements	A-57
5.9	Director and Officer Indemnification	A-58
5.10	Stock Exchange Listing	A-58
5.11	Section 16 Matters	A-59
5.12	Stockholder Litigation	A-59
5.13	Tax Matters	A-59
5.14	Employee Matters	A-60
5.15	Cooperation; Integration Planning	A-61
5.16	Stock Exchange Delisting and Deregistration	A-62
5.17	Treatment of Veeco Convertible Notes and Veeco Capped Call Instruments.	A-62
5.18	Treatment of Veeco Indebtedness	A-63
5.19	ISRA	A-63
5.20	Takeover Provisions	A-63
5.21	Obligations of Merger Sub	A-63
5.22	Merger Sub Stockholder Consent	A-63
5.23	Filing of Form S-8	A-63

ARTICLE 6

Conditions to Consummation of the Merger

6.1	Conditions to Obligations of Each Party Under This Agreement	A-63
6.2	Conditions to Obligations of Acelis and Merger Sub Under This Agreement	A-64
6.3	Conditions to Obligations of Veeco Under This Agreement	A-65

ARTICLE 7

Termination, Amendment and Waiver

7.1	Termination	A-65
7.2	Effect of Termination	A-66
7.3	Termination Fees; Expenses	A-67
7.4	Amendment or Supplement	A-68
7.5	Extension of Time; Waiver	A-69

ARTICLE 8

General Provisions

8.1	Non-Survival of Representations and Warranties	A-69
8.2	Notices	A-69
8.3	Certain Definitions	A-70
8.4	Headings	A-76
8.5	Severability	A-76
8.6	Entire Agreement	A-77
8.7	Assignment	A-77
8.8	Parties in Interest	A-77
8.9	Mutual Drafting; Interpretation	A-77
8.10	Governing Law; Consent to Jurisdiction; Waiver of Trial by Jury	A-78
8.11	Counterparts	A-78
8.12	Delivery by Email	A-78
8.13	Specific Performance	A-79
8.14	Disclosure Schedules	A-79

Exhibit A Form of Certificate of Incorporation of the Surviving Corporation

GLOSSARY OF DEFINED TERMS

Defined Term	Section
Acceptable Confidentiality Agreement	8.3
affiliate	8.3
Agreement	Preamble
Anti-corruption Laws	8.3
Antitrust Laws	8.3
associate	8.3
Axcelis	Preamble
Axcelis Adverse Recommendation Change	5.3(c)(ii)
Axcelis Benefit Plan	8.3
Axcelis Board	Recitals
Axcelis Business Personnel	4.12(a)
Axcelis Bylaws	4.1
Axcelis Charter	4.1
Axcelis Common Stock	2.1(b)
Axcelis Data Privacy and Security Laws	4.18
Axcelis Disclosure Schedule	8.3
Axcelis ESPP	4.2(a)
Axcelis Foreign Benefit Plan	4.11(j)
Axcelis Intervening Event	5.4(g)(i)
Axcelis Lease	4.14(b)
Axcelis Leased Real Property	4.14(b)
Axcelis Material Adverse Effect	8.3
Axcelis Material Contracts	4.16(c)
Axcelis Material Intellectual Property	4.17(d)
Axcelis Owned Real Property	4.14(a)
Axcelis Preferred Stock	8.3
Axcelis Products	8.3
Axcelis Qualified Plan	5.14(e)
Axcelis Recommendation	4.3(b)
Axcelis Registered Intellectual Property	4.17(a)
Axcelis RSA	2.6(c)(ii)
Axcelis RSU	2.6(a)(ii)
Axcelis SEC Documents	4.5(a)
Axcelis SEC Financial Statements	4.5(c)
Axcelis Securities	4.2(a)
Axcelis Share Issuance	5.4(f)
Axcelis Software	8.3
Axcelis Stock Plan	8.3
Axcelis Stockholder Approval	4.3(c)
Axcelis Stockholders Meeting	5.3(c)(i)
Axcelis Termination Fee	7.3(b)
Axcelis Top Customer	4.25(a)

Defined Term	Section
Axcelis Top Supplier	4.25(b)
beneficial ownership	8.3
Business Day	8.3
Capitalization Date	3.2(a)
Certificate of Merger	1.3(a)
Chosen Courts	8.10(b)
Closing	1.2
Closing Date	1.2
COBRA	3.11(g)
Code	8.3
Collective Bargaining Agreement	8.3
Common Shares Trust	2.4(b)
Competing Proposal	5.4(g)(i)
Competing Proposal Notice	5.4(b)
Confidentiality Agreement	5.5(a)
Consents	5.6(a)
Contaminants	3.17(f)
Continuing Employee	5.14(a)
Contract	8.3
control	8.3
controlled by	Def. of 'control'
Current Purchase Period	2.6(d)
D&O Insurance	5.9(c)
Designated Chairman	1.6(a)
Detriment	5.6(d)
DGCL	8.3
Disclosure Schedules	8.3
Divestiture Action	8.3
Effective Time	1.3(b)
Enforcement Costs	7.3(f)
Environmental Claim	8.3
Environmental Laws	8.3
Environmental Permits	8.3
Equity Interest	8.3
ERISA	8.3
ERISA Affiliate	8.3
Excess Shares	2.4(a)
Exchange Act	8.3
Exchange Agent	2.5(a)
Exchange Fund	2.5(a)
Existing Veeco Credit Facility	8.3
Expenses	8.3
Export Approvals	3.9(f)

Defined Term	Section
FCPA	3.9(b)
Final Purchase Period	2.6(d)
First Extended Outside Date	7.1(b)(ii)
Form S-4	3.7
Fractional Shares Cash Amount	2.4(b)
GAAP	8.3
Government Official	8.3
Government Shutdown	8.3
Governmental Entity	8.3
group	8.3
Hazardous Materials	8.3
HSR Act	8.3
Indemnitee	5.9(a)
Indemnitees	5.9(a)
Initial Outside Date	7.1(b)(ii)
Integration Planning Committee	5.15(b)
Intellectual Property	8.3
Intended Tax Treatment	Preamble
Investment Screening Laws	8.3
IRS	8.3
ISRA	8.3
IT Assets	8.3
Joint Proxy Statement	8.3
Knowledge	8.3
known	Def. of 'Knowledge'
Labor Organization	8.3
Law	8.3
Lien	8.3
Merger	1.1(a)
Merger Sub	Preamble
MoFo	5.13(b)
Multiemployer Plan	3.11(e)
Nasdaq	8.3
Nasdaq Listing Application	5.10
Negotiation Period	5.4(b)
OFAC	3.9(e)
Open Source Licenses	Def. of 'Open Source Material'
Open Source Material	8.3
Order	8.3
Other Covered Party	8.3
Outside Date	8.3
Payment Amount	5.18
Payoff Letter	5.18

Defined Term	Section
Permits	3.9(d)
Permitted Liens	8.3
Person	8.3
Personal Information	8.3
Post-Closing Plans	5.14(c)
Pre-Closing Integration Plan	5.15(b)
Proceeding	8.3
Regulatory Strategy Framework	5.6(a)
Release	8.3
Representatives	8.3
Sanctioned Country	3.9(e)
Sanctioned Person	3.9(e)
Sanctions	3.9(e)
Sarbanes-Oxley Act	3.5(d)
SEC	8.3
SEC Opinion	5.13(b)
Second Extended Outside Date	7.1(b)(ii)
Securities Act	8.3
Software	8.3
Source Code	8.3
Subsidiary	8.3
Superior Proposal	5.4(g)(iii)
Surviving Corporation	1.1(a)
Takeover Provisions	8.3
Tax Return	8.3
Taxes	8.3
Taxing Authority	8.3
Trade Control Laws	3.9(f)
Trademarks	8.3
Trading Day	8.3
Transactions	1.1(a)
Treasury Regulations	8.3
Trustee	5.17(a)
under common control with	Def. of 'control'
Unvested Veeco PSU	2.6(b)(ii)
Unvested Veeco RSU	2.6(a)(ii)
Veeco	Preamble, 1.1(a)
Veeco Adverse Recommendation Change	5.3(b)(ii)
Veeco Benefit Plan	8.3
Veeco Board	Recitals
Veeco Book-Entry Shares	2.1(c)
Veeco Business Personnel	3.12(a)
Veeco Bylaws	3.1

Defined Term	Section
Veeco Capped Call Instruments	5.17(a)
Veeco Certificate	2.1(c)
Veeco Charter	3.1
Veeco Common Stock	2.1
Veeco Convertible Notes	5.17(a)
Veeco Convertible Notes Indenture	5.17(a)
Veeco Data Privacy and Security Laws	3.18
Veeco Director Restricted Stock Award	2.6(c)(i)
Veeco Disclosure Schedule	8.3
Veeco ESPP	2.6(d)
Veeco Exchange Ratio	2.1(b)
Veeco Foreign Benefit Plan	3.11(j)
Veeco Intervening Event	5.4(g)(iv)
Veeco Lease	3.14(b)
Veeco Leased Real Property	3.14(b)
Veeco Material Adverse Effect	8.3
Veeco Material Contracts	3.16(c)
Veeco Material Intellectual Property	3.17(d)
Veeco Merger Consideration	2.1(b)
Veeco Owned Real Property	3.14(a)
Veeco Products	8.3
Veeco PSU	8.3
Veeco Qualified Plan	5.14(e)
Veeco Recommendation	3.3(b)
Veeco Registered Intellectual Property	3.17(a)
Veeco RSU	8.3
Veeco SEC Documents	3.5(a)
Veeco SEC Financial Statements	3.5(c)
Veeco Securities	3.2(a)
Veeco Software	8.3
Veeco Stock Plan	8.3
Veeco Stockholder Approval	3.3(c)
Veeco Stockholders Meeting	5.3(b)(i)
Veeco Termination Fee	7.3(d)
Veeco Top Customer	3.25(a)
Veeco Top Supplier	3.25(b)
Vested Veeco PSU	2.6(b)(i)
Vested Veeco PSU Consideration	2.6(b)(i)
Vested Veeco RSU	2.6(a)(i)
Vested Veeco RSU Consideration	2.6(a)(i)
WARN Act	5.1(o)
Willful Breach	8.3

AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER (this “Agreement”) is dated as of September 30, 2025, by and among Axcelis Technologies, Inc., a Delaware corporation (“Axcelis”), Victory Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Axcelis (“Merger Sub”), and Veeco Instruments Inc., a Delaware corporation (“Veeco”).

RECITALS

WHEREAS, Axcelis has organized Merger Sub for the purpose of effecting the transactions contemplated by this Agreement;

WHEREAS, each of Axcelis, Merger Sub and Veeco desire, following the satisfaction or waiver of the conditions set forth in Article 6, to effect the Merger upon the terms and subject to the conditions set forth in this Agreement, pursuant to which Merger Sub shall be merged with and into Veeco, with Veeco as the surviving entity in the Merger and continuing as a wholly owned subsidiary of Axcelis;

WHEREAS, each of Axcelis, Merger Sub, and Veeco intend that, for U.S. federal income tax purposes, the Merger will qualify as a “reorganization” within the meaning of Section 368(a) of the Code (the “Intended Tax Treatment”), and that this Agreement be, and is hereby adopted as, a “plan of reorganization” within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a) and for purposes of Sections 354, 361 and 368 of the Code;

WHEREAS, the Boards of Directors of each of Axcelis, Merger Sub, and Veeco have each unanimously (except, in the case of Axcelis and Veeco, for one (1) director recusing himself) approved and declared advisable this Agreement and the Transactions, including the Merger, and determined that it is advisable and in the best interests of their respective companies and stockholders to consummate the Merger and the Transactions on the terms and conditions set forth in this Agreement;

WHEREAS, the Board of Directors of Axcelis (the “Axcelis Board”) has, subject to Section 5.4, unanimously (except for one (1) director recusing himself) resolved to recommend the approval of the Axcelis Share Issuance to Axcelis’s stockholders;

WHEREAS, the Board of Directors of Veeco (the “Veeco Board”) has, subject to Section 5.4, unanimously (except for one (1) director recusing himself) resolved to recommend the adoption of this Agreement to Veeco’s stockholders; and

WHEREAS, Axcelis, Merger Sub and Veeco desire to make certain representations, warranties, covenants and agreements in connection with the Merger and also to prescribe various conditions to the Merger.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and premises contained in this Agreement and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties to this Agreement agree as follows:

ARTICLE 1

THE MERGER

1.1 The Merger.

(a) At the Effective Time, Merger Sub shall be merged with and into Veeco (the “Merger”) in accordance with the DGCL, and upon the terms and conditions set forth in this Agreement, whereupon the separate existence of Merger Sub shall cease and Veeco shall continue as the surviving corporation (the “Surviving Corporation”). As a result of the Merger, the Surviving Corporation shall become a wholly owned subsidiary of Axcelis. The Merger and other transactions contemplated by this Agreement are referred to herein as the “Transactions”. References herein to “Veeco” with respect to the period from and after the Effective Time shall be deemed to be references to the Surviving Corporation.

(b) The Merger shall have the effects specified in the DGCL. From and after the Effective Time, the Surviving Corporation shall possess all the rights, powers, privileges and franchises and be subject to all of the obligations, liabilities and duties of Veeco and Merger Sub, all as provided under the DGCL.

1.2 Closing. The closing of the Merger (the “Closing”) shall be held virtually at 9:00 a.m. Eastern time, as soon as practicable (and, in any event, within three (3) Business Days) after satisfaction or, to the extent permitted by applicable Law, waiver of all applicable conditions set forth in Article 6 (except for any conditions that by their nature can only be satisfied at the Closing, but subject to the satisfaction of such conditions or, to the extent permitted by applicable Law, waiver by the party entitled to waive such conditions) or at such other time and place as Axcelis and Veeco shall agree. The date on which the Closing occurs is referred to herein as the “Closing Date”.

1.3 Effective Time.

(a) On the Closing Date, Veeco and Merger Sub shall file a certificate of merger relating to the Merger (the “Certificate of Merger”) with the Secretary of State of the State of Delaware in accordance with the relevant provisions of the DGCL and shall make all other filings or recordings required under the DGCL.

(b) The Merger shall become effective concurrently upon the due filing of the Certificate of Merger with the Secretary of State of the State of Delaware, or such later time as Axcelis and Veeco shall agree and specify in the Certificate of Merger (such time as the Merger becomes effective being the “Effective Time”).

1.4 Surviving Corporation Certificate of Incorporation and Bylaws. At the Effective Time, the certificate of incorporation of Veeco in effect immediately prior to the Effective Time shall be amended and restated pursuant to the Merger in its entirety as set forth as Exhibit A, and as so amended and restated shall be the certificate of incorporation of the Surviving Corporation until thereafter changed or amended as provided therein or by applicable Law, subject to Section 5.9. At the Effective Time, Axcelis shall take such action necessary to cause the bylaws of Veeco in effect immediately prior to the Effective Time to be amended and restated in their entirety so as to be identical to the bylaws of Merger Sub as in effect immediately prior to the Effective Time (except that the name of the Surviving Corporation shall be changed to a name to be mutually agreed by Axcelis and Veeco prior to the Effective Time), and as so amended and restated shall be the bylaws of the Surviving Corporation until thereafter changed or amended as provided therein or by applicable Law, subject to Section 5.9.

1.5 Directors and Officers of the Surviving Corporation. The parties shall take all necessary action such that, from and after the Effective Time, until successors are duly elected or appointed and qualified in accordance with applicable Law, (i) the directors of the Surviving Corporation shall be those individuals who were directors of Merger Sub as of immediately prior to the Effective Time and (ii) the officers of the Surviving Corporation shall be those individuals who were officers of Merger Sub as of immediately prior to the Effective Time.

1.6 Combined Parent Company Governance.

(a) Unless otherwise agreed by Axcelis and Veeco in writing, the parties shall take all necessary action to cause the size of the Axcelis Board to be comprised of eleven (11) members at the Effective Time. Prior to the Effective Time, Axcelis and Veeco shall each designate directors such that at the Effective Time, the Axcelis Board shall be comprised of: (i) Thomas St. Dennis, who shall serve as chairman of the Axcelis Board (the “Designated Chairman”) as of immediately after the Effective Time unless otherwise agreed by Axcelis and Veeco, (ii) four (4) directors, designated by the Veeco Board, each of whom shall be a director of Veeco prior to the Effective Time and be reasonably acceptable to Axcelis (including William J. Miller, who is deemed reasonably acceptable to Axcelis) and (iii) six (6) directors, designated by the Axcelis Board, each of whom shall be a director of Axcelis prior to the Effective Time and be reasonably acceptable to Veeco (including Russell Low and Jorge Titinger, each of whom is deemed reasonably acceptable to Veeco); provided that, prior to the Effective Time, in the event that any person designated to serve on the Axcelis Board after the Effective Time is unable or unwilling to serve as a result of illness, death, resignation or any other reason, the Board of Directors which designated such person shall designate another of its directors to serve in such person’s place. Subject to the proviso in the foregoing sentence, William J. Miller shall serve

as chairman of the Technology Committee of the Axcelis Board. Each director designee (other than the chief executive officer of Axcelis or Veeco immediately prior to the Effective Time) must qualify as an “independent director”, as such term is defined in Nasdaq Rule 5605(a)(2); provided, that at least two (2) of the Veeco designees and two (2) of the Axcelis designees shall meet the minimum requirements to serve on Axcelis’s audit committee under the Nasdaq Rules. Effective at the Effective Time, unless otherwise agreed by Veeco and Axcelis in writing, the parties shall take all necessary action to cause the appointments contemplated by this Section 1.6(a).

(b) Immediately following the Effective Time, Axcelis and the Surviving Corporation shall have their headquarters and principal executive offices in Beverly, Massachusetts.

(c) Notwithstanding anything to the contrary, the parties agree that (i) following the Closing, the corporate name and ticker symbol of Axcelis shall be changed to a corporate name and ticker symbol mutually agreed by Axcelis and Veeco prior to the Closing, (ii) the joint press release to be issued by Axcelis and Veeco announcing the Closing shall include such new name and (iii) Axcelis will use reasonable best efforts to take any actions necessary or advisable (including submitting such name change for a shareholder vote or effecting a short-form merger with a subsidiary formed for such purpose, if needed) to effect such renaming as promptly as reasonably practicable following the Closing.

ARTICLE 2

CONVERSION OF SECURITIES IN THE MERGER

2.1 Effect on Capital Stock of Veeco; Conversion of Veeco Common Stock and Merger Sub Common Stock. At the Effective Time, by virtue of the Merger and without any action on the part of Axcelis, Veeco, Merger Sub or any holder of any shares of Veeco common stock, \$0.01 par value per share (“Veeco Common Stock”):

(a) All shares of Veeco Common Stock that are owned by Veeco, Axcelis or Merger Sub or any wholly owned Subsidiary of Veeco, Axcelis, or Merger Sub (or are held in treasury by Veeco) immediately prior to the Effective Time shall cease to be outstanding and shall be cancelled and retired and shall cease to exist, and no consideration shall be delivered in exchange therefor.

(b) Subject to Section 2.1(a), Section 2.3, Section 2.4 and Section 2.6, each share of Veeco Common Stock issued and outstanding immediately prior to the Effective Time shall be converted into and thereafter represent the right to receive that number of validly issued, fully paid and non-assessable shares of Axcelis common stock, \$0.001 par value per share (“Axcelis Common Stock”), equal to the Veeco Exchange Ratio. The shares of Axcelis Common Stock to be issued upon the conversion of shares of Veeco Common Stock pursuant to this Section 2.1(b) and the Fractional Shares Cash Amount to be paid in lieu of fractional shares pursuant to Section 2.4 are referred to, as applicable, as the “Veeco Merger Consideration”. For purposes of this Agreement, “Veeco Exchange Ratio” means 0.3575. Without limiting the foregoing, except as contemplated by Section 2.6(c)(i) of this Agreement, any risk of forfeiture or right of repurchase in favor of Veeco that is applicable to any Veeco Common Stock as of immediately prior to the Effective Time shall apply to the related Axcelis Common Stock received as Veeco Merger Consideration on the same terms and conditions except that the vesting schedule and repurchase price shall be adjusted to reflect the Veeco Exchange Ratio and references to services to or performance of Veeco and its Subsidiaries shall be deemed to refer to Axcelis and its Subsidiaries.

(c) All of the outstanding shares of Veeco Common Stock shall be converted into the right to receive the applicable Veeco Merger Consideration pursuant to this Section 2.1 and all such shares of Veeco Common Stock shall cease to be outstanding and shall cease to exist and, as of the Effective Time, each holder of a certificate representing any such shares of Veeco Common Stock (an “Veeco Certificate”) or shares of Veeco Common Stock held in book entry form (“Veeco Book-Entry Shares”) shall cease to have any rights with respect thereto, except the right to receive, in accordance with Section 2.1(b), the applicable Veeco Merger Consideration, upon surrender of such Veeco Certificate or Veeco Book-Entry Share in accordance with Section 2.5.

(d) Each share of common stock of Merger Sub, par value \$0.01 per share, issued and outstanding immediately prior to the Effective Time shall be converted into one (1) share of common stock, par value \$0.0001 per share, of the Surviving Corporation.

2.2 Effect on Axcelis Common Stock. At the Effective Time, each share of Axcelis Common Stock issued and outstanding immediately prior to the Effective Time shall remain outstanding.

2.3 Certain Adjustments. Notwithstanding anything in this Agreement to the contrary, if, from the date of this Agreement until the Effective Time, the outstanding shares of Axcelis Common Stock or Veeco Common Stock shall have been changed into a different number of shares or a different class by reason of any reclassification, stock split (including a reverse stock split), recapitalization, split-up, combination, exchange of shares, readjustment, or other similar transaction, or a stock dividend or stock distribution thereon shall be declared with a record date within said period, the applicable Veeco Merger Consideration and the Veeco Exchange Ratio and any other similarly dependent items, as the case may be, shall be equitably adjusted to provide the holders of Veeco Common Stock the same economic effect as contemplated by this Agreement prior to such event; provided that nothing contained in this sentence shall be construed to permit Axcelis or Veeco to take any action with respect to its securities or otherwise that is prohibited or restricted by the terms of this Agreement.

2.4 Fractional Shares.

(a) No fractional shares of Axcelis Common Stock shall be issued in the Merger, but in lieu thereof each holder of Veeco Common Stock otherwise entitled to a fractional share of Axcelis Common Stock (after aggregating all shares represented by Veeco Certificates and Veeco Book-Entry Shares held by such holder) will be entitled to receive, from the Exchange Agent in accordance with the provisions of this Section 2.4, a cash payment in lieu of such fractional share of Axcelis Common Stock representing such holder's proportionate interest, if any, in the proceeds from the sale by the Exchange Agent (reduced by any fees of the Exchange Agent attributable to such sale) in one or more transactions of shares of Axcelis Common Stock equal to the excess of (A) the aggregate number of shares of Axcelis Common Stock to be delivered to the Exchange Agent by Axcelis pursuant to Section 2.5(a) over (B) the aggregate number of whole shares of Axcelis Common Stock to be distributed to the holders of shares of Veeco Common Stock pursuant to Section 2.5(b) (such excess, the "Excess Shares"). Veeco and Axcelis acknowledge that payment of the cash consideration in lieu of issuing fractional shares of Axcelis Common Stock was not separately bargained-for consideration but merely represents a mechanical rounding off for purposes of avoiding the expense and inconvenience to Axcelis that would otherwise be caused by the issuance of fractional shares of Axcelis Common Stock. As soon as practicable after the Effective Time, the Exchange Agent, as agent for the holders of Veeco Common Stock that would otherwise receive fractional shares of Axcelis Common Stock, shall sell the Excess Shares at then prevailing prices on Nasdaq in the manner provided in the following paragraph.

(b) The sale of the Excess Shares by the Exchange Agent, as agent for the holders of Veeco Common Stock that would otherwise receive fractional shares of Axcelis Common Stock, shall be executed on Nasdaq and shall be executed in round lots to the extent practicable. Until the proceeds of such sale or sales have been distributed to the holders of Veeco Common Stock, the Exchange Agent shall hold such proceeds in trust for the holders of Veeco Common Stock that would otherwise receive fractional shares of Axcelis Common Stock (the "Common Shares Trust"). The Exchange Agent shall determine the portion of the Common Shares Trust to which each holder of Veeco Common Stock shall be entitled, if any, by multiplying the amount of the aggregate proceeds comprising the Common Shares Trust by a fraction, the numerator of which is the amount of the fractional share interest to which such holder of Veeco Common Stock would otherwise be entitled and the denominator of which is the aggregate amount of fractional share interests to which all holders of Veeco Common Stock would otherwise be entitled (the "Fractional Shares Cash Amount").

(c) As soon as practicable after the determination of the amount of cash, if any, to be paid to holders of Veeco Common Stock in lieu of any fractional shares of Axcelis Common Stock, the Exchange Agent shall make available such amounts to such holders of shares of Veeco Common Stock without interest, subject to and in accordance with Section 2.5.

2.5 Exchange of Certificates and Book-Entry Shares.

(a) Prior to the dissemination of the Joint Proxy Statement to the stockholders of Veeco and the stockholders of Axcelis, Axcelis and Veeco shall appoint a nationally recognized financial institution or trust company to act as exchange agent (the “Exchange Agent”) for the payment and delivery of the Veeco Merger Consideration. At or prior to the Effective Time, Axcelis shall deposit, in trust for the benefit of the holders of Veeco Common Stock, with the Exchange Agent for exchange in accordance with this Article 2, a number of shares of Axcelis Common Stock equal to the total shares of Axcelis Common Stock issuable pursuant to Section 2.1 (together with the Fractional Shares Cash Amount, the “Exchange Fund”). The Exchange Agent shall, pursuant to irrevocable instructions, deliver the whole shares of Axcelis Common Stock contemplated to be issued pursuant to Section 2.1 and the Fractional Shares Cash Amount out of the Exchange Fund. The Exchange Fund shall not be used for any other purpose.

(b) Exchange Procedures. As promptly as practicable after the Effective Time (but in no event later than three (3) Business Days thereafter), Axcelis shall cause the Exchange Agent to mail to each holder of record of a Veeco Certificate or Veeco Book-Entry Share, in each case which shares were converted into the right to receive the applicable Veeco Merger Consideration at the Effective Time pursuant to this Agreement: (i) a letter of transmittal, which shall specify that delivery shall be effected, and risk of loss and title to the Veeco Certificates shall pass, only upon delivery of the Veeco Certificates to the Exchange Agent, and shall otherwise be in such form and have such other provisions as Axcelis, Veeco and the Exchange Agent may reasonably specify, and (ii) instructions for effecting the surrender of the Veeco Certificates and Veeco Book-Entry Shares in exchange for the applicable Veeco Merger Consideration and the method of payment of such holder’s Fractional Shares Cash Amount. Upon surrender of Veeco Certificates or Veeco Book-Entry Shares for cancellation to the Exchange Agent or to such other agent or agents as may be appointed by Veeco and Axcelis, and upon delivery of a letter of transmittal, duly executed and in proper form with all required enclosures and attachments, with respect to such Veeco Certificates or Veeco Book-Entry Shares, the holder of such Veeco Certificates or Veeco Book-Entry Shares shall be entitled to receive the whole shares of Axcelis Common Stock that such holder is entitled to receive pursuant to Section 2.1 and, if applicable, the Fractional Shares Cash Amount for each share of Veeco Common Stock formerly represented by such Veeco Certificates or Veeco Book-Entry Share. Any Veeco Certificates or Veeco Book-Entry Shares so surrendered shall forthwith be cancelled. If payment of the applicable Veeco Merger Consideration is to be made to a Person other than the Person in whose name any surrendered Veeco Certificate is registered, it shall be a condition precedent to payment that the Veeco Certificate so surrendered shall be properly endorsed or shall be otherwise in proper form for transfer, and the Person requesting such payment shall have paid any transfer and other similar Taxes required by reason of the delivery of the applicable Veeco Merger Consideration to a Person other than the registered holder of the Veeco Certificate so surrendered and shall have established to the satisfaction of Axcelis that such Taxes either have been paid or are not required to be paid. Notwithstanding anything to the contrary contained in this Agreement, no holder of Veeco Book-Entry Shares shall be required to deliver a Veeco Certificate or, in the case of holders of Veeco Book-Entry Shares held through the Depository Trust Company, an executed letter of transmittal, to receive the applicable Veeco Merger Consideration that such holder is entitled to receive pursuant to this Agreement. Delivery of the applicable Veeco Merger Consideration with respect to Veeco Book-Entry Shares shall only be made to the Person in whose name such shares are registered. Until surrendered as contemplated hereby, each Veeco Certificate or Veeco Book-Entry Share shall be deemed at any time after the Effective Time to represent only the right to receive the applicable Veeco Merger Consideration provided in this Agreement.

(c) Transfer Books. At the Effective Time, the stock transfer books of Veeco shall be closed and thereafter there shall be no further registration of transfers of shares of Veeco Common Stock on the records of Veeco. From and after the Effective Time, the holders of Veeco Certificates and Veeco Book-Entry Shares representing shares of Veeco Common Stock outstanding immediately prior to the Effective Time shall cease to have any rights with respect to such shares except as otherwise provided for herein or by applicable Law. If, after the Effective Time, Veeco Certificates representing shares of Veeco Common Stock are presented to Axcelis or the Surviving Corporation for any reason, they shall be cancelled and exchanged for the whole shares of Axcelis Common Stock that such holder is entitled to receive pursuant to Section 2.1 and, if applicable, the Fractional Shares Cash Amount as provided in this Agreement subject, in each case, to any applicable abandoned property, escheat or similar Laws.

(d) Termination of Fund; Abandoned Property. At any time following twelve (12) months after the Closing Date, Axcelis shall be entitled to require the Exchange Agent to deliver to it any shares of Axcelis Common Stock or cash remaining in the Exchange Fund made available to the Exchange Agent and not delivered to holders of Veeco Certificates or Veeco Book-Entry Shares and thereafter such holders shall be entitled to look only to Axcelis (subject to abandoned property, escheat or other similar Laws) only as general creditors thereof with respect to the applicable Veeco Merger Consideration payable upon due surrender of their Veeco Certificates or Veeco Book-Entry Shares and compliance with the procedures in Section 2.5. If, prior to six (6) years after the Closing Date (or otherwise immediately prior to such time on which any payment in respect hereof would escheat to or become the property of any Governmental Entity pursuant to any applicable abandoned property, escheat or similar Laws), any holder of Veeco Certificates or Veeco Book-Entry Shares has not complied with the procedures in Section 2.5 to receive the applicable Veeco Merger Consideration to which such holder would otherwise be entitled, the applicable Veeco Merger Consideration to which such holder would otherwise be entitled in respect of such Veeco Certificates or Veeco Book-Entry Shares shall, to the extent permitted by applicable Law, become the property of Axcelis, free and clear of all claims or interest of any Person previously entitled thereto. Notwithstanding the foregoing, none of Axcelis, the Surviving Corporation or the Exchange Agent, or any Representative or affiliate thereof, shall be liable to any holder of a Veeco Certificate or Veeco Book-Entry Shares for Veeco Merger Consideration delivered to a public official pursuant to any applicable abandoned property, escheat or similar Law.

(e) Lost, Stolen or Destroyed Certificates. In the event that any Veeco Certificates shall have been lost, stolen or destroyed, the Exchange Agent shall issue in exchange for such lost, stolen or destroyed Veeco Certificates, upon the making of an affidavit of that fact by the holder thereof, the applicable Veeco Merger Consideration payable in respect thereof pursuant to Section 2.1(b); provided, however, that Axcelis or the Exchange Agent may, in its reasonable discretion and as a condition precedent to the payment of the applicable Veeco Merger Consideration, require the owners of such lost, stolen or destroyed Veeco Certificates to deliver a customary indemnity against any claim that may be made against Axcelis, the Surviving Corporation or the Exchange Agent with respect to the Veeco Certificates alleged to have been lost, stolen or destroyed.

(f) Distributions with Respect to Unexchanged Axcelis Common Stock. No dividends or other distributions declared or made after the Effective Time with respect to Axcelis Common Stock with a record date after the Effective Time shall be paid to the holder of any unsurrendered Veeco Certificate or Veeco Book-Entry Share with respect to any shares of Axcelis Common Stock represented thereby, and, if applicable, no portion of the Fractional Shares Cash Amount shall be paid to any such holder pursuant to Section 2.4, unless and until the holder of such Veeco Certificate or Veeco Book-Entry Share shall surrender such Veeco Certificate or Veeco Book-Entry Share in accordance with this Section 2.5. Following surrender of any such Veeco Certificate or Veeco Book-Entry Share in accordance with this Section 2.5, there shall be paid by Axcelis to the holder of the certificates or book-entry shares representing whole shares of Axcelis Common Stock issued in exchange therefor, without interest, (i) promptly, the portion of the Fractional Shares Cash Amount, if applicable, payable with respect to a fractional share of Axcelis Common Stock to which such holder is entitled pursuant to Section 2.4 and the amount of dividends or other distributions with a record date after the Effective Time and (ii) at the appropriate payment date, the amount of dividends or other distributions, with a record date after the Effective Time but prior to surrender and a payment date occurring after surrender, payable with respect to such whole shares of Axcelis Common Stock.

2.6 Stock-Based Awards.

(a) Treatment of Veeco RSUs.

(i) As of the Effective Time, by virtue of the Merger and without any action on the part of the holders thereof, each Veeco RSU that is (x) outstanding immediately prior to the Effective Time and (y) vested in accordance with its terms as of the Effective Time (each, a “Vested Veeco RSU”) shall be canceled, and the holder thereof shall be entitled to receive, subject to any applicable Taxes and withholdings (A) the Veeco Merger Consideration in respect of each share of Veeco Common Stock subject to such Vested Veeco RSU immediately prior to the Effective Time and (B) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the Effective Time with respect to each such Vested Veeco RSU (the “Vested Veeco RSU Consideration”). The Vested Veeco RSU

Consideration shall be made by Axcelis within three (3) Business Days after the Effective Time or at such later date required to avoid the imposition of Taxes under Section 409A of the Code.

(ii) As of the Effective Time, by virtue of the Merger and without any action on the part of the holders thereof, each Veeco RSU that is not a Vested Veeco RSU (each, an "Unvested Veeco RSU") that is outstanding immediately prior to the Effective Time shall be assumed by Axcelis and shall be converted into a restricted stock unit (an "Axcelis RSU") covering Axcelis Common Stock in accordance with this Section 2.6(a)(ii). Each such Axcelis RSU as so assumed and converted shall continue to have, and shall be subject to, the same terms and conditions as applied to the Unvested Veeco RSU immediately prior to the Effective Time, except that, as of the Effective Time, each such Unvested Veeco RSU as so assumed and converted shall be a restricted stock unit covering that number of whole shares of Axcelis Common Stock (rounded down to the nearest whole share) equal to the product of (A) the number of shares of Veeco Common Stock subject to such Unvested Veeco RSU and (B) the Veeco Exchange Ratio. All dividend equivalents, if any, accrued but unpaid as of the Effective Time with respect to each such Unvested Veeco RSU shall also be assumed and become an obligation in connection with the applicable Axcelis RSU.

(b) Treatment of Veeco PSUs.

(i) As of the Effective Time, by virtue of the Merger and without any action on the part of the holders thereof, each Veeco PSU that is (x) outstanding immediately prior to the Effective Time and (y) vested in accordance with its terms as of the Effective Time (each, a "Vested Veeco PSU") shall be canceled, and the holder thereof shall be entitled to receive, subject to any applicable Taxes and withholdings (A) the Veeco Merger Consideration in respect of each share of Veeco Common Stock subject to such Vested Veeco PSU immediately prior to the Effective Time (based on the achievement of the applicable performance metrics (x) for those Vested Veeco PSUs where the applicable performance period has elapsed prior to the Effective Time, at the actual level of performance as determined by the Compensation Committee of the Veeco Board in the ordinary course of business consistent with past practice at the conclusion of such performance period and (y) for those Vested Veeco PSUs where the applicable performance period has not elapsed prior to the Effective Time, at the greater of (i) target level of performance or (ii) actual performance through the most recent practicable date prior to the Closing Date, as determined in good faith and consistent with past practice by the Compensation Committee of the Veeco Board) and (B) an amount in cash equal to all dividend equivalents, if any, accrued but unpaid as of the Effective Time with respect to each such Vested Veeco PSU (the "Vested Veeco PSU Consideration"). The Vested Veeco PSU Consideration shall be made by Axcelis within three (3) Business Days after the Effective Time or at such later date required to avoid the imposition of Taxes under Section 409A of the Code.

(ii) As of the Effective Time, by virtue of the Merger and without any action on the part of the holders thereof, each Veeco PSU that is not a Vested Veeco PSU Award (each, an "Unvested Veeco PSU") that is outstanding immediately prior to the Effective Time shall be assumed by Axcelis and shall be converted into an Axcelis RSU covering Axcelis Common Stock in accordance with this Section 2.6(b)(ii). Each such Axcelis RSU as so assumed and converted shall continue to have, and shall be subject to, the same terms and conditions as applied to the Unvested Veeco PSU immediately prior to the Effective Time, except that, as of the Effective Time, each such Axcelis RSU shall be subject solely to the service-based conditions applicable to the corresponding Unvested Veeco PSU and shall cover that number of whole shares of Axcelis Common Stock (rounded down to the nearest whole share) equal to the product of (A) the number of shares of Veeco Common Stock subject to such Unvested Veeco PSU immediately prior to the Effective Time (based on the achievement of the applicable performance metrics at the greater of (i) target level of performance or (ii) actual performance through the most recent practicable date prior to the Closing Date, as determined in good faith and consistent with past practice by the Compensation Committee of the Veeco Board) and (B) the Veeco Exchange Ratio. All dividend equivalents, if any, accrued but unpaid as of the Effective Time with respect to each such Unvested Veeco PSU shall also be assumed and become an obligation in connection with the applicable Axcelis RSU.

(c) Treatment of Veeco Restricted Stock.

(i) As of the Effective Time, by virtue of the Merger and without any action on the part of the holders thereof, each Veeco Restricted Stock Award that is outstanding immediately prior to the Effective Time (whether vested or unvested) and was granted to a non-employee member of the Veeco Board (each, a “Veeco Director Restricted Stock Award”), shall, to the extent not vested, become fully vested, and shall be canceled, and the holder thereof shall be entitled to receive the Veeco Merger Consideration in respect of each share of Veeco Common Stock subject to such Veeco Director Restricted Stock Award immediately prior to the Effective Time in accordance with Section 2.1.

(ii) At the Effective Time, each Veeco Restricted Stock Award that is then outstanding and is not a Veeco Director Restricted Stock Award shall be automatically and without any required action on the part of the holder thereof, be assumed by Axcelis and converted into a restricted stock award of Axcelis (each, an “Axcelis RSA”), with the same terms and conditions as were applicable to such Veeco Restricted Stock Award immediately prior to the Effective Time relating to the number of shares of Axcelis Common Stock equal to the product obtained by multiplying (A) the number of shares of Veeco Common Stock that were subject to the Veeco Restricted Stock Award, as of immediately prior to the Effective Time, by (B) the Veeco Exchange Ratio, and rounding the resulting number down to the nearest whole number of shares of Axcelis Common Stock.

(d) Treatment of Employee Stock Purchase Plan. As soon as practicable following the date of this Agreement, the Veeco Board or the appropriate committee of the Veeco Board shall take all reasonable actions, including the adoption of any necessary resolutions, to (i) ensure that no employees who are not currently participants become participants in the Veeco 2016 Employee Stock Purchase Plan (as amended, the “Veeco ESPP”) with respect to the Purchase Period (as defined in the Veeco ESPP) in effect as of the date of this Agreement (the “Current Purchase Period”); and (ii) prohibit current participants in the Veeco ESPP from increasing their payroll deduction elections or from making separate non-payroll contributions to the Veeco ESPP in respect of the Current Purchase Period. For clarity, nothing in the prior sentence shall affect the administration of the Veeco ESPP with respect to Purchase Periods after the Current Purchase Period. Prior to the Effective Time, the Company shall take all action that may be necessary to, effective upon the consummation of the Merger, (A) cause the Purchase Period that is in effect at the Effective Time (the “Final Purchase Period”) to be terminated no later than ten (10) Business Days prior to the date on which the Effective Time occurs; (B) make any pro rata adjustments that may be necessary to reflect the Final Purchase Period, but otherwise treat the Final Purchase Period as a fully effective and completed Purchase Period for all purposes pursuant to the Veeco ESPP; and (C) cause the exercise (as of no later than ten (10) Business Days prior to the date on which the Effective Time occurs) of each outstanding purchase right pursuant to the Veeco ESPP. On such exercise date, Veeco shall apply the funds credited as of such date pursuant to the Veeco ESPP within each participant’s payroll withholding account to the purchase of whole shares of Company Common Stock in accordance with the terms of the Veeco ESPP, and such shares shall be entitled to the Merger Consideration in accordance with Section 2.1. Immediately prior to and effective as of the Effective Time (but subject to the consummation of the Merger), Veeco shall terminate the Veeco ESPP.

(e) Prior to the Effective Time, Veeco shall take all necessary action as may be necessary for the adjustment and assumption of equity awards under this Section 2.6. Veeco shall have provided Axcelis with drafts of, and a reasonable opportunity to comment upon, any resolutions contemplated by this Section 2.6 prior to adoption by the Veeco Board or a committee thereof. Axcelis shall reserve for future issuance a number of shares of Axcelis Common Stock at least equal to the number of shares of Axcelis Common Stock that will be subject to Axcelis RSUs and Axcelis RSAs as a result of the actions contemplated by this Section 2.6. Not later than the Closing Date, Axcelis shall file an effective registration statement on Form S-8 (or other applicable form) with respect to the Axcelis Common Stock subject to such and Axcelis RSUs and Axcelis RSAs, and Axcelis shall use reasonable best efforts to maintain the effectiveness of such registration statement or registration statements (and maintain the current status of the prospectus or prospectuses contained therein) for so long as such Axcelis RSUs and Axcelis RSAs remain outstanding.

2.7 Veeco Convertible Notes.

(a) Prior to or at the Effective Time, Veeco and Axcelis shall take all actions required by the Veeco Convertible Notes Indenture to cause each Veeco Convertible Note that is issued and outstanding immediately prior to the Effective Time to remain issued and outstanding but to represent a right, on substantially the same terms and conditions as applied to the Veeco Convertible Notes immediately prior to the Effective Time, to receive Reference Property (as defined in the Veeco Convertible Notes Indenture) consisting of Axcelis Common Stock; provided that the conversion rate underlying each such right to convert into shares of Axcelis Common Stock as of the Effective Time shall be determined in accordance with the provisions of the Veeco Convertible Notes Indenture regarding the effect of recapitalizations, reclassifications and changes of the Veeco Common Stock.

(b) Prior to the Effective Time, each of the Veeco Board and the Axcelis Board shall adopt all resolutions as are necessary to authorize and approve the treatment of the Veeco Convertible Notes as contemplated by this Section 2.7.

2.8 No Appraisal Rights. In accordance with the DGCL, there are no appraisal rights available to holders of shares of Veeco Common Stock or Axcelis Common Stock in connection with the Transaction.

2.9 Withholding Rights. Each of Axcelis, the Surviving Corporation, Veeco, Merger Sub, the Exchange Agent and any other applicable withholding agent shall be entitled to deduct and withhold from any amount otherwise payable pursuant to this Agreement to any Person, such amounts as are required to be deducted and withheld under the Code, Treasury Regulations promulgated under the Code or any applicable provisions of state, local or non-U.S. Tax Law. To the extent that amounts are so deducted and withheld and paid over to the applicable Governmental Entity in accordance with applicable Law, such deducted and withheld amounts shall be treated for all purposes of this Agreement as having been paid to the Person(s) in respect of which such deduction and withholding was made.

ARTICLE 3

REPRESENTATIONS AND WARRANTIES OF VEECO

Except (a) as set forth in the Veeco Disclosure Schedule (subject to Section 8.14) and (b) as otherwise disclosed or identified in the Veeco SEC Documents publicly filed or furnished after December 31, 2023 and prior to the date hereof (other than (i) any forward-looking disclosures contained in the “Forward Looking Statements” and “Risk Factors” sections of the Veeco SEC Documents and any other disclosures included therein to the extent they are primarily predictive, cautionary or forward looking in nature and (ii) information included in, or incorporated by reference as, exhibits and schedules to any Veeco SEC Document, and provided that the exception provided for in this clause (b) shall be applied if, and only if, the nature and content of the applicable disclosure in any such Veeco SEC Document publicly filed or furnished prior to the date hereof is reasonably specific as to matters and items such that the subject matter of such disclosure is reasonably apparent on the face of the text of such disclosure to be applicable to the representation set forth herein), Veeco hereby represents and warrants to Axcelis as follows:

3.1 Corporate Organization. Each of Veeco and, except where the failure to be in good standing has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, its Subsidiaries, is a corporation or other entity duly organized, validly existing and, to the extent applicable, in good standing under the laws of the jurisdiction of its organization and has the requisite corporate or other entity power and authority to own or lease all of its properties and assets and to carry on its business as it is now being conducted. Each of Veeco and its Subsidiaries is duly licensed or qualified to do business in each jurisdiction in which the nature of the business conducted by it or the character or location of the properties and assets owned or leased by it makes such licensing or qualification necessary, except where the failure to be so licensed or qualified, has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect. Veeco has provided Axcelis true, complete and correct copies of the Amended and Restated Certificate of Incorporation (the “Veeco Charter”), and Amended and Restated Bylaws of Veeco (the “Veeco Bylaws”) as in effect as of the date of this Agreement. Veeco is not in violation of any of the provisions of the Veeco Charter or the Veeco Bylaws.

3.2 Veeco Capitalization.

(a) The authorized capital stock of Veeco consists of one hundred twenty million (120,000,000) shares of Veeco Common Stock and five hundred thousand (500,000) shares of Veeco Preferred Stock. As of September 29, 2025 (the “Capitalization Date”), (i) 60,159,113 shares of Veeco Common Stock (other than treasury shares) were issued and outstanding, all of which were validly issued and fully paid, nonassessable and free of preemptive rights, (ii) no shares of Veeco Common Stock were held in the treasury of Veeco or by its Subsidiaries, (iii) 2,097,146 shares of Veeco Common Stock were issuable (and such number was reserved for issuance) upon vesting of Veeco RSUs outstanding as of such date, (iv) 576,250 shares of Veeco Common Stock were issuable (and such number was reserved for issuance) upon vesting of Veeco PSUs (assuming target level of performance) outstanding as of such date, (v) 765,196 shares of Veeco Common Stock were authorized for issuance pursuant to the Veeco ESPP, (vi) 10,231,297 shares of Veeco Common Stock were issuable (and such number, which reflects the maximum number of shares issuable upon conversion of the Veeco Convertible Notes, was reserved for issuance) upon the conversion of the Veeco Convertible Notes and (vii) no shares of Veeco Preferred Stock were issued and outstanding (collectively, the items in clauses (i) through (vii), the “Veeco Securities”).

(b) Except for the outstanding Veeco RSUs, Veeco PSUs, Veeco Restricted Stock Awards, shares of Veeco Common Stock authorized for issuance under the Veeco ESPP, shares of Veeco Common Stock authorized for issuance upon conversion of the Veeco Convertible Notes and shares of Veeco Common Stock authorized for issuance under the Veeco Stock Plan, there are no options, warrants or other rights, agreements, arrangements or commitments of any character to which Veeco or any of its Subsidiaries is a party or by which Veeco or any of its Subsidiaries is bound relating to the issued or unissued capital stock or other Equity Interests of Veeco of any of its Subsidiaries, or securities convertible into or exchangeable for such capital stock or other Equity Interests, or obligating Veeco or any of its Subsidiaries to issue or sell any shares of its capital stock or other Equity Interests, or securities convertible into or exchangeable for such capital stock of, or other Equity Interests in, Veeco. Since the Capitalization Date, Veeco has not issued any shares of its capital stock or other Equity Interests, or securities convertible into or exchangeable for such capital stock or other Equity Interests, other than those shares of capital stock reserved for issuance described in this Section 3.2(b).

(c) Veeco has previously provided Axcelis with a true and complete list as of the Capitalization Date of each outstanding Veeco RSU, Veeco PSU and Veeco Restricted Stock Award, including, as applicable, the holder, country of residence (if outside the United States), date of grant, expiration date, the vesting schedule, the number of shares of Veeco Common Stock subject thereto (with performance at both target and maximum level of performance), the amount vested and outstanding and the amount unvested and outstanding, and the Veeco Stock Plan under which the award is granted. All of the outstanding Veeco RSUs, Veeco PSUs and Veeco Restricted Stock Awards have been duly authorized by all necessary corporate action and were granted in accordance with the terms of the applicable Veeco Stock Plan and applicable Laws.

(d) All shares of Veeco Common Stock subject to issuance under the Veeco Stock Plan, or subject to issuance upon conversion of any Veeco Preferred Stock, upon issuance prior to the Effective Time on the terms and conditions specified in the instruments pursuant to which they are issuable, will be duly authorized, validly issued, fully paid, nonassessable and free of preemptive rights. There are no bonds, debentures, notes or other indebtedness of Veeco having the right to vote on any matters on which stockholders of Veeco may vote. Neither Veeco nor any of its Subsidiaries is a party to any voting agreement with respect to the voting of any Equity Interests of Veeco or any of its Subsidiaries.

(e) There are no outstanding contractual obligations of Veeco or any of its Subsidiaries (i) restricting the transfer of, (ii) affecting the voting rights of, (iii) requiring the repurchase, redemption or disposition of, or containing any right of first refusal with respect to, (iv) requiring the registration for sale of or (v) granting any preemptive or antidilutive right with respect to, any shares of Veeco Common Stock or Veeco Preferred Stock or any capital stock of, or other Equity Interests in, Veeco or any of its Subsidiaries.

(f) Section 3.2(f) of the Veeco Disclosure Schedule sets forth a true and complete list of all of the Subsidiaries of Veeco and the jurisdiction of organization of each such Subsidiary. Except for Veeco and as set forth in Section 3.2(f) of the Veeco Disclosure Schedule, none of Veeco or any of its Subsidiaries holds

an Equity Interest in any other Person (other than a Subsidiary of Veeco). Each outstanding share of capital stock or other Equity Interest in each Subsidiary of Veeco is duly authorized, validly issued, fully paid, nonassessable and free of preemptive rights and is owned, beneficially and of record, by Veeco or one or more of its wholly owned Subsidiaries free and clear of all Liens. There are no outstanding contractual obligations of Veeco or any of its Subsidiaries to provide funds to, or make any investment (in the form of a loan, capital contribution or otherwise) in, any Subsidiaries of Veeco (in excess of \$1,000,000) or any other Person, other than guarantees by Veeco of any indebtedness or other obligations of any wholly owned Subsidiary of Veeco.

3.3 Authority; Execution and Delivery; Enforceability.

(a) Veeco has all necessary power and authority to execute and deliver this Agreement, to perform and comply with each of its obligations under this Agreement and, subject to the receipt of the Veeco Stockholder Approval, to consummate the Transactions. The execution and delivery by Veeco of this Agreement, the performance and compliance by Veeco with each of its obligations herein and the consummation by Veeco of the Transactions have been duly authorized by all necessary corporate action on the part of Veeco, subject to receipt of the Veeco Stockholder Approval, and no other corporate proceedings on the part of Veeco and no other stockholder votes are necessary to authorize this Agreement or the consummation by Veeco of the Transactions. Veeco has duly and validly executed and delivered this Agreement and, assuming the due authorization, execution and delivery by Axcelis and Merger Sub of this Agreement, this Agreement constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, except as limited by Laws affecting the enforcement of creditors' rights generally, by general equitable principles or by the discretion of any Governmental Entity before which any Proceeding seeking enforcement may be brought.

(b) The Veeco Board, at a meeting duly called and held, unanimously (except for one (1) director recusing himself) adopted resolutions (i) adopting and approving this Agreement and the consummation of the Transactions upon the terms and subject to the conditions set forth in this Agreement, (ii) determining that the terms of this Agreement, the Merger and the other Transactions are fair to, and in the best interests of, Veeco and its stockholders, (iii) directing that this Agreement be submitted to the stockholders of Veeco for approval and adoption, (iv) recommending that its stockholders adopt this Agreement and (v) declaring that this Agreement is advisable (the "Veeco Recommendation").

(c) Assuming the accuracy of the representations and warranties in Section 4.21, to the Knowledge of Veeco, no takeover, anti- takeover, business combination, control share acquisition or similar Law applies to this Agreement, the Merger or the other Transactions. The only vote of holders of any class or series of Equity Interests of Veeco necessary to approve the Transactions is the adoption of this Agreement by the holders of a majority of the shares of Veeco Common Stock outstanding and entitled to vote thereon at the Veeco Stockholders Meeting (the "Veeco Stockholder Approval"). No other vote of the holders of Veeco Common Stock or any other Equity Interests of Veeco is necessary to consummate the Transactions.

3.4 No Conflicts.

(a) The execution and delivery of this Agreement by Veeco does not and will not, and the performance of this Agreement by Veeco and the consummation of the Transactions will not, (i) assuming the Veeco Stockholder Approval is obtained, conflict with or violate any provision of the Veeco Charter or the Veeco Bylaws or any equivalent organizational documents of any Subsidiary of Veeco, (ii) assuming that all consents, approvals, authorizations and permits described in Section 3.4(b) have been obtained and all filings and notifications described in Section 3.4(b) have been made and any waiting periods thereunder have terminated or expired, conflict with or violate any Law applicable to Veeco or any of its Subsidiaries or by which any property or asset of Veeco or any of its Subsidiaries is bound or affected or (iii) require any consent or approval under, result in any breach of or any loss or impairment of any benefit under, constitute a change of control or default (or an event which with notice or lapse of time or both would become a default) under or give to others any right of termination, vesting, amendment, acceleration or cancellation of, or result in the creation of a Lien (other than Permitted Liens) on any property or asset of Veeco or any of its Subsidiaries pursuant to, any Contract or Permit (other than a Veeco Benefit Plan), except, with respect to clauses (ii) and (iii), for any such conflicts, violations, breaches, defaults or other occurrences which would not, individually or in the aggregate, reasonably be expected to (A) prevent or materially delay consummation of the Merger,

(B) otherwise prevent or materially delay performance by Veeco of any of its material obligations under this Agreement or (C) have a Veeco Material Adverse Effect.

(b) The execution and delivery of this Agreement by Veeco does not and will not, and the consummation by Veeco of the Transactions and compliance by Veeco with any of the terms or provisions hereof or thereof will not, require any consent, approval, authorization or permit of, or filing with or notification to, any Governmental Entity, except (i) under the Exchange Act, Securities Act, any applicable blue sky Law and the rules and regulations of Nasdaq, (ii) under the HSR Act or other applicable Antitrust Laws and Investment Screening Laws, (iii) the filing of the Certificate of Merger as required by the DGCL, (iv) as contemplated by Section 5.19 of this Agreement, and (v) where failure to obtain such consents, approvals, authorizations or permits, or to make such filings or notifications to a Person other than a Governmental Entity, would not, individually or in the aggregate, reasonably be expected to (A) prevent or materially delay consummation of the Merger or other Transactions, (B) otherwise prevent or materially delay performance by Veeco of any of its material obligations under this Agreement or (C) have a Veeco Material Adverse Effect.

3.5 SEC Documents; Financial Statements; Undisclosed Liabilities.

(a) Veeco has filed or furnished on a timely basis all reports, schedules, forms, statements, registration statements, prospectuses and other documents required to be filed or furnished by Veeco with the SEC under the Securities Act or the Exchange Act since December 31, 2023 (the “Veeco SEC Documents”). None of the Subsidiaries of Veeco is required to make or makes any filings with the SEC.

(b) As of its respective filing date, and, if amended, as of the date of the last amendment prior to the date of this Agreement, each Veeco SEC Document complied in all material respects with the requirements of the Exchange Act or the Securities Act, as the case may be, and the rules and regulations of the SEC promulgated thereunder applicable to such Veeco SEC Document and did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(c) The consolidated financial statements of Veeco included in the Veeco SEC Documents (including, in each case, any notes or schedules thereto) (the “Veeco SEC Financial Statements”), comply as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. The Veeco SEC Financial Statements fairly present, in all material respects, the financial condition and the results of operations, cash flows and changes in stockholders’ equity of Veeco (on a consolidated basis) as of the respective dates of and for the periods referred to in the Veeco SEC Financial Statements, and were prepared in accordance with GAAP applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto), subject, in the case of interim Veeco SEC Financial Statements, to normal year-end adjustments (which are not material in significance or amount) and the absence of notes.

(d) Veeco is in compliance in all material respects with (i) the applicable provisions of the Sarbanes-Oxley Act of 2002 and the related rules and regulations promulgated thereunder or under the Exchange Act (the “Sarbanes-Oxley Act”) and (ii) the applicable listing and corporate governance rules and regulations of Nasdaq.

(e) To the Knowledge of Veeco, there are no outstanding or unresolved comments in comment letters received from the SEC staff with respect to any Veeco SEC Documents and none of the Veeco SEC Documents is the subject of ongoing SEC review. To the Knowledge of Veeco, there are no SEC inquiries or investigations, in each case, pending or threatened regarding any accounting practices of Veeco.

(f) Veeco has established and maintains disclosure controls and procedures and internal control over financial reporting (as such terms are defined in paragraphs (e) and (f), respectively, of Rule 13a-15 and paragraph (e) of Rule 15d-15 under the Exchange Act) as required by Rules 13a-15 and 15d-15 under the Exchange Act. Veeco’s disclosure controls and procedures are designed to ensure that all information (both financial and non-financial) required to be disclosed by Veeco in the reports that it files or furnishes under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that all such information is accumulated and communicated to Veeco’s management as appropriate to allow timely decisions regarding required disclosure and to make the

certifications required pursuant to Sections 302 and 906 of the Sarbanes- Oxley Act. Since December 31, 2023, Veeco has had no significant deficiencies or material weaknesses in the design or operation of its internal control over financial reporting that would reasonably be expected to adversely affect Veeco's ability to record, process, summarize and report financial information and Veeco does not have Knowledge of any fraud, whether or not material, that involves management or other employees who have a significant role in Veeco's internal control over financial reporting.

(g) Veeco and its Subsidiaries do not have any liabilities or obligations of any nature (whether absolute or contingent, asserted or unasserted, known or unknown, primary or secondary, direct or indirect, and whether or not accrued or required to be reflected in Veeco's financial statements in accordance with GAAP), except (i) as disclosed, reflected or reserved against in the most recent audited balance sheet included in the Veeco SEC Financial Statements or the notes thereto, (ii) for liabilities and obligations incurred in the ordinary course of business since the date of the most recent audited balance sheet included in the Veeco SEC Financial Statements, (iii) for liabilities and obligations arising out of or in connection with this Agreement, the Merger or the Transactions and (iv) for liabilities and obligations that, individually or in the aggregate, have not had, and would not reasonably be expected to have, a Veeco Material Adverse Effect.

(h) Neither Veeco nor any of its Subsidiaries is a party to, or has any commitment to become a party to, any joint venture, off-balance sheet partnership or any similar Contract (including any Contract or arrangement relating to any transaction or relationship between or among Veeco and any of its Subsidiaries, on the one hand, and any unconsolidated affiliate, including any structured finance, special purpose or limited purpose entity or Person, on the other hand, or any "off-balance-sheet arrangements" (as defined in Item 303(a) of Regulation S-K under the Exchange Act)), where the result, purpose or intended effect of such Contract is to avoid disclosure of any material transaction involving, or material liabilities of, Veeco or any of its Subsidiaries in Veeco's or such Subsidiary's published financial statements or other Veeco SEC Documents.

3.6 Absence of Certain Changes or Events. Since July 1, 2025 and through the date of this Agreement, (a) Veeco and its Subsidiaries have conducted their businesses in all material respects only in the ordinary course and in a manner consistent with past practice and (b) there has not been any change, event, development, condition or occurrence that, individually or in the aggregate, has had or would reasonably be expected to have a Veeco Material Adverse Effect.

3.7 Information Supplied. None of the information supplied or to be supplied by Veeco for inclusion or incorporation by reference in (i) the registration statement on Form S-4 to be filed with the SEC by Axcelis in connection with the Merger (the "Form S-4") will, at the time the Form S-4 is filed with the SEC, and at any time it is amended or supplemented, at the time it becomes effective under the Securities Act and at the Effective Time, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) the Joint Proxy Statement will, at the date it or any amendment or supplement is mailed to each of the holders of Axcelis Common Stock and Veeco Common Stock and at the time of each of the Axcelis Stockholders Meeting and Veeco Stockholders Meeting, and (iii) a current report on Form 8-K at the time it is filed, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances in which they are made, not misleading (except that no representation or warranty is made by Veeco to such portions thereof that relate expressly to Axcelis or any of its Subsidiaries, including Merger Sub, or to statements made therein based on information supplied by or on behalf of Axcelis for inclusion or incorporation by reference therein). The Form S-4 and the Joint Proxy Statement will comply as to form in all material respects with the requirements of the Securities Act or Exchange Act, as applicable, and other applicable Law.

3.8 Legal Proceedings. As of the date hereof, there are no Proceedings pending, or to the Knowledge of Veeco, threatened in writing against Veeco or any of its Subsidiaries or any of their respective assets, rights or properties or any of the officers or directors of Veeco, that would, in each case, individually or in the aggregate, reasonably be expected to prevent or materially delay the consummation of the Transactions. There are no Proceedings pending, or to the Knowledge of Veeco, threatened in writing against Veeco or any of its Subsidiaries or any of their respective assets, rights or properties or any of the officers or directors of Veeco, except, in each case, for those that, individually or in the aggregate, have not had, and would not reasonably be expected to have, a Veeco Material Adverse Effect. Neither Veeco nor any of its Subsidiaries

nor any of their respective properties, rights or assets is or are subject to any outstanding Order, except for those that, individually or in the aggregate, have not had, and would not reasonably be expected to have, a Veeco Material Adverse Effect.

3.9 Compliance with Laws.

(a) (i) Veeco and its Subsidiaries are in compliance, and for the past five (5) years have been in compliance, with all Laws and Orders applicable to Veeco or any of its Subsidiaries or any assets owned or used by any of them (except for such past noncompliance as has been remedied and imposes no continuing obligations or costs on Veeco or its Subsidiaries), and (ii) neither Veeco nor any of its Subsidiaries has received any written communication during the past five (5) years from a Governmental Entity that alleges that Veeco or any of its Subsidiaries is not in compliance with any such Law or Order, except in the case of clauses (i) and (ii) where any non-compliance, individually or in the aggregate, has not had and would not reasonably be expected to have, a Veeco Material Adverse Effect.

(b) Veeco and each of its Subsidiaries (i) are in compliance, and for the past five (5) years have been in compliance, in all material respects with the United States Foreign Corrupt Practices Act of 1977 (the “FCPA”) and any other applicable Anti-corruption Laws; (ii) during the past five (5) years have not been investigated, to the Knowledge of Veeco, by any Governmental Entity with respect to, or been given notice by a Governmental Entity or any other Person of, any actual or alleged violation by Veeco or any of its Subsidiaries of the FCPA or any other Anti-corruption Laws; and (iii) during the past five (5) years have had an operational and effective FCPA and anti-corruption compliance program that includes, at a minimum, policies, procedures and training intended to enhance awareness of and compliance by Veeco and its Subsidiaries with the FCPA and any other applicable Anti-corruption Laws.

(c) To the Knowledge of Veeco, none of Veeco or its Subsidiaries has, directly or indirectly through its Representatives or any Person authorized to act on its behalf (including any distributor, agent, sales intermediary or other third party), offered, promised, paid, authorized or given money or anything of value to any Person for the purpose of: (i) influencing any act or decision of any Government Official or Other Covered Party; (ii) inducing any Government Official or Other Covered Party to do or omit to do an act in violation of a lawful duty; (iii) securing any improper advantage; or (iv) inducing any Government Official or Other Covered Party to influence the act or decision of a government or government instrumentality, in order to obtain or retain business, or direct business to, any Person or entity, in any way.

(d) To the Knowledge of Veeco, during the past five (5) years, Veeco and its Subsidiaries have maintained complete and accurate books and records, including records of payments to any agents, consultants, representatives, third parties and Government Officials, in accordance with GAAP, in all material respects. There have been no false or fictitious entries made in the books and records of Veeco or its Subsidiaries relating to any unlawful offer, payment, promise to pay, or authorization of the payment of any money, or unlawful offer, gift, promise to give, or authorization of the giving of anything of value, including any bribe, kickback or other illegal or improper payment, and Veeco and its Subsidiaries have not established or maintained a secret or unrecorded fund.

(e) Since April 24, 2019, none of Veeco or its Subsidiaries has had a customer or supplier or other business relationship with, is a party to any Contract with, or has engaged in any transaction with, any Person (i) that is located, organized, or resident in a country or territory that is itself the subject or target of any economic or financial sanctions or trade embargoes imposed, administered, or enforced from time to time by the U.S. Department of the Treasury’s Office of Foreign Assets Control (“OFAC”), the U.S. Department of State, the United Nations Security Council, the European Union, any EU member state, or His Majesty’s Treasury of the United Kingdom (collectively, “Sanctions”) (at the time of this Agreement, Cuba, Iran, North Korea, and the Crimea, so-called Luhansk People’s Republic, and so-called Donetsk People’s Republic regions of Ukraine) (each, a “Sanctioned Country”), (ii) that is listed on any Sanctions-related list of designated Persons maintained by OFAC, the U.S. Department of State, the United Nations Security Council, the European Union, any EU member state, or His Majesty’s Treasury of the United Kingdom, (iii) the Government of Venezuela, or (iv) owned or controlled by any such Person or Persons described in the foregoing clauses (i), (ii), and (iii) (each Person described in clauses (i) – (iv), a “Sanctioned Person”) or Sanctioned Country, in violation of applicable Sanctions. Neither Veeco or any of its Subsidiaries nor any of their respective officers, directors, employees or, to the Knowledge of Veeco, agents

or other Persons acting on behalf of any of them, is a Sanctioned Person. None of (i) the Merger, (ii) the execution, delivery and performance of this Agreement, or (iii) the consummation of any Transactions contemplated hereby, or the fulfillment of the terms hereof, will result in a violation of any applicable Sanctions.

(f) Since April 24, 2019, Veeco has complied with all applicable Sanctions and, in all material respects, all applicable export, import, customs, trade, and anti-boycott Laws or programs administered, enacted or enforced by Governmental Entity, including but not limited to (i) the Export Administration Regulations, the International Traffic in Arms Regulations, and the import Laws administered by U.S. Customs and Border Protection, (ii) the anti-boycott Laws administered by the U.S. Departments of Commerce and Treasury, and (iii) any other similar export, import, customs, trade, or anti-boycott Laws or programs in any relevant jurisdiction to the extent they are applicable (the Laws and programs described in clauses (i)-(iii), “Trade Control Laws”). Since April 24, 2019, Veeco and its Subsidiaries have maintained policies and procedures designed to promote compliance by Veeco and its Subsidiaries and their respective officers, directors, employees, agents, and other Persons acting on behalf of any of them with applicable Sanctions and Trade Control Laws. Since April 24, 2019, Veeco has not been the subject of or otherwise involved in investigations or enforcement actions by any Governmental Entity or other legal proceedings with respect to any actual or alleged violations of applicable Sanctions or Trade Control Laws, and has not been notified of any such pending or threatened actions. Veeco and its Subsidiaries have obtained all material consents, orders, licenses and declarations from, provided all material notices to, and made all material filings with, all relevant Governmental Entities required for (A) the export, import, re-export and transfer (in-country) of its products, services, software and technologies, and (B) releases of technologies and software to foreign nationals located in the U.S. and abroad (collectively, the “Export Approvals”), and each of Veeco and its Subsidiaries is and, has been in compliance in all material respects with the terms of all Export Approvals. To the Knowledge of Veeco, there are no pending or threatened claims against Veeco or any of its Subsidiaries with respect to such Export Approvals. As of the date hereof, neither Veeco nor any of its Subsidiaries has received notice from any Governmental Entity that such Governmental Entity intends to terminate, materially and adversely modify, or decline to reauthorize any existing government authorizations, including license exceptions or exemptions, upon which Veeco or any of its Subsidiaries currently relies with respect to Sanctions or Trade Control Laws.

3.10 Permits. Veeco and each of its Subsidiaries have all required governmental permits, licenses, franchises, certificates, registrations, approvals, exemptions, clearances, billings and authorizations and similar rights (“Permits”) necessary for the conduct of their business and the use of their properties and assets, as presently conducted and used, and each of the Permits is valid, subsisting and in full force and effect, except where the failure to have or maintain such Permit, individually or in the aggregate, has not had and would not reasonably be expected to have a Veeco Material Adverse Effect. Except as would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, (i) the operation of the business of Veeco and its Subsidiaries as currently conducted is not, and has not been since December 31, 2023, in violation of, nor is Veeco or its Subsidiaries in default or violation under, any Permit (except for such past violation or default as has been remedied and imposes no continuing obligations or costs on Veeco or its Subsidiaries), and (ii) to the Knowledge of Veeco, no event has occurred which, with notice or the lapse of time or both, would constitute a default or violation of any term, condition or provision of any Permit. There are no actions pending or, to the Knowledge of Veeco, threatened, that seek the revocation, cancellation or modification of any Permit, except where such revocation, cancellation or modification, individually or in the aggregate, has not had and would not reasonably be expected to have, a Veeco Material Adverse Effect. Since December 31, 2023, neither Veeco nor its Subsidiaries have received written notice of any charge, claim or assertion alleging any violations of or noncompliance with any Permit, nor to the Knowledge of Veeco, has any charge, claim or assertion been threatened, except where such notice, charge, claim or assertion, individually or in the aggregate, has not had and would not reasonably be expected to have, a Veeco Material Adverse Effect.

3.11 Employee Benefit Plans.

(a) Section 3.11(a) of the Veeco Disclosure Schedule sets forth a true and complete list of each material Veeco Benefit Plan and separately identifies each material Veeco Benefit Plan that is a Veeco Foreign Benefit Plan.

(b) With respect to each material Veeco Benefit Plan, Veeco has made available to Axcelis a current written copy thereof (if any) and, to the extent applicable: (i) any amendments and any related trust agreement; (ii) the most recent IRS determination letter; (iii) the most recent summary plan description and summary of material modifications; and (iv) for the most recent plan year (A) the Form 5500 and attached schedules and (B) audited financial statements.

(c) Except as has not had or would not reasonably be expected to result, individually or in the aggregate, in a material liability to Veeco and its Subsidiaries taken as a whole, each Veeco Benefit Plan has been administered in accordance with its terms and all applicable Laws, including ERISA and the Code, and contributions required to be made under the terms of any of the Veeco Benefit Plans have been timely made or, if not yet due, have been properly reflected on the most recent consolidated balance sheet filed or incorporated by reference in the Veeco SEC Documents prior to the date of this Agreement.

(d) (i) Each Veeco Benefit Plan which is intended to qualify under Section 401(a) of the Code has either received a favorable determination letter or opinion letter from the IRS as to its qualified status, and to Veeco's Knowledge, no fact or event has occurred that could adversely affect the qualified status of any such Veeco Benefit Plan or the exempt status of any such trust, (ii) there has been no prohibited transaction (within the meaning of Section 406 of ERISA or Section 4975 of the Code), other than a transaction that is exempt under a statutory or administrative exemption, with respect to any Veeco Benefit Plan, and (iii) no Proceeding has been brought, or to the Knowledge of Veeco is threatened, against or with respect to any Veeco Benefit Plan, including any audit or inquiry by the IRS or United States Department of Labor (other than for routine benefits claims).

(e) No Veeco Benefit Plan is, and neither Veeco nor any of its ERISA Affiliates contributes to, has during the preceding six (6) years contributed to or has any liability or obligation, whether fixed or contingent, with respect to a multiemployer plan (as defined in Section 3(37) or Section 4001(a)(3) of ERISA) ("Multiemployer Plan") or other plan subject to Title IV of ERISA or the minimum funding requirements of Section 302 of ERISA or Section 412 of the Code. No material liability under Title IV of ERISA has been incurred by Veeco or any ERISA Affiliate thereof that has not been satisfied in full, and no condition exists that would reasonably be expected to have a Veeco Material Adverse Effect (whether primarily, jointly or secondarily) under Title IV of ERISA.

(f) No amount that could be received (whether in cash or property or the vesting of property), as a result of the consummation of the Merger or other Transactions (either alone or in combination with another event), by any employee, officer or director of Veeco or any of its Subsidiaries who is a "disqualified individual" (within the meaning of Section 280G of the Code) could be characterized as an "excess parachute payment" (within the meaning of Section 280G(b)(1) of the Code).

(g) Except as required by Law, no Veeco Benefit Plan provides post-employment medical, disability or life insurance benefits to any former director, employee or their respective dependents (other than as required by health care continuation coverage as required by Section 4980B of the Code or any similar state law ("COBRA") or ERISA or coverage through the end of the calendar month in which a termination of employment occurs).

(h) Neither the execution of this Agreement nor the consummation of the Merger or other Transactions (either alone or in combination with another event) will (i) entitle any employee or director of Veeco or its Subsidiaries to a bonus, severance or change in control payment, (ii) accelerate the time of payment or vesting or trigger any payment or funding (through a grantor trust or otherwise) of compensation or benefits, (iii) increase the amount payable or trigger any other material obligation pursuant to any of the Veeco Benefit Plans or (iv) result in any breach or violation of, or default under any Veeco Benefit Plan.

(i) Each Veeco Benefit Plan that constitutes in any part a nonqualified deferred compensation plan within the meaning of Section 409A of the Code in all material respects has been operated and maintained in operational and documentary compliance with Section 409A of the Code and all IRS guidance promulgated thereunder, to the extent such section and such guidance have been applicable to such Veeco Benefit Plan. There is no agreement, plan, Contract or other arrangement to which Veeco or any of its Subsidiaries is a party or by which any of them is otherwise bound to compensate any Person in respect of Taxes pursuant to Sections 409A or 4999 of the Code.

(j) Except as has not resulted and would not reasonably be expected to result, individually or in the aggregate, in a material liability to Veeco and its Subsidiaries taken as a whole, with respect to each Veeco Benefit Plan established or maintained outside of the United States of America primarily for the benefit of employees of Veeco or its affiliates residing outside the United States of America (a “Veeco Foreign Benefit Plan”): (i) all employer and employee contributions to each Veeco Foreign Benefit Plan required by law or by the terms of any Veeco Foreign Benefit Plan have been made or, if applicable, accrued, in accordance with normal accounting practices; (ii) the fair market value of the assets of each funded Veeco Foreign Benefit Plan, the liability of each insurer for any Veeco Foreign Benefit Plan funded through insurance or the book reserve established for any Veeco Foreign Benefit Plan, together with any accrued contributions, is sufficient to procure or provide for the accrued benefit obligations with respect to all current and former participants in such Veeco Foreign Benefit Plan according to the actuarial assumptions and valuations most recently used to determine employer contributions to such Veeco Foreign Benefit Plan, and neither the execution of this Agreement nor the consummation of the Merger or other Transactions will cause such assets or insurance obligations to be less than such benefit obligations; and (iii) each Veeco Foreign Benefit Plan required to be registered has been registered and has been maintained in good standing with applicable regulatory authorities.

3.12 Employee and Labor Matters.

(a) Neither Veeco nor any of its Subsidiaries is a party to or bound by any Collective Bargaining Agreement, no Labor Organization or group of employees of Veeco or any of its Subsidiaries has made a pending demand for recognition or certification, and there are no representation or certification proceedings or petitions seeking a representation proceeding presently pending or, to the Knowledge of Veeco, threatened in writing to be brought or filed with the National Labor Relations Board or any other labor relations tribunal or authority. Neither Veeco nor any of its Subsidiaries has engaged in any unfair labor practice with respect to any individuals employed by or otherwise performing services for Veeco or any of its Subsidiaries (the “Veeco Business Personnel”), and there is no unfair labor practice charges, grievances, arbitrations, or administrative or judicial complaints, actions, investigations pending or, to the Knowledge of Veeco, threatened in writing against Veeco or any of its Subsidiaries by the National Labor Relations Board or any other Governmental Entity with respect to any present or former Veeco Business Personnel which would reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect. There is no labor strike, walkout, lockout, slowdown, work stoppage or other labor dispute pending or, to the Knowledge of Veeco, threatened against or affecting Veeco or any of its Subsidiaries.

(b) Neither Veeco nor any of its Subsidiaries is required under applicable Law or Contract to provide notice to, or to enter into any consultation procedure with, any work council, Labor Organization, or similar representative body in connection with the execution of this Agreement or the consummation of the Transactions.

(c) Veeco and its Subsidiaries are and have for the past five (5) years been in compliance with all applicable Laws respecting employment and employment practices, including, without limitation, all Laws respecting terms and conditions of employment, health and safety, wage payment, wages and hours, child labor, collective bargaining, immigration and work authorizations, employment, discrimination, retaliation, civil rights, veterans’ rights, disability rights or benefits, equal opportunity, plant closures and layoffs, affirmative action, workers’ compensation, labor relations, social welfare obligations, proper classification of employees as exempt and non-exempt and as employees and independent contractors, unemployment insurance and the collection and payment of withholding and/or social security Taxes and any similar Tax, except for noncompliance as individually or in the aggregate, has not had and would not reasonably be expected to have, a Veeco Material Adverse Effect.

(d) To the Knowledge of Veeco, no Veeco Business Personnel is in any material respect in violation of any term of any employment agreement, nondisclosure agreement, common law nondisclosure obligation, fiduciary duty, noncompetition agreement, restrictive covenant or other obligation owed to Veeco or any of its Subsidiaries or to a former employer of any such employee relating (i) to the right of any such individual to be employed by or provide services for Veeco or its Subsidiaries or (ii) to the knowledge or use of trade secrets or proprietary information.

(e) Veeco and its Subsidiaries are not delinquent in payments to any current or former Veeco Business Personnel for any services or amounts required to be reimbursed or otherwise paid, except as currently does not have and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect.

(f) Neither Veeco nor its Subsidiaries are party to a settlement agreement signed in the last five (5) years with a current or former officer, employee or independent contractor of Veeco or its Subsidiaries that involves allegations relating to harassment or discrimination of any kind by either (i) an officer of Veeco or its Subsidiaries or (ii) an employee of Veeco or its Subsidiaries at the level of Vice President or above. To the Knowledge of Veeco, in the last five (5) years, no allegations of harassment or discrimination of any kind have been made against (i) any officer of Veeco or its Subsidiaries or (ii) an employee of Veeco or its Subsidiaries at the level of Vice President or above.

3.13 Environmental Matters. Except as, individually or in the aggregate, has not had and would not reasonably be expected to have, a Veeco Material Adverse Effect:

(a) Veeco and each of its Subsidiaries (i) have been within the last five (5) years, and are, in compliance with all, and are not subject to any liability with respect to noncompliance with any, applicable Environmental Laws, (ii) have and hold, or have applied for, all Environmental Permits necessary for the conduct of their business and the use of their properties and assets, as currently conducted and used, and (iii) are in compliance with their respective Environmental Permits.

(b) There are no Environmental Claims pending, nor to the Knowledge of Veeco, threatened against Veeco or any of its Subsidiaries, and none of Veeco or any of its Subsidiaries has received any notification of any allegation of actual or potential responsibility for any Release or threatened Release of any Hazardous Materials with respect to any location.

(c) There have been no Releases of Hazardous Materials at any properties that are owned, operated, leased or used by Veeco or any of its Subsidiaries, or to the Knowledge of Veeco, at properties that were formerly owned, operated, leased or used by Veeco or any of its Subsidiaries, that are reasonably likely to cause Veeco or any of its Subsidiaries to incur liability pursuant to applicable Environmental Law.

(d) None of Veeco or any of its Subsidiaries (i) has entered into or agreed to any consent decree or consent order or is otherwise subject to any judgment, decree, or judicial or administrative Order relating to compliance with Environmental Laws or Environmental Permits, the investigation, sampling, monitoring, treatment, remediation, response, removal or cleanup of Hazardous Materials, and no Proceeding is pending, or to the Knowledge of Veeco is threatened, with respect thereto, or (ii) is an indemnitor by contract or otherwise in connection with any claim, demand, suit or action threatened or asserted by any third-party for any liability under any Environmental Law or otherwise relating to any Hazardous Materials.

3.14 Real Property.

(a) Section 3.14(a) of the Veeco Disclosure Schedule sets forth a true, complete and accurate list as of the date hereof of all real property owned by Veeco and its Subsidiaries (the “Veeco Owned Real Property”), which schedule sets forth the fee owner and physical address of such Veeco Owned Real Property. Except as would not have a Veeco Material Adverse Effect, Veeco or one of its Subsidiaries has good and valid fee simple title to all Veeco Owned Real Property, free and clear of all Liens, other than Permitted Liens. Veeco has made available to Axcelis complete and accurate copies of all deeds, mortgages, surveys, licenses and/or title insurance policies with respect to the Veeco Owned Real Property and other documents relating to or affecting title to the Veeco Owned Real Property, none of which have been amended or rescinded to the Knowledge of Veeco and, in each case, to the extent the same are within the possession of Veeco or one of its Subsidiaries.

(b) Section 3.14(b) of the Veeco Disclosure Schedule sets forth a true, complete and accurate list of all leases, subleases, licenses or other occupancy agreements for real property to which Veeco or any of its Subsidiaries is a party that are currently in effect, including all amendments, extensions, renewals, guaranties and other written agreements with respect thereto (and each, a “Veeco Lease”) (the real and personal

property leased pursuant to the Veeco Leases, the “Veeco Leased Real Property”), which schedule lists the landlord, sublandlord, and address of the Veeco Leased Real Property. To the Knowledge of Veeco, there are no material oral agreements with respect to any Veeco Leased Real Property. Except as set forth in Section 3.14(b) of the Veeco Disclosure Schedule, Veeco or its Subsidiaries has no option or other right to purchase any Veeco Leased Real Property, and no consents of any party to any Veeco Lease is required in connection with the Transactions. Veeco or its Subsidiaries, as the case may be, has a valid and subsisting leasehold or subleasehold interest in the Veeco Leased Real Property free and clear of all Liens, except for Permitted Liens. With respect to each of the Veeco Leases, to the Knowledge of Veeco: (i) such Veeco Lease is legal, valid, binding, enforceable against Veeco or its applicable Subsidiary and in full force and effect, except as limited by Laws affecting the enforcement of creditors’ rights generally, by general equitable principles or by the discretion of any Governmental Entity before which any Proceeding seeking enforcement may be brought; (ii) the possession and quiet enjoyment of the Veeco Leased Real Property under such Veeco Lease has not been disturbed and there are no disputes with respect to such Veeco Lease; (iii) neither Veeco nor any applicable Subsidiary is in material default under, nor has any event occurred or does any circumstance exist that, with notice of lapse of time or both would constitute a material default by Veeco or its applicable Subsidiary under such Veeco Lease; and (iv) no default, event or circumstance exists that, with notice or lapse of time, or both, would constitute a material default by any counterparty to any such Veeco Lease. Veeco has made available to the Axcelis true and complete copies, in all material respects, of all Veeco Leases, none of which has been assigned or amended or modified in any material respect except as set forth in Section 3.14(b) of the Veeco Disclosure Schedule.

(c) The Veeco Owned Real Property and Veeco Leased Real Property constitute all real property necessary for the conduct of the business of Veeco and its Subsidiaries, taken as a whole, as currently conducted. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, neither Veeco nor any of its Subsidiaries has received written notice of any Proceedings in eminent domain, condemnation or other similar Proceedings that are pending, and to Veeco’s Knowledge there are no such Proceedings threatened in writing, affecting any portion of the Veeco Owned Real Property or Veeco Leased Real Property and neither Veeco nor any of its Subsidiaries has received written notice of the existence of any Order or of any pending Proceeding relating to the ownership, lease, use, occupancy or operation by any Person of any portion of the Veeco Owned Real Property or Veeco Leased Real Property. Neither Veeco nor any of its Subsidiaries has leased, subleased, licensed or otherwise granted any Person a material right to use or occupy any of the Veeco Owned Real Property or Veeco Leased Real Property or any material portion thereof. Except as set forth in Section 3.14(c) of the Veeco Disclosure Schedule, neither Veeco nor any of its Subsidiaries has granted any option or other right to any third party to purchase any of the Veeco Owned Real Property or any material portion thereof. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect or as otherwise set forth in Section 3.14(c) of the Veeco Disclosure Schedule, there are no construction or material alteration projects, other than normal repair and maintenance, currently ongoing or contemplated with respect to any Veeco Owned Real Property or, to Veeco’s Knowledge, Veeco Leased Real Property, and any prior construction or material alteration projects, to which Veeco or its Subsidiaries contracted under written agreements to complete, are fully complete, including the completion of all punch list items and payment of all amounts owed to outside contractors or other third parties in connection therewith and, to Veeco’s Knowledge, all buildings and improvements located on such Veeco Owned Real Property or Veeco Leased Real Property, as the case may be, are in a state of good operating condition, subject to ordinary wear and tear, normal repairs and maintenance, and any maintenance or repair obligations of landlords under the Veeco Leases.

3.15 Tax Matters.

(a) Except as would not, individually or in the aggregate, reasonably be expected to have a Veeco Material Adverse Effect:

(i) (A) All Tax Returns that are required to be filed by or with respect to Veeco or any of its Subsidiaries have been timely filed (taking into account any extension of time within which to file), (B) all such Tax Returns are or will be true, complete and accurate in all respects, (C) Veeco and its Subsidiaries have paid all Taxes due and owing by any of them (whether or not shown on any Tax Return) or adequate accruals or reserves have been established in the Veeco SEC Documents for any such

Taxes that have not been paid and (D) neither Veeco nor any of its Subsidiaries has filed any extension of time within which to file any Tax Returns that have not been filed, except in the ordinary course of business.

(ii) No written agreement or other written document waiving or extending, or having the effect of waiving or extending, the statute of limitations or the period of assessment or collection of any Taxes relating to Veeco or any of its Subsidiaries has been filed or entered into with any Taxing Authority, and no request for any such waiver or extension is currently pending.

(iii) (A) Neither Veeco nor any of its Subsidiaries is the subject of any Tax audit or other proceeding with respect to any Taxes or Tax Returns, which audit or other proceeding remains unresolved; (B) no Tax audit or other proceeding with respect to Taxes or Tax Returns has been proposed against Veeco or any of its Subsidiaries in writing; and (C) no deficiencies have been asserted and no assessments have been made against Veeco or any of its Subsidiaries, in each case, as a result of any Tax audit or other proceeding with respect to Taxes or Tax Returns, which deficiencies or assessments have not been resolved (except those that are being contested in good faith and for which adequate accruals or reserves have been established in the Veeco SEC Documents).

(iv) No claim has ever been made in writing by a Taxing Authority of a jurisdiction where Veeco or any of its Subsidiaries has not filed Tax Returns that Veeco or such Subsidiary is or may be subject to taxation by that jurisdiction.

(v) Neither Veeco nor any of its Subsidiaries has constituted, in the two (2) years prior to the date of this Agreement, a “distributing corporation” or a “controlled corporation” (within the meaning of Section 355(a)(1)(A) of the Code) in a distribution of stock intended to qualify for tax-free treatment under Section 355 of the Code (or any similar provision of state, local, or non-U.S. Law) or otherwise as part of a plan (or series of related transactions), within the meaning of Section 355(e) of the Code, that includes the Merger.

(vi) Neither Veeco nor any of its Subsidiaries (A) is a party to or bound by or has any obligation under any Tax allocation, indemnification, separation, sharing or similar agreement or arrangement (other than such an agreement or arrangement exclusively between or among Veeco and its Subsidiaries or entered into in the ordinary course of business which does not relate primarily to Taxes), (B) is or has been a member of any consolidated, combined, unitary or similar group for purposes of filing Tax Returns or paying Taxes (other than a group the common parent of which is or was Veeco or any of its Subsidiaries), (C) has entered into a closing agreement pursuant to Section 7121 of the Code or any other binding agreement with a Taxing Authority that would have an effect on the determination of Veeco’s or any of its Subsidiaries’ liability to Tax in a tax year ending after the Effective Time, or any predecessor provision or any similar provision of foreign, state or local Tax law, (D) has any liability for Taxes of any Person (other than Veeco or any of its Subsidiaries) under U.S. Treasury Regulation Section 1.1502-6 (or any similar provision of state, local, or non-U.S. Law) or as transferee or successor or (E) will be required to make any payment after the Closing Date as a result of an election under Section 965(h) of the Code.

(vii) There are no Liens for Taxes upon any property or assets of Veeco or any of its Subsidiaries, except for Permitted Liens.

(viii) Neither Veeco nor any of its Subsidiaries is or has ever been a “surrogate foreign corporation” as defined in Section 7874(a)(2)(B) of the Code.

(ix) Neither Veeco nor any of its Subsidiaries has entered into any “listed transaction” within the meaning of Section 6707A(c)(2) of the Code and U.S. Treasury Regulation Section 1.6011-4(b)(2) (or any similar provision of state, local or non-U.S. Law).

(x) Veeco is not a United States real property holding corporation within the meaning of Section 897(c)(2) of the Code.

(b) Neither Veeco nor any of its Subsidiaries has Knowledge of any facts, agreements, plans or other circumstances or has taken or agreed to take any action that would reasonably be expected to prevent or impede the Merger from qualifying for the Intended Tax Treatment.

3.16 Material Contracts.

(a) All Contracts required to be filed as exhibits to the Veeco SEC Documents have been so filed in a timely manner. Section 3.16(a) of the Veeco Disclosure Schedule sets forth a true and complete list, as of the date hereof, of each of the following Contracts, excluding any Veeco SEC Documents and any Veeco Benefit Plans, to which Veeco or any of its Subsidiaries is a party or by which Veeco or any of its Subsidiaries or any of their assets or businesses are bound (and any amendments, supplements and modifications thereto):

- (i) any Contract that is a “material contract” (as such term is defined in Item 601(b)(10) of Regulation S-K of the Exchange Act);
- (ii) any Contract that materially limits the ability of Veeco or any of its affiliates (including, following the consummation of the Transactions, the Surviving Corporation and its affiliates) to engage or compete in any line of business or in any geographic area;
- (iii) any Contract required to be disclosed pursuant to Item 404 of Regulation S-K of the Exchange Act;
- (iv) any Contract or series of related Contracts relating to indebtedness for borrowed money (A) in excess of \$1,000,000 or (B) that becomes due and payable as a result of the Transactions;
- (v) all Contracts granting any licenses, sublicenses, rights, interest or options into or any Intellectual Property granted by Veeco or any of its Subsidiaries to any Person (including coexistence agreements, prior rights agreements, rights of first refusal, rights of last refusal, covenants not to sue and immunities from suit), other than (A) non-disclosure agreements on Veeco’s standard form made available to Axcelis, (B) non-material and non-exclusive licenses granted by Veeco or its Subsidiaries to advertising agencies, vendors and other similar contractors in the ordinary course of business consistent with past practice, (C) non-material customer agreements in which the grants to the applicable customer of rights to use Intellectual Property are non-exclusive and incidental to and not material to performance under the agreement and (D) customary licenses granted to employees in the ordinary course of business consistent with past practice;
- (vi) all Contracts granting any licenses, sublicenses, rights, interest or options into or any Intellectual Property granted by any Person to Veeco or any of its Subsidiaries, other than (A) licenses to generally commercially available Software licensed pursuant to a standard “off- the-shelf” or “shrink wrap” or “click wrap” agreements, (B) non-material agreements in which the grants in, to or under Intellectual Property are non-exclusive and incidental to, and not material to, performance under the agreement and (C) customary licenses granted from employees in the ordinary course of business consistent with past practice;
- (vii) any purchase, sale or supply contract that contains volume requirements or commitments, exclusive or preferred purchasing arrangements, most favored nation provisions or promotional requirements, other than any such Contracts that are not material to Veeco and its Subsidiaries;
- (viii) any Veeco Lease reasonably expected to result in payments of base rent in excess of \$1,000,000 in any twelve (12) month period after the Closing Date;
- (ix) any agreement that grants any right of first refusal or right of first offer or similar right or that limits or purports to limit the ability of Veeco or any of its Subsidiaries to own, operate, sell, transfer, pledge or otherwise dispose of any material amount of assets or businesses (in any case in excess of \$1,000,000);
- (x) any acquisition or divestiture agreement (A) entered into since December 31, 2023 with a purchase price in excess of \$1,000,000 or (B) that contains “earn-out” provisions or other contingent payment obligations that could reasonably be expected to exceed \$1,000,000 (including indemnification obligations) that have not been satisfied in full as of the date hereof;
- (xi) any agreement that by its terms limits the payment of dividends or other distributions by Veeco or any of its Subsidiaries;

(xii) any Contract for any joint venture, partnership or similar arrangement, or any Contract involving a sharing of revenues, profits, losses, costs, or liabilities by Veeco or any of its Subsidiaries with any other Person;

(xiii) any “single source” supply Contract pursuant to which goods or materials that are material to Veeco or any of its Subsidiaries are supplied to Veeco or such Subsidiary from an exclusive source; or

(xiv) any Contract with any Governmental Entity.

(b) Veeco has heretofore made available to Axcelis true, correct and complete copies of the Contracts set forth in Section 3.16(a).

(c) Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, (i) all Contracts set forth or required to be set forth in Section 3.16(a) of the Veeco Disclosure Schedule or filed or required to be filed as exhibits to the Veeco SEC Documents (the “Veeco Material Contracts”) are valid, binding and in full force and effect and are enforceable by Veeco or its applicable Subsidiary in accordance with their terms, except as limited by Laws affecting the enforcement of creditors’ rights generally, by general equitable principles or by the discretion of any Governmental Entity before which any Proceeding seeking enforcement may be brought, (ii) Veeco, or its applicable Subsidiary, has performed all obligations required to be performed by it under the Veeco Material Contracts, and it is not (with or without notice or lapse of time, or both) in breach or default thereunder and, to the Knowledge of Veeco, no other party to any Veeco Material Contract is (with or without notice or lapse of time, or both) in breach or default thereunder, (iii) since December 31, 2023, neither Veeco nor any of its Subsidiaries has received written notice of any actual, alleged, possible or potential violation of, or failure to comply with, any term or requirement of any Veeco Material Contract, and (iv) neither Veeco nor any of its Subsidiaries has received any written notice of the intention of any party to cancel, terminate, materially change the scope of rights under or fail to renew any Veeco Material Contract.

3.17 Intellectual Property.

(a) Section 3.17(a) of the Veeco Disclosure Schedule sets forth a complete and accurate list of all (i) issued patents and pending patent applications, (ii) Trademark registrations and applications, (iii) copyright registrations and applications, and (iv) internet domain name registrations, in each case that are owned, or purported to be owned, by Veeco or any of its Subsidiaries (collectively, the “Veeco Registered Intellectual Property”). Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, Veeco owns all right, title and interest in the Veeco Registered Intellectual Property free and clear of all Liens other than Liens created by Axcelis or Permitted Liens, and each such item of Veeco Registered Intellectual Property is subsisting, and, to the Knowledge of Veeco, each such registered item is valid and enforceable.

(b) Neither the execution and delivery of this Agreement by Veeco, nor the performance of this Agreement by Veeco, will result in the loss, forfeiture, termination, or impairment of, or give rise to a right of any Person to limit, terminate, or consent to the continued use of, any rights of Veeco or any of its Subsidiaries in any Intellectual Property except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect.

(c) Except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to the business of Veeco and its Subsidiaries, to the Knowledge of Veeco, neither Veeco nor any of its Subsidiaries nor the conduct of their business (i) is infringing, misappropriating or otherwise violating, and has not during the last three (3) years infringed, misappropriated or otherwise violated, the Intellectual Property rights of any Person, or (ii) currently constitutes, and has not during the last three (3) years constituted, unfair competition or trade practices under the Laws of any jurisdiction in which it conducts its business. Neither Veeco nor any of its Subsidiaries has received any written charge, complaint, claim, demand, or notice in the last three (3) years (or earlier, if presently not resolved) alleging any such infringement, misappropriation or other violation (including any claim that Veeco or any of its Subsidiaries must license or refrain from using any Intellectual Property rights of any Person) which alleged infringement, misappropriation or other violation, if true, would reasonably be expected to be, individually or in the aggregate, material to the business of Veeco and its Subsidiaries. To the Knowledge of

Veeco, no Person is infringing, misappropriating or otherwise violating any Intellectual Property owned by Veeco or any of its Subsidiaries, except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect. Neither Veeco nor any of its Subsidiaries has made or asserted any charge, complaint, claim, demand or notice in the last three (3) years (or earlier, if presently not resolved) alleging any such infringement, misappropriation or other violation which alleged infringement, misappropriation or other violation, if true, would reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect.

(d) Veeco and its Subsidiaries have taken commercially reasonable steps to maintain, police and protect the Intellectual Property that is owned or purported to be owned by Veeco or its Subsidiaries and is material to their business ("Veeco Material Intellectual Property"). Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, all Veeco Material Intellectual Property that derives actual or potential economic value from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use has been maintained in confidence in accordance with protection procedures that are in accordance with procedures customarily used in the industry to protect rights of like importance and, to the Knowledge of Veeco, adequate for protection against unauthorized disclosure or use. To the Knowledge of Veeco, there has been no unauthorized disclosure of any Veeco Material Intellectual Property that constitutes confidential information. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, to the Knowledge of Veeco, all former and current officers, directors, employees, personnel, consultants, advisors, agents, and independent contractors of Veeco and its Subsidiaries, and each of their predecessors, who have contributed to or participated in the conception and development of Intellectual Property for such entities have entered into valid and binding proprietary rights agreements with Veeco or one of its Subsidiaries or predecessors, vesting ownership of such Intellectual Property in Veeco or one of its Subsidiaries or predecessors. No such Person has asserted, and to the Knowledge of Veeco, no such Person has, any right, title, interest or other claim in, or the right to receive any royalties or other consideration with respect to, any Veeco Material Intellectual Property.

(e) Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, no Veeco Software contains, or has contained, is or has been linked with, derived from, or distributed with, or developed using, any Open Source Materials in a manner that requires, pursuant to the applicable Open Source License, any Veeco Software: (i) be disclosed or distributed in source code form; (ii) be licensed for the purpose of making modifications or derivative works; or (iii) be redistributable at no charge (in each case, except for the applicable, unmodified third party Open Source Material itself). Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, Veeco and its Subsidiaries are and have been in compliance with the terms and conditions of each Open Source Material license to which they are subject.

(f) Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, none of the Veeco Software contains any virus, Trojan horse, worm or other Software routines or hardware components designed or that may be used to permit unauthorized access to or disable, erase, interrupt, destroy or otherwise harm or materially adversely affect the functionality or operation of software, hardware or data (collectively, "Contaminants"). Veeco and its Subsidiaries have implemented industry standard procedures to mitigate against the likelihood that the Veeco Software contain any Contaminants, except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, to the Knowledge of Veeco, there has been no cyber-attack, unauthorized access to or use of (whether without authorization or in breach of an authorization) or harm to any IT Assets (or any Software, information, or data stored on any IT Assets).

(g) Except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to the business of Veeco and its Subsidiaries, (i) neither Veeco nor its Subsidiaries has disclosed or delivered to any escrow agent or any other Person (other than an employee bound by a binding and enforceable written confidentiality agreement) any of the Source Code for any Veeco Software, and no other Person has the right, contingent or otherwise, to obtain access to such Source Code; (ii) no event has occurred, and no circumstance or condition exists, that (with or without notice or lapse of time or both)

will, or would, result in the release, delivery, license or other disclosure of any of the Source Code for any Veeco Software to any Person who is not as of the date hereof a current employee bound by a binding and enforceable written confidentiality agreement; (iii) the consummation of the Transactions will not constitute a Source Code escrow release condition to require release of Source Code for any Veeco Software from escrow; and (iv) no requests have been made to Veeco, its Subsidiaries, or any escrow agent, for release of Source Code for any Veeco Software.

(h) Except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to the business of Veeco and its Subsidiaries, neither Veeco nor its Subsidiaries is itself a member of and has not participated in any patent pool, standards setting organization, special interest group, forum, consortium, committee, working group, trade association, or other organization pursuant to the rules of which it is obligated to license any existing or future copyrights or patents to any Person or to refrain from asserting any existing or future copyrights or patents against any Person. Without limiting the foregoing, neither Veeco nor its Subsidiaries is a member of the Open Invention Network.

(i) None of the execution and delivery of this Agreement, the consummation of the Transactions, or the performance by Veeco or any of its Subsidiaries of its obligations hereunder: (i) conflicts or will conflict with, or alters or impairs or will alter or impair, any of Veeco or its Subsidiaries' rights in, to and under any Intellectual Property or the validity, enforceability, use, right to use, ownership, registration, right to register, priority, duration, scope, or effectiveness of any such Intellectual Property, (ii) will alter any, or trigger any additional, royalties, license fees, honoraria or other payment obligations of Veeco or Axcelis or their respective Subsidiaries or (iii) will result in the grant, assignment or transfer to any other Person of any license or other right or interest, or otherwise encumber, any of the Intellectual Property owned or purported to be owned by Veeco or its Subsidiaries or, pursuant to any Contract to which Veeco or its Subsidiaries is a party, any other Intellectual Property of Axcelis or its Affiliates.

(j) Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, the IT Assets of Veeco and its Subsidiaries operate in all material respects in accordance with their documentation and functional specifications and as required by Veeco and its Subsidiaries to operate the business of Veeco and its Subsidiaries as presently conducted and have not in the last three (3) years materially malfunctioned or failed. Veeco and its Subsidiaries have implemented commercially reasonable measures to protect the confidentiality and security of such IT Assets and information stored or contained therein against any unauthorized use, access, interruption or corruption. Veeco and its Subsidiaries have implemented commercially reasonable data backup, data storage, system redundancy and disaster avoidance procedures with respect to their IT Assets.

3.18 Data Privacy. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, in the last three (3) years, (a) Veeco and its Subsidiaries have been in compliance with applicable Laws that govern Veeco's and its Subsidiaries' collection, use, disclosure and protection of Personal Information (collectively, "Veeco Data Privacy and Security Laws"), (b) Veeco and its Subsidiaries have implemented and maintained commercially reasonable organizational, physical, and technical measures designed to protect Personal Information in its or their possession or control against unauthorized access, acquisition, alteration, modification, or use, (c) there has been no unauthorized access, acquisition, alteration, modification, use or loss or other misuse of Personal Information maintained or processed by or on behalf of Veeco and its Subsidiaries, and (d) Veeco and its Subsidiaries have not received any written notification from any Person that alleges a violation of any Veeco Data Privacy and Security Laws and are not and have not been subject to any investigation by a Governmental Entity relating to any Veeco Data Privacy and Security Laws.

3.19 Broker's Fees. Except for the financial advisors' fees set forth in Section 3.19 of the Veeco Disclosure Schedule, neither Veeco nor any of its Subsidiaries nor any of their respective officers or directors on behalf of Veeco or such Subsidiaries has employed any financial advisor, broker or finder or incurred any liability for any financial advisory fee, broker's fees, commissions or finder's fees in connection with any of the Transactions.

3.20 Opinion of Veeco's Financial Advisor. UBS Securities LLC, Veeco's financial advisor, has delivered to the Veeco Board its opinion in writing or orally, in which case, such opinion will be subsequently confirmed in writing, to the effect that, as of the date thereof and based upon and subject to the factors

and assumptions set forth therein, the Veeco Exchange Ratio pursuant to this Agreement is fair from a financial point of view to the holders of the shares of Veeco Common Stock.

3.21 Ownership of Veeco Common Stock. Neither Veeco nor any of its affiliates or associates is, nor at any time during the last three (3) years has Veeco or any of its affiliates or associates been, an “interested stockholder” of Acelis as defined in Section 203 of the DGCL. Veeco and its Subsidiaries, affiliates and associates do not beneficially own any shares of Acelis Common Stock or other securities of Acelis or any options, warrants or other rights to acquire Acelis Common Stock or other securities of, or any other economic interest (through derivative securities or otherwise) in, Acelis.

3.22 Insurance. All insurance policies (including policies providing casualty, liability, and workers compensation coverage, but excluding any Veeco Benefit Plans) to which Veeco or any of its Subsidiaries is currently a party are in full force and effect, and, to the Knowledge of Veeco, have been issued by licensed insurers, all premiums due and payable in respect of such policies have been paid, and no notice of cancellation or termination has been received with respect to any such policies, except for such cancellations or terminations which would have not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect, each of Veeco and its Subsidiaries is, and since December 31, 2023 has been, insured with respect to its assets and properties and the conduct of its business in such amounts and against such risks as are in its reasonable judgment sufficient for compliance with Law and as are adequate to protect its assets and properties and the conduct of its business.

3.23 Takeover Provisions. Assuming the accuracy of Acelis’ and Merger Sub’s representation and warranty set forth in Section 4.21, the Veeco Board has taken and will take all actions so that the restrictions (whether procedural, voting, approval, fairness or otherwise) applicable to business combinations contained in Section 203 of the DGCL and any other Takeover Provisions are, and will be, inapplicable to the execution, delivery and performance of this Agreement, and the timely consummation of the Merger and any other Transactions and will not restrict, impair or delay the ability of Acelis or Merger Sub to vote or otherwise exercise all rights as a stockholder. No “fair price,” “moratorium,” “control share acquisition” or other similar Takeover Provisions or any anti-takeover provision in the Veeco Charter or the Veeco Bylaws is, or at the Effective Time will be, applicable to the Veeco Securities, the Merger or the other Transactions.

3.24 Assets. Other than the Veeco Owned Real Property and the Veeco Leased Real Property, Veeco or a Subsidiary of Veeco has good and marketable title to, or good and valid leasehold interests in, all of the material tangible assets reflected as owned, leased or used by it on the most recent consolidated balance sheet of Veeco contained in the Veeco SEC Documents filed prior to the date hereof (except for properties or assets that have been sold or disposed of in the ordinary course of business consistent with past practice since the date of such balance sheet) free and clear of any Liens, except for Permitted Liens.

3.25 Top Customers and Suppliers.

(a) Section 3.25(a) of the Veeco Disclosure Schedule sets forth a true, complete and correct list of each customer who, for the year ended December 31, 2023 or for the year ended December 31, 2024, was one of the twenty (20) largest sources of revenues for Veeco, based on revenues in this period (each, a “Veeco Top Customer”). As of the date hereof, neither Veeco nor any of its Subsidiaries has received written notice from any Veeco Top Customer that such customer intends to terminate or materially and adversely modify existing Contracts with Veeco or any of its Subsidiaries.

(b) Section 3.25(b) of the Veeco Disclosure Schedule sets forth a true, complete and correct list of each supplier who, for the year ended December 31, 2023 or for the year ended December 31, 2024, was one of the twenty (20) largest suppliers for Veeco, based on amounts paid or payable in this period (each, a “Veeco Top Supplier”). As of the date hereof, neither Veeco nor any of its Subsidiaries has received any written notice from any Veeco Top Supplier that such supplier intends to terminate or materially and adversely modify existing Contracts with Veeco or any of its Subsidiaries.

3.26 Product Defects and Warranties.

(a) Since December 31, 2023, all Veeco Products that are sold and currently supported by Veeco or any of its Subsidiaries have been provided in conformity with Veeco's and its Subsidiaries' applicable contractual commitments, warranties and specifications, except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to Veeco and its Subsidiaries, taken as a whole.

(b) Veeco's warranty reserve reflected on the most recent Veeco SEC Financial Statements was calculated utilizing historical warranty experience rates consistent with past practice and, to the Knowledge of Veeco, was sufficient as of the date of the most recent Veeco SEC Financial Statements to cover the unexpired warranty liabilities of Veeco and its Subsidiaries for any products (including Veeco Products) sold by Veeco or any of its Subsidiaries to their respective customers as of the date of the most recent Veeco SEC Financial Statements, except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to Veeco and its Subsidiaries, taken as a whole. Since the most recent Veeco SEC Financial Statements, Veeco has not materially modified its practices in calculating warranty reserves. To the Knowledge of Veeco, Veeco's current warranty reserve is sufficient as of the date hereof to cover the unexpired warranty liabilities of Veeco and its Subsidiaries for any products (including Veeco Products) sold by Veeco or any of its Subsidiaries to their respective customers as of the date hereof.

3.27 No Other Representations or Warranties. Veeco hereby acknowledges and agrees that, except for the representations and warranties set forth in Article 4, (a) none of Axcelis, or any of its affiliates, stockholders or representatives, or any other Person, has made or is making any express or implied representation or warranty with respect to Axcelis or its business or operations, including with respect to any information provided or made available to Veeco or any of its affiliates, stockholders or representatives, or any other Person, or, except as otherwise expressly set forth in this Agreement, had or has any duty or obligation to provide any information to Veeco or any of its affiliates, stockholders or Representatives, or any other Person, in connection with this Agreement, the Transactions or otherwise, and (b) to the fullest extent permitted by Law, none of Axcelis, nor any of its affiliates, stockholders or representatives, or any other Person, will have or be subject to any liability or indemnification or other obligation of any kind or nature to Veeco, or any of its affiliates, stockholders or representatives, or any other Person, resulting from the delivery, dissemination or any other distribution to Veeco or any of its affiliates, stockholders or representatives, or any other Person, or the use by Veeco or any of its affiliates, stockholders or representatives, or any other Person, of any such information provided or made available to any of them by Axcelis, or any of its affiliates, stockholders or representatives, or any other Person, and (subject to the express representations and warranties of Axcelis set forth in Article 4) Veeco and its Subsidiaries, affiliates, stockholders and representatives, or any other Person, expressly disclaim reliance on any such information (including the accuracy or completeness thereof) or any representations or warranties or other statements or omissions that may have been made by Axcelis or any Person with respect to Axcelis other than the representations and warranties set forth in this Agreement.

ARTICLE 4

REPRESENTATIONS AND WARRANTIES OF AXCELIS

Except (a) as set forth in the Axcelis Disclosure Schedule (subject to Section 8.14) and (b) as otherwise disclosed or identified in the Axcelis SEC Documents publicly filed or furnished after December 31, 2023 and prior to the date hereof (other than (i) any forward-looking disclosures contained in the "Forward Looking Statements" and "Risk Factors" sections of the Axcelis SEC Documents and any other disclosures included therein to the extent they are primarily predictive, cautionary or forward looking in nature and (ii) information included in, or incorporated by reference as, exhibits and schedules to any Axcelis SEC Document, and provided that the exception provided for in this clause (b) shall be applied if, and only if, the nature and content of the applicable disclosure in any such Axcelis SEC Document publicly filed or furnished prior to the date hereof is reasonably specific as to matters and items such that the subject matter of such disclosure is reasonably apparent on the face of the text of such disclosure to be applicable to the representation set forth herein), Axcelis hereby represents and warrants to Veeco as follows:

4.1 Corporate Organization. Each of Axcelis and, except where the failure to be in good standing has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis

Material Adverse Effect, its Subsidiaries, including Merger Sub, is a corporation or other entity duly organized, validly existing and, to the extent applicable, in good standing under the laws of the jurisdiction of its organization and has the requisite corporate or other entity power and authority to own or lease all of its properties and assets and to carry on its business as it is now being conducted. Each of Axcelis and its Subsidiaries, including Merger Sub, is duly licensed or qualified to do business in each jurisdiction in which the nature of the business conducted by it or the character or location of the properties and assets owned or leased by it makes such licensing or qualification necessary, except where the failure to be so licensed or qualified, has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect. Axcelis has provided Veeco true, complete and correct copies of the Certificate of Incorporation (the “Axcelis Charter”) and Bylaws (the “Axcelis Bylaws”) of Axcelis, as in effect as of the date of this Agreement. Axcelis is not in violation of any of the provisions of the Axcelis Charter or the Axcelis Bylaws.

4.2 Axcelis Capitalization.

(a) The authorized capital stock of Axcelis consists of seventy-five million (75,000,000) shares of Axcelis Common Stock and thirty million (30,000,000) shares of Axcelis Preferred Stock. As of the Capitalization Date, (i) 30,997,551 shares of Axcelis Common Stock (other than treasury shares) were issued and outstanding, all of which were validly issued and fully paid, nonassessable and free of preemptive rights, (ii) no shares of Axcelis Common Stock were held in the treasury of Axcelis or by its Subsidiaries, (iii) 702,969 shares of Axcelis Common Stock were issuable (and such number was reserved for issuance) upon the vesting of Axcelis RSUs (including any performance-based Axcelis RSUs, based on target level of performance) outstanding as of such date, (iv) 2,753,665 shares of Axcelis Common Stock were authorized for issuance (but not yet issued or reserved for issuance on outstanding Axcelis RSUs) pursuant to the Axcelis Stock Plan, (v) 858,354 shares of Axcelis Common Stock were authorized for issuance (but not yet issued) pursuant to the Axcelis 2020 Employee Stock Purchase Plan (the “Axcelis ESPP”) and (vi) no shares of Axcelis Preferred Stock were issued and outstanding (collectively, the items in clauses (i) through (v), the “Axcelis Securities”).

(b) Except for Axcelis RSUs (including performance-based Axcelis RSUs), shares of Axcelis Common Stock authorized for issuance pursuant to the Axcelis ESPP and shares of Axcelis Common Stock authorized for issuance under the Axcelis Stock Plan, there are no options, warrants or other rights, agreements, arrangements or commitments of any character to which Axcelis or any of its Subsidiaries is a party or by which Axcelis or any of its Subsidiaries is bound relating to the issued or unissued capital stock or other Equity Interests of Axcelis or any of its Subsidiaries, or securities convertible into or exchangeable for such capital stock or other Equity Interests, or obligating Axcelis or any of its Subsidiaries to issue or sell any shares of its capital stock or other Equity Interests, or securities convertible into or exchangeable for such capital stock of, or other Equity Interests in, Axcelis or any of its Subsidiaries. Since the Capitalization Date, Axcelis has not issued any shares of its capital stock or other Equity Interests, or securities convertible into or exchangeable for such capital stock or other Equity Interests, other than those shares of capital stock reserved for issuance described in this Section 4.2(b). All shares of Axcelis Common Stock subject to issuance under the Axcelis Stock Plan, upon issuance prior to the Effective Time on the terms and conditions specified in the instruments pursuant to which they are issuable, will be duly authorized, validly issued, fully paid, nonassessable and free of preemptive rights. There are no bonds, debentures, notes or other indebtedness of Axcelis having the right to vote on any matters on which stockholders of Axcelis may vote. Neither Axcelis nor any of its Subsidiaries is a party to any voting agreement with respect to the voting of any Equity Interests of Axcelis or any of its Subsidiaries.

(c) Axcelis has previously provided Veeco with a true and complete list as of the Capitalization Date of each outstanding Axcelis RSU (including performance-based Axcelis RSUs), including the holder, country of residence (if outside the United States), date of grant, expiration date, the vesting schedule, the number of shares of Axcelis Common Stock subject thereto (with performance at both target and maximum level of performance), the amount vested and outstanding and the amount unvested and outstanding, and the Axcelis Stock Plan under which the award is granted. All of the outstanding Axcelis RSUs have been duly authorized by all necessary corporate action and were granted in accordance with the terms of the Axcelis Stock Plan and applicable Laws.

(d) There are no outstanding contractual obligations of Axcelis or any of its Subsidiaries (i) restricting the transfer of, (ii) affecting the voting rights of, (iii) requiring the repurchase, redemption or disposition of, or containing any right of first refusal with respect to, (iv) requiring the registration for sale of, or (v) granting any preemptive or antidilutive right with respect to, any shares of Axcelis Common Stock or any capital stock of, or other Equity Interests in, Axcelis or any of its Subsidiaries.

(e) Section 4.2(e) of the Axcelis Disclosure Schedule sets forth a true and complete list of all of the Subsidiaries of Axcelis and the jurisdiction of organization of each such Subsidiary. Except for Axcelis and Merger Sub and as set forth in Section 4.2(e) of the Axcelis Disclosure Schedule, none of Axcelis or any of its Subsidiaries holds an Equity Interest in any other Person. Each outstanding share of capital stock or other Equity Interest in each Subsidiary of Axcelis is duly authorized, validly issued, fully paid, nonassessable and free of preemptive rights and is owned, beneficially and of record, by Axcelis or one or more of its wholly owned Subsidiaries free and clear of all Liens. There are no outstanding contractual obligations of Axcelis or any of its Subsidiaries to provide funds to, or make any investment (in the form of a loan, capital contribution or otherwise) in, any Subsidiary of Axcelis (in excess of \$1,000,000) or any other Person, other than guarantees by Axcelis of any indebtedness or other obligations of any wholly owned Subsidiary of Axcelis.

4.3 Authority; Execution and Delivery; Enforceability.

(a) Axcelis has all necessary power and authority to execute and deliver this Agreement, to perform and comply with their obligations under this Agreement and, subject to the receipt of the Axcelis Stockholder Approval and to the adoption of this Agreement by Axcelis as the sole stockholder of Merger Sub, to consummate the Transactions applicable to such party. The execution and delivery by Axcelis of this Agreement, the performance and compliance by Axcelis with each of its obligations herein and the consummation by Axcelis of the Transactions have been duly authorized by all necessary corporate action on the part of Axcelis, subject to the receipt of the Axcelis Stockholder Approval and to the adoption of this Agreement by Axcelis as the sole stockholder of Merger Sub, and no other corporate proceedings on the part of Axcelis and no other stockholder votes are necessary to authorize this Agreement or the consummation by Axcelis of the Transactions to which it is a party. Axcelis has duly and validly executed and delivered this Agreement and, assuming the due authorization, execution and delivery by Veeco of this Agreement, this Agreement constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, except as limited by Laws affecting the enforcement of creditors' rights generally, by general equitable principles or by the discretion of any Governmental Entity before which any Proceeding seeking enforcement may be brought.

(b) The Axcelis Board, at a meeting duly called and held, unanimously (except for one (1) director recusing himself) adopted resolutions (i) adopting and approving this Agreement and the consummation of the Transactions upon the terms and subject to the conditions set forth in this Agreement, (ii) determining that the terms of this Agreement, including the Axcelis Share Issuance, the Merger and the other Transactions, are fair to, and in the best interests of, Axcelis and its stockholders, (iii) directing that Axcelis Share Issuance be submitted to the stockholders of Axcelis for approval and adoption, (iv) recommending that its stockholders vote in favor of the approval of the Axcelis Share Issuance and (v) declaring that this Agreement is advisable (the "Axcelis Recommendation").

(c) Assuming the accuracy of the representations and warranties in Section 3.21, to the Knowledge of Axcelis, no takeover, anti- takeover, business combination, control share acquisition or similar Law applies to this Agreement, the Merger or the other Transactions. The only vote of holders of any class or series of Equity Interests of Axcelis necessary to approve the Transactions is the approval of the Axcelis Share Issuance by the holders of a majority of the shares of Axcelis Common Stock outstanding and entitled to vote thereon at the Axcelis Stockholders Meeting (the "Axcelis Stockholder Approval"). No other vote of the holders of Axcelis Common Stock or any other Equity Interests of Axcelis is necessary to consummate the Transactions.

4.4 No Conflicts.

(a) The execution and delivery of this Agreement by Axcelis does not and will not, and the performance of this Agreement by Axcelis and the consummation of the Transactions will not, (i) assuming the Axcelis

Stockholder Approval is obtained and this Agreement is adopted by Acelis as the sole stockholder of Merger Sub, conflict with or violate any provision of the Acelis Charter or the Acelis Bylaws or any equivalent organizational documents of any Subsidiary of Acelis, including Merger Sub, (ii) assuming that all consents, approvals, authorizations and permits described in Section 4.4(b) have been obtained and all filings and notifications described in Section 4.4(b) have been made and any waiting periods thereunder have terminated or expired, conflict with or violate any Law applicable to Acelis or any of its Subsidiaries, including Merger Sub, or by which any property or asset of Acelis or any of its Subsidiaries, including Merger Sub, is bound or affected or (iii) require any consent or approval under, result in any breach of or any loss or impairment of any benefit under, constitute a change of control or default (or an event which with notice or lapse of time or both would become a default) under or give to others any right of termination, vesting, amendment, acceleration or cancellation of, or result in the creation of a Lien (other than Permitted Liens) on any property or asset of Acelis or any of its Subsidiaries, including Merger Sub, pursuant to, any Contract or Permit (other than an Acelis Benefit Plan), except, with respect to clauses (ii) and (iii), for any such conflicts, violations, breaches, defaults or other occurrences which would not, individually or in the aggregate, reasonably be expected to (A) prevent or materially delay consummation of the Merger, (B) otherwise prevent or materially delay performance by Acelis of any of its material obligations under this Agreement or (C) have an Acelis Material Adverse Effect.

(b) The execution and delivery of this Agreement by Acelis does not and will not, and the consummation by Acelis of the Transactions to which it is a party and compliance by Acelis with any of the terms or provisions hereof or thereof will not, require any consent, approval, authorization or permit of, or filing with or notification to, any Governmental Entity, except (i) under the Exchange Act, Securities Act, any applicable blue sky Law and the rules and regulations of Nasdaq, (ii) under the HSR Act or other applicable Antitrust Laws and Investment Screening Laws, (iii) the filing of the Certificate of Merger as required by the DGCL and (iv) where failure to obtain such consents, approvals, authorizations or permits, or to make such filings or notifications to a Person other than a Governmental Entity, would not, individually or in the aggregate, reasonably be expected to (A) prevent or materially delay consummation of the Merger or other Transactions, (B) otherwise prevent or materially delay performance by Acelis of any of their respective material obligations under this Agreement or (C) have an Acelis Material Adverse Effect.

4.5 SEC Documents; Financial Statements; Undisclosed Liabilities.

(a) Acelis has filed or furnished on a timely basis all reports, schedules, forms, statements, registration statements, prospectuses and other documents required to be filed or furnished by Acelis with the SEC under the Securities Act or the Exchange Act since December 31, 2023 (the “Acelis SEC Documents”). None of the Subsidiaries of Acelis is required to make or makes any filings with the SEC.

(b) As of its respective filing date, and, if amended, as of the date of the last amendment prior to the date of this Agreement, each Acelis SEC Document complied in all material respects with the requirements of the Exchange Act or the Securities Act, as the case may be, and the rules and regulations of the SEC promulgated thereunder applicable to such Acelis SEC Document and did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(c) The consolidated financial statements of Acelis included in the Acelis SEC Documents (including, in each case, any notes or schedules thereto) (the “Acelis SEC Financial Statements”), comply as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. The Acelis SEC Financial Statements fairly present, in all material respects, the financial condition and the results of operations, cash flows and changes in stockholders’ equity of Acelis (on a consolidated basis) as of the respective dates of and for the periods referred to in the Acelis SEC Financial Statements, and were prepared in accordance with GAAP applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto), subject, in the case of interim Acelis SEC Financial Statements, to normal year-end adjustments (which are not material in significance or amount) and the absence of notes.

(d) Acelis is in compliance in all material respects with (i) the applicable provisions of the Sarbanes-Oxley Act and (ii) the applicable listing and corporate governance rules and regulations of Nasdaq.

(e) To the Knowledge of Axcelis, there are no outstanding or unresolved comments in comment letters received from the SEC staff with respect to any Axcelis SEC Documents and none of the Axcelis SEC Documents is the subject of ongoing SEC review. To the Knowledge of Axcelis, there are no SEC inquiries or investigations, in each case, pending or threatened regarding any accounting practices of Axcelis.

(f) Axcelis has established and maintains disclosure controls and procedures and internal control over financial reporting (as such terms are defined in paragraphs (e) and (f), respectively, of Rule 13a-15 and paragraph (e) of Rule 15d-15 under the Exchange Act) as required by Rules 13a-15 and 15d-15 under the Exchange Act. Axcelis's disclosure controls and procedures are designed to ensure that all information (both financial and non-financial) required to be disclosed by Axcelis in the reports that it files or furnishes under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that all such information is accumulated and communicated to Axcelis's management as appropriate to allow timely decisions regarding required disclosure and to make the certifications required pursuant to Sections 302 and 906 of the Sarbanes-Oxley Act. Since December 31, 2023, Axcelis has had no significant deficiencies or material weaknesses in the design or operation of its internal control over financial reporting that would reasonably be expected to adversely affect Axcelis's ability to record, process, summarize and report financial information and Axcelis does not have Knowledge of any fraud, whether or not material, that involves management or other employees who have a significant role in Axcelis's internal control over financial reporting.

(g) Axcelis and its Subsidiaries do not have any liabilities or obligations of any nature (whether absolute or contingent, asserted or unasserted, known or unknown, primary or secondary, direct or indirect, and whether or not accrued or required to be reflected in Axcelis's financial statements in accordance with GAAP), except (i) as disclosed, reflected or reserved against in the most recent audited balance sheet included in the Axcelis SEC Financial Statements or the notes thereto, (ii) for liabilities and obligations incurred in the ordinary course of business since the date of the most recent audited balance sheet included in the Axcelis SEC Financial Statements, (iii) for liabilities and obligations arising out of or in connection with this Agreement, the Merger or the Transactions and (iv) for liabilities and obligations that, individually or in the aggregate, have not had, and would not reasonably be expected to have, an Axcelis Material Adverse Effect.

(h) Neither Axcelis nor any of its Subsidiaries is a party to, or has any commitment to become a party to, any joint venture, off-balance sheet partnership or any similar Contract (including any Contract or arrangement relating to any transaction or relationship between or among Axcelis and any of its Subsidiaries, on the one hand, and any unconsolidated affiliate, including any structured finance, special purpose or limited purpose entity or Person, on the other hand, or any "off-balance-sheet arrangements" (as defined in Item 303(a) of Regulation S-K under the Exchange Act)), where the result, purpose or intended effect of such Contract is to avoid disclosure of any material transaction involving, or material liabilities of, Axcelis or any of its Subsidiaries in Axcelis's or such Subsidiary's published financial statements or other Axcelis SEC Documents.

4.6 Absence of Certain Changes or Events. Since July 1, 2025 and through the date of this Agreement, (a) Axcelis and its Subsidiaries have conducted their businesses in all material respects only in the ordinary course and in a manner consistent with past practice and (b) there has not been any change, event, development, condition or occurrence that, individually or in the aggregate, has had or would reasonably be expected to have an Axcelis Material Adverse Effect.

4.7 Information Supplied. None of the information supplied or to be supplied by Axcelis for inclusion or incorporation by reference in (i) the Form S-4 will, at the time the Form S-4 is filed with the SEC, and at any time it is amended or supplemented, at the time it becomes effective under the Securities Act and at the Effective Time, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) the Joint Proxy Statement will, at the date it or any amendment or supplement is mailed to each of the holders of Axcelis Common Stock and Veeco Common Stock and at the time of each of the Axcelis Stockholders Meeting and Veeco Stockholders Meeting, and (iii) a current report on Form 8-K at the time it is filed, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances in which they are made, not misleading (except that no representation or warranty is made by Axcelis to such portions thereof that relate expressly to Veeco or to statements made

therein based on information supplied by or on behalf of Veeco for inclusion or incorporation by reference therein). The Form S-4 and the Joint Proxy Statement will comply as to form in all material respects with the requirements of the Securities Act or Exchange Act, as applicable, and other applicable Law.

4.8 Legal Proceedings. As of the date hereof, there are no Proceedings pending, or to the Knowledge of Axcelis, threatened in writing against Axcelis or any of its Subsidiaries or any of their respective assets, rights or properties or any of the officers or directors of Axcelis, that would, in each case, individually or in the aggregate, reasonably be expected to prevent or materially delay the consummation of the Transactions. There are no Proceedings pending, or to the Knowledge of Axcelis, threatened in writing against Axcelis or any of its Subsidiaries or any of their respective assets, rights or properties or any of the officers or directors of Axcelis, except, in each case, for those that, individually or in the aggregate, have not had, and would not reasonably be expected to have, an Axcelis Material Adverse Effect. Neither Axcelis nor any of its Subsidiaries nor any of their respective properties, rights or assets is or are subject to any outstanding Order, except for those that, individually or in the aggregate, have not had, and would not reasonably be expected to have, an Axcelis Material Adverse Effect.

4.9 Compliance with Laws.

(a) (i) Axcelis and its Subsidiaries are in compliance, and for the past five (5) years have been in compliance, with all Laws and Orders applicable to Axcelis or any of its Subsidiaries or any assets owned or used by any of them (except for such past noncompliance as has been remedied and imposes no continuing obligations or costs on Axcelis or its Subsidiaries), and (ii) neither Axcelis nor any of its Subsidiaries has received any written communication during the past five (5) years from a Governmental Entity that alleges that Axcelis or any of its Subsidiaries is not in compliance with any such Law or Order, except in the case of clauses (i) and (ii) where any non-compliance, individually or in the aggregate, has not had and would not reasonably be expected to have, an Axcelis Material Adverse Effect.

(b) Axcelis and each of its Subsidiaries (i) are in compliance, and for the past five (5) years have been in compliance, in all material respects with the FCPA and any other applicable Anti-corruption Laws; (ii) during the past five (5) years have not been investigated, to the Knowledge of Axcelis, by any Governmental Entity with respect to, or been given notice by a Governmental Entity or any other Person of, any actual or alleged violation by Axcelis or any of its Subsidiaries of the FCPA or any other Anti-corruption Laws; and (iii) during the past five (5) years have had an operational and effective FCPA and anti-corruption compliance program that includes, at a minimum, policies, procedures and training intended to enhance awareness of and compliance by Axcelis and its Subsidiaries with the FCPA and any other applicable Anti-corruption Laws.

(c) To the Knowledge of Axcelis, none of Axcelis or its Subsidiaries has directly or indirectly through its Representatives or any Person authorized to act on its behalf (including any distributor, agent, sales intermediary or other third party), offered, promised, paid, authorized or given money or anything of value to any Person for the purpose of: (i) influencing any act or decision of any Government Official or Other Covered Party; (ii) inducing any Government Official or Other Covered Party to do or omit to do an act in violation of a lawful duty; (iii) securing any improper advantage; or (iv) inducing any Government Official or Other Covered Party to influence the act or decision of a government or government instrumentality, in order to obtain or retain business, or direct business to, any Person or entity, in any way.

(d) To the Knowledge of Axcelis, during the past five (5) years, Axcelis and its Subsidiaries have maintained complete and accurate books and records, including records of payments to any agents, consultants, representatives, third parties and Government Officials, in accordance with GAAP, in all material respects. There have been no false or fictitious entries made in the books and records of Axcelis or its Subsidiaries relating to any unlawful offer, payment, promise to pay, or authorization of the payment of any money, or unlawful offer, gift, promise to give, or authorization of the giving of anything of value, including any bribe, kickback or other illegal or improper payment, and Axcelis and its Subsidiaries have not established or maintained a secret or unrecorded fund.

(e) Since April 24, 2019, none of Axcelis or its Subsidiaries has had a customer or supplier or other business relationship with, is a party to any Contract with, or has engaged in any transaction with, any Sanctioned Person or Sanctioned Country, in violation of applicable Sanctions. Neither Axcelis or any of

its Subsidiaries nor any of their respective officers, directors, employees or, to the Knowledge of Axcelis, agents or other Persons acting on behalf of any of them, is a Sanctioned Person. None of (i) the Merger, (ii) the execution, delivery and performance of this Agreement, or (iii) the consummation of any Transactions contemplated hereby, or the fulfillment of the terms hereof, will result in a violation of any applicable Sanctions.

(f) Since April 24, 2019, Axcelis has complied with all applicable Sanctions and, in all material respects, all applicable Trade Control Laws. Since April 24, 2019, Axcelis and its Subsidiaries have maintained policies and procedures designed to promote compliance by Axcelis and its Subsidiaries and their respective officers, directors, employees, agents, and other Persons acting on behalf of any of them with applicable Sanctions and Trade Control Laws. Since April 24, 2019, Axcelis has not been the subject of or otherwise involved in investigations or enforcement actions by any Governmental Entity or other legal proceedings with respect to any actual or alleged violations of applicable Sanctions or Trade Control Laws, and has not been notified of any such pending or threatened actions. Axcelis and its Subsidiaries have obtained all Export Approvals, and each of Axcelis and its Subsidiaries is and, has been in compliance in all material respects with the terms of all Export Approvals. To the Knowledge of Axcelis, there are no pending or threatened claims against Axcelis or any of its Subsidiaries with respect to such Export Approvals. As of the date hereof, neither Axcelis nor any of its Subsidiaries has received notice from any Governmental Entity that such Governmental Entity intends to terminate, materially and adversely modify, or decline to reauthorize any existing government authorizations, including license exceptions or exemptions, upon which Axcelis or any of its Subsidiaries currently relies with respect to Sanctions or Trade Control Laws.

4.10 Permits. Axcelis and each of its Subsidiaries have all required Permits necessary for the conduct of their business and the use of their properties and assets, as presently conducted and used, and each of the Permits is valid, subsisting and in full force and effect, except where the failure to have or maintain such Permit, individually or in the aggregate, has not had and would not reasonably be expected to have, an Axcelis Material Adverse Effect. Except as would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, (i) the operation of the business of Axcelis and its Subsidiaries as currently conducted is not, and has not been since December 31, 2023, in violation of, nor is Axcelis or its Subsidiaries in default or violation under, any Permit (except for such past violation or default as has been remedied and imposes no continuing obligations or costs on Axcelis or its Subsidiaries), and (ii) to the Knowledge of Axcelis, no event has occurred which, with notice or the lapse of time or both, would constitute a default or violation of any term, condition or provision of any Permit. There are no actions pending or, to the Knowledge of Axcelis, threatened, that seek the revocation, cancellation or modification of any Permit, except where such revocation, cancellation or modification, individually or in the aggregate, has not had and would not reasonably be expected to have, an Axcelis Material Adverse Effect. Since December 31, 2023, neither Axcelis nor its Subsidiaries have received written notice of any charge, claim or assertion alleging any violations of or noncompliance with any Permit, nor to the Knowledge of Axcelis, has any charge, claim or assertion been threatened, except where such notice, charge, claim or assertion, individually or in the aggregate, has not had and would not reasonably be expected to have, an Axcelis Material Adverse Effect.

4.11 Employee Benefit Plans.

(a) Section 4.11(a) of the Axcelis Disclosure Schedule sets forth a true and complete list of each material Axcelis Benefit Plan and separately identifies each material Axcelis Benefit Plan that is an Axcelis Foreign Benefit Plan.

(b) With respect to each material Axcelis Benefit Plan, Axcelis has made available to Veeco a current written copy thereof (if any) and, to the extent applicable: (i) any amendments and any related trust agreement; (ii) the most recent IRS determination letter; (iii) the most recent summary plan description and summary of material modifications; and (iv) for the most recent plan year (A) the Form 5500 and attached schedules and (B) audited financial statements.

(c) Except as has not had or would not reasonably be expected to result, individually or in the aggregate, in a material liability to Axcelis and its Subsidiaries taken as a whole, each Axcelis Benefit Plan has been administered in accordance with its terms and all applicable Laws, including ERISA and the Code, and contributions required to be made under the terms of any of the Axcelis Benefit Plans have been

timely made or, if not yet due, have been properly reflected on the most recent consolidated balance sheet filed or incorporated by reference in the Axcelis SEC Documents prior to the date of this Agreement.

(d) (i) Each Axcelis Benefit Plan which is intended to qualify under Section 401(a) of the Code has either received a favorable determination letter or opinion letter from the IRS as to its qualified status, and to Axcelis's Knowledge no fact or event has occurred that could adversely affect the qualified status of any such Axcelis Benefit Plan or the exempt status of any such trust, (ii) there has been no prohibited transaction (within the meaning of Section 406 of ERISA or Section 4975 of the Code), other than a transaction that is exempt under a statutory or administrative exemption, with respect to any Axcelis Benefit Plan, and (iii) no Proceeding has been brought, or to the Knowledge of Axcelis is threatened, against or with respect to any Axcelis Benefit Plan, including any audit or inquiry by the IRS or United States Department of Labor (other than for routine benefits claims).

(e) No Axcelis Benefit Plan is, and neither Axcelis nor any of its ERISA Affiliates contributes to, has during the preceding six (6) years contributed to or has any liability or obligation, whether fixed or contingent, with respect to a Multiemployer Plan or other plan subject to Title IV of ERISA or the minimum funding requirements of Section 302 of ERISA or Section 412 of the Code. No material liability under Title IV of ERISA has been incurred by Axcelis or any ERISA Affiliate thereof that has not been satisfied in full, and no condition exists that would reasonably be expected to have an Axcelis Material Adverse Effect (whether primarily, jointly or secondarily) under Title IV of ERISA.

(f) No amount that could be received (whether in cash or property or the vesting of property), as a result of the consummation of the Merger or other Transactions (either alone or in combination with another event), by any employee, officer or director of Axcelis or any of its Subsidiaries who is a "disqualified individual" (within the meaning of Section 280G of the Code) could be characterized as an "excess parachute payment" (within the meaning of Section 280G(b)(1) of the Code).

(g) Except as required by Law, no Axcelis Benefit Plan provides post-employment medical, disability or life insurance benefits to any former director, employee or their respective dependents (other than as required by health care continuation coverage as required by COBRA or ERISA or coverage through the end of the calendar month in which a termination of employment occurs).

(h) Neither the execution of this Agreement nor the consummation of the Merger or other Transactions (either alone or in combination with another event) will (i) entitle any employee or director of Axcelis or its Subsidiaries to a bonus, severance or change in control payment, (ii) accelerate the time of payment or vesting or trigger any payment or funding (through a grantor trust or otherwise) of compensation or benefits, (iii) increase the amount payable or trigger any other material obligation pursuant to any of the Axcelis Benefit Plans or (iv) result in any breach or violation of, or default under any Axcelis Benefit Plan.

(i) Each Axcelis Benefit Plan that constitutes in any part a nonqualified deferred compensation plan within the meaning of Section 409A of the Code in all material respects has been operated and maintained in operational and documentary compliance with Section 409A of the Code and all IRS guidance promulgated thereunder, to the extent such section and such guidance have been applicable to such Axcelis Benefit Plan. There is no agreement, plan, Contract or other arrangement to which Axcelis or any of its Subsidiaries is a party or by which any of them is otherwise bound to compensate any Person in respect of Taxes pursuant to Sections 409A or 4999 of the Code.

(j) Except as has not resulted and would not reasonably be expected to result, individually or in the aggregate, in a material liability to Axcelis or its Subsidiaries taken as a whole, with respect to each Axcelis Benefit Plan established or maintained outside of the United States of America primarily for the benefit of employees of Axcelis or its affiliates residing outside the United States of America (an "Axcelis Foreign Benefit Plan"): (i) all employer and employee contributions to each Axcelis Foreign Benefit Plan required by law or by the terms of any Axcelis Foreign Benefit Plan have been made or, if applicable, accrued, in accordance with normal accounting practices; (ii) the fair market value of the assets of each funded Axcelis Foreign Benefit Plan, the liability of each insurer for any Axcelis Foreign Benefit Plan funded through insurance or the book reserve established for any Axcelis Foreign Benefit Plan, together with any accrued contributions, is sufficient to procure or provide for the accrued benefit obligations with respect to all current

and former participants in such Axcelis Foreign Benefit Plan according to the actuarial assumptions and valuations most recently used to determine employer contributions to such Axcelis Foreign Benefit Plan, and neither the execution of this Agreement nor the consummation of the Merger or other Transactions will cause such assets or insurance obligations to be less than such benefit obligations; and (iii) each Axcelis Foreign Benefit Plan required to be registered has been registered and has been maintained in good standing with applicable regulatory authorities.

4.12 Employee and Labor Matters.

(a) Neither Axcelis nor any of its Subsidiaries is a party to or bound by any Collective Bargaining Agreement, no Labor Organization or group of employees of Axcelis or any of its Subsidiaries has made a pending demand for recognition or certification, and there are no representation or certification proceedings or petitions seeking a representation proceeding presently pending or, to the Knowledge of Axcelis, threatened in writing to be brought or filed with the National Labor Relations Board or any other labor relations tribunal or authority. Neither Axcelis nor any of its Subsidiaries has engaged in any unfair labor practice with respect to any individuals employed by performing services for Axcelis or any of its Subsidiaries (the “Axcelis Business Personnel”), and there is no unfair labor practice charges, grievances, arbitrations, or administrative or judicial complaints, actions, investigations pending or, to the Knowledge of Axcelis, threatened in writing against Axcelis or any of its Subsidiaries by the National Labor Relations Board or any other Governmental Entity with respect to any present or former Axcelis Business Personnel which would reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect. There is no labor strike, walkout, lockout, slowdown, work stoppage or other labor dispute pending or, to the Knowledge of Axcelis, threatened against or affecting Axcelis or any of its Subsidiaries.

(b) Neither Axcelis nor any of its Subsidiaries is required under applicable Law or Contract to provide notice to, or to enter into any consultation procedure with, any work council, Labor Organization, or similar representative body in connection with the execution of this Agreement or the consummation of the Transactions.

(c) Axcelis and its Subsidiaries are, and have for the past five (5) years been, in compliance with all applicable Laws respecting employment and employment practices, including, without limitation, all Laws respecting terms and conditions of employment, health and safety, wage payment, wages and hours, child labor, collective bargaining, immigration and work authorizations, employment, discrimination retaliation, civil rights, veterans’ rights, disability rights or benefits, equal opportunity, plant closures and layoffs, affirmative action, workers’ compensation, labor relations, social welfare obligations, proper classification of employees as exempt and non-exempt and as employees and independent contractors, unemployment insurance and the collection and payment of withholding and/or social security Taxes and any similar Tax, except for noncompliance as individually or in the aggregate, has not had and would not reasonably be expected to have, an Axcelis Material Adverse Effect.

(d) To the Knowledge of Axcelis, no Axcelis Business Personnel is in material violation of any term of any employment agreement, nondisclosure agreement, common law nondisclosure obligation, fiduciary duty, noncompetition agreement, restrictive covenant or other obligation owed to Axcelis or any of its Subsidiaries or to a former employer of any such employee relating (i) to the right of any such individual to be employed by or provide services for Axcelis or its Subsidiaries or (ii) to the knowledge or use of trade secrets or proprietary information.

(e) Axcelis and its Subsidiaries are not delinquent in payments to any current or former Axcelis Business Personnel for any services or amounts required to be reimbursed or otherwise paid, except as currently does not have and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect.

(f) Neither Axcelis nor its Subsidiaries are party to a settlement agreement signed in the last five (5) years with a current or former officer, employee or independent contractor of Axcelis or its Subsidiaries that involves allegations relating to harassment or discrimination of any kind by either (i) an officer of Axcelis or its Subsidiaries or (ii) an employee of Axcelis or its Subsidiaries at the level of Vice President or above. To the Knowledge of Axcelis, in the last five (5) years, no allegations of harassment or discrimination of any kind have been made against (i) any officer of Axcelis or its Subsidiaries or (ii) an employee of Axcelis or its Subsidiaries at the level of Vice President or above.

4.13 Environmental Matters. Except as, individually or in the aggregate, has not had and would not reasonably be expected to have, an Axcelis Material Adverse Effect:

- (a) Axcelis and each of its Subsidiaries (i) have been within the last five (5) years, and are, in compliance with all, and are not subject to any liability with respect to noncompliance with any, applicable Environmental Laws, (ii) have and hold, or have applied for, all Environmental Permits necessary for the conduct of their business and the use of their properties and assets, as currently conducted and used, and (iii) are in compliance with their respective Environmental Permits.
- (b) There are no Environmental Claims pending, nor to the Knowledge of Axcelis, threatened against Axcelis or any of its Subsidiaries, and none of Axcelis or any of its Subsidiaries has received any notification of any allegation of actual or potential responsibility for any Release or threatened Release of any Hazardous Materials with respect to any location.
- (c) There have been no Releases of Hazardous Materials at any properties that are owned, operated, leased or used by Axcelis or any of its Subsidiaries, or to the Knowledge of Axcelis, at properties that were formerly owned, operated, leased or used by Axcelis or any of its Subsidiaries, that are reasonably likely to cause Axcelis or any of its Subsidiaries to incur liability pursuant to applicable Environmental Law.
- (d) None of Axcelis or any of its Subsidiaries (i) has entered into or agreed to any consent decree or consent order or is otherwise subject to any judgment, decree, or judicial or administrative Order relating to compliance with Environmental Laws or Environmental Permits, the investigation, sampling, monitoring, treatment, remediation, response, removal or cleanup of Hazardous Materials, and no Proceeding is pending, or to the Knowledge of Axcelis is threatened, with respect thereto, or (ii) is an indemnitor by contract or otherwise in connection with any claim, demand, suit or action threatened or asserted by any third-party for any liability under any Environmental Law or otherwise relating to any Hazardous Materials.

4.14 Real Property.

(a) Section 4.14(a) of the Axcelis Disclosure Schedule sets forth a true, complete and accurate list as of the date hereof of all real property owned by Axcelis and its Subsidiaries (the “Axcelis Owned Real Property”), which schedule sets forth the fee owner and physical address of such Axcelis Owned Real Property. Except as would not have an Axcelis Material Adverse Effect, Axcelis or one of its Subsidiaries has good and valid fee simple title to all Axcelis Owned Real Property, free and clear of all Liens, other than Permitted Liens. Axcelis has made available to Veeco complete and accurate copies of all deeds, mortgages, surveys, licenses and/or title insurance policies with respect to the Axcelis Owned Real Property and other documents relating to or affecting title to the Axcelis Owned Real Property, none of which have been amended or rescinded to the Knowledge of Axcelis, in each case, to the extent the same are within the possession of Axcelis or one of its Subsidiaries.

(b) Section 4.14(b) of the Axcelis Disclosure Schedule sets forth a true, complete and accurate list of all leases, subleases, licenses or other occupancy agreements for real property to which Axcelis or any of its Subsidiaries is a party that are currently in effect, including all amendments, extensions, renewals, guaranties and other written agreements with respect thereto (and each, an “Axcelis Lease”) (the real and personal property leased pursuant to the Axcelis Leases, the “Axcelis Leased Real Property”), which schedule lists the landlord, sublandlord, and address of the Axcelis Leased Real Property. To the Knowledge of Axcelis, there are no material oral agreements with respect to any Axcelis Leased Real Property. Except as set forth in Section 4.14(b) of the Axcelis Disclosure Schedule, Axcelis or its Subsidiaries has no option or other right to purchase any Axcelis Leased Real Property, and no consents of any party to any Axcelis Lease is required in connection with the Transactions. Axcelis or its Subsidiaries, as the case may be, has a valid and subsisting leasehold or subleasehold interest in the Axcelis Leased Real Property free and clear of all Liens, except for Permitted Liens. With respect to each of the Axcelis Leases, to the Knowledge of Axcelis: (i) such Axcelis Lease is legal, valid, binding, enforceable against Axcelis or its applicable Subsidiary and in full force and effect, except as limited by Laws affecting the enforcement of creditors’ rights generally, by general equitable principles or by the discretion of any Governmental Entity before which any Proceeding seeking enforcement may be brought; (ii) the possession and quiet enjoyment of the Axcelis Leased Real Property

under such Axcelis Lease has not been disturbed and there are no disputes with respect to such Axcelis Lease; (iii) neither Axcelis nor any applicable Subsidiary is in material default under, nor has any event occurred or does any circumstance exist that, with notice of lapse of time or both would constitute a material default by Axcelis or its applicable Subsidiary under such Axcelis Lease; and (iv) no default, event or circumstance exists that, with notice or lapse of time, or both, would constitute a material default by any counterparty to any such Axcelis Lease. Axcelis has made available to the Veeco true and complete copies, in all material respects, of all Axcelis Leases, none of which has been assigned or amended or modified in any material respect except as set forth in Section 4.14(b) of the Axcelis Disclosure Schedule.

(c) The Axcelis Owned Real Property and Axcelis Leased Real Property constitute all real property necessary for the conduct of the business of Axcelis and its Subsidiaries, taken as a whole, as currently conducted. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, neither Axcelis nor any of its Subsidiaries has received written notice of any Proceedings in eminent domain, condemnation or other similar Proceedings that are pending, and to the Knowledge of Axcelis there are no such Proceedings threatened in writing, affecting any portion of the Axcelis Owned Real Property or Axcelis Leased Real Property and neither Axcelis nor any of its Subsidiaries has received written notice of the existence of any Order or of any pending Proceeding relating to the ownership, lease, use, occupancy or operation by any Person of any portion of the Axcelis Owned Real Property or Axcelis Leased Real Property. Neither Axcelis nor any of its Subsidiaries has leased, subleased, licensed or otherwise granted any Person a material right to use or occupy any of the Axcelis Owned Real Property or Axcelis Leased Real Property or any material portion thereof. Except as set forth in Section 4.14(c) of the Axcelis Disclosure Schedule, neither Axcelis nor any of its Subsidiaries has granted any option or other right to any third party to purchase any of the Axcelis Owned Real Property or any material portion thereof. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, or as otherwise set forth in Section 4.14(c) of the Axcelis Disclosure Schedule, there are no construction or material alteration projects, other than normal repair and maintenance, currently ongoing or contemplated with respect to any Axcelis Owned Real Property or, to Axcelis's Knowledge, Axcelis Leased Real Property, and any prior construction or material alteration projects, to which Axcelis or its Subsidiaries contracted under written agreements to complete, are fully complete, including the completion of all punch list items and payment of all amounts owed to outside contractors or other third parties in connection therewith and, to Axcelis's Knowledge, all buildings and improvements located on such Axcelis Owned Real Property or Axcelis Leased Real Property, as the case may be, are in a state of good operating condition, subject to ordinary wear and tear, normal repairs and maintenance, and any maintenance or repair obligations of landlords under the Axcelis Leases.

4.15 Tax Matters.

(a) Except as would not, individually or in the aggregate, reasonably be expected to have an Axcelis Material Adverse Effect:

(i) (A) All Tax Returns that are required to be filed by or with respect to Axcelis or any of its Subsidiaries have been timely filed (taking into account any extension of time within which to file), (B) all such Tax Returns are or will be true, complete and accurate in all respects, (C) Axcelis and its Subsidiaries have paid all Taxes due and owing by any of them (whether or not shown on any Tax Return) or adequate accruals or reserves have been established in the Axcelis SEC Documents for any such Taxes that have not been paid and (D) neither Axcelis nor any of its Subsidiaries has filed any extension of time within which to file any Tax Returns that have not been filed, except in the ordinary course of business.

(ii) No written agreement or other written document waiving or extending, or having the effect of waiving or extending, the statute of limitations or the period of assessment or collection of any Taxes relating to Axcelis or any of its Subsidiaries has been filed or entered into with any Taxing Authority, and no request for any such waiver or extension is currently pending.

(iii) (A) Neither Axcelis nor any of its Subsidiaries is the subject of any Tax audit or other proceeding with respect to any Taxes or Tax Returns, which audit or other proceeding remains unresolved; (B) no Tax audit or other proceeding with respect to Taxes or Tax Returns has been proposed against Axcelis or any of its Subsidiaries in writing; and (C) no deficiencies have been asserted

and no assessments have been made against Axcelis or any of its Subsidiaries, in each case, as a result of any Tax audit or other proceeding with respect to Taxes or Tax Returns, which deficiencies or assessments have not been resolved (except those that are being contested in good faith and for which adequate accruals or reserves have been established in the Axcelis SEC Documents).

(iv) No claim has ever been made in writing by a Taxing Authority of a jurisdiction where Axcelis or any of its Subsidiaries has not filed Tax Returns that Axcelis or such Subsidiary is or may be subject to taxation by that jurisdiction.

(v) Neither Axcelis nor any of its Subsidiaries has constituted, in the two (2) years prior to the date of this Agreement, a “distributing corporation” or a “controlled corporation” (within the meaning of Section 355(a)(1)(A) of the Code) in a distribution of stock intended to qualify for tax-free treatment under Section 355 of the Code (or any similar provision of state, local, or non-U.S. Law) or otherwise as part of a plan (or series of related transactions), within the meaning of Section 355(e) of the Code, that includes the Merger.

(vi) Neither Axcelis nor any of its Subsidiaries (A) is a party to or bound by or has any obligation under any Tax allocation, indemnification, separation, sharing or similar agreement or arrangement (other than such an agreement or arrangement exclusively between or among Axcelis and its Subsidiaries or entered into in the ordinary course of business which does not relate primarily to Taxes), (B) is or has been a member of any consolidated, combined, unitary or similar group for purposes of filing Tax Returns or paying Taxes (other than a group the common parent of which is or was Axcelis or any of its Subsidiaries), (C) has entered into a closing agreement pursuant to Section 7121 of the Code or any other binding agreement with a Taxing Authority that would have an effect on the determination of Axcelis’s or any of its Subsidiaries’ liability to Tax in a tax year ending after the Effective Time, or any predecessor provision or any similar provision of foreign, state or local Tax law, (D) has any liability for Taxes of any Person (other than Axcelis or any of its Subsidiaries) under U.S. Treasury Regulation Section 1.1502-6 (or any similar provision of state, local, or non-U.S. Law) or as transferee or successor or (E) will be required to make any payment after the Closing Date as a result of an election under Section 965(h) of the Code.

(vii) There are no Liens for Taxes upon any property or assets of Axcelis or any of its Subsidiaries, except for Permitted Liens.

(viii) Neither Axcelis nor any of its Subsidiaries has entered into any “listed transaction” within the meaning of Section 6707A(c)(2) of the Code and U.S. Treasury Regulation Section 1.6011-4(b)(2) (or any similar provision of state, local or non-U.S. Law).

(ix) Neither Axcelis nor any of its Subsidiaries is or has ever been a “surrogate foreign corporation” as defined in Section 7874(a)(2)(B) of the Code.

(x) Axcelis is not a United States real property holding corporation within the meaning of Section 897(c)(2) of the Code.

(b) Neither Axcelis nor any of its Subsidiaries has Knowledge of any facts, agreements, plans or other circumstances or has taken or agreed to take any action that would reasonably be expected to prevent or impede the Merger from qualifying for the Intended Tax Treatment.

4.16 Material Contracts.

(a) All Contracts required to be filed as exhibits to the Axcelis SEC Documents have been so filed in a timely manner. Section 4.16(a) of the Axcelis Disclosure Schedule sets forth a true and complete list, as of the date hereof, of each of the following Contracts, excluding any Axcelis SEC Documents and any Axcelis Benefit Plans, to which Axcelis or any of its Subsidiaries is a party or by which Axcelis or any of its Subsidiaries or any of their assets or businesses are bound (and any amendments, supplements and modifications thereto):

(i) any Contract that is a “material contract” (as such term is defined in Item 601(b)(10) of Regulation S-K of the Exchange Act);

(ii) any Contract that materially limits the ability of Axcelis or any of its affiliates (including, following the consummation of the Transactions, the Surviving Corporation and its affiliates) to engage or compete in any line of business or in any geographic area;

(iii) any Contract required to be disclosed pursuant to Item 404 of Regulation S-K of the Exchange Act;

(iv) any Contract or series of related Contracts relating to indebtedness for borrowed money (A) in excess of \$1,000,000 or (B) that becomes due and payable as a result of the Transactions;

(v) all Contracts granting any licenses, sublicenses, rights, interest or options into or any Intellectual Property granted by Axcelis or any of its Subsidiaries to any Person (including coexistence agreements, prior rights agreements, rights of first refusal, rights of last refusal, covenants not to sue and immunities from suit), other than (A) non-material and non-exclusive licenses granted by Axcelis or its Subsidiaries to advertising agencies, vendors and other similar contractors in the ordinary course of business consistent with past practice, (B) non-material customer agreements in which the grants to the applicable customer of rights to use Intellectual Property are non-exclusive and incidental to and not material to performance under the agreement and (C) customary licenses granted to employees in the ordinary course of business consistent with past practice;

(vi) all Contracts granting any licenses, sublicenses, rights, interest or options into or any Intellectual Property granted by any Person to Axcelis or any of its Subsidiaries, other than (A) licenses to generally commercially available Software licensed pursuant to a standard “off-the-shelf” or “shrink wrap” or “click wrap” agreements, (B) non-material agreements in which the grants in, to or under Intellectual Property are non-exclusive and incidental to, and not material to, performance under the agreement and (C) customary licenses granted from employees in the ordinary course of business consistent with past practice;

(vii) any purchase, sale or supply contract that contains volume requirements or commitments, exclusive or preferred purchasing arrangements, most favored nation provisions or promotional requirements, other than any such Contracts that are not material to Axcelis and its Subsidiaries;

(viii) any Axcelis Lease reasonably expected to result in payments of base rent in excess of \$1,000,000 in any twelve (12) month period after the Closing Date;

(ix) any agreement that grants any right of first refusal or right of first offer or similar right or that limits or purports to limit the ability of Axcelis or any of its Subsidiaries to own, operate, sell, transfer, pledge or otherwise dispose of any material amount of assets or businesses (in any case in excess of \$1,000,000);

(x) any acquisition or divestiture agreement (A) entered into since December 31, 2023 with a purchase price in excess of \$1,000,000 or (B) that contains “earn-out” provisions or other contingent payment obligations that could reasonably be expected to exceed \$1,000,000 (including indemnification obligations) that have not been satisfied in full as of the date hereof;

(xi) any agreement that by its terms limits the payment of dividends or other distributions by Axcelis or any of its Subsidiaries;

(xii) any Contract for any joint venture, partnership or similar arrangement, or any Contract involving a sharing of revenues, profits, losses, costs, or liabilities by Axcelis or any of its Subsidiaries with any other Person;

(xiii) any “single source” supply Contract pursuant to which goods or materials that are material to Axcelis or any of its Subsidiaries are supplied to Axcelis or such Subsidiary from an exclusive source; or

(xiv) any Contract with any Governmental Entity.

(b) Axcelis has heretofore made available to Veeco true, correct and complete copies of the Contracts set forth in Section 4.16(a).

(c) Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, (i) all Contracts set forth or required to be set forth in Section 4.16(a) of the Axcelis Disclosure Schedule or filed or required to be filed as exhibits to the Axcelis SEC Documents (the “Axcelis Material Contracts”) are valid, binding and in full force and effect and are enforceable by Axcelis or its applicable Subsidiary in accordance with their terms, except as limited by Laws affecting the enforcement of creditors’ rights generally, by general equitable principles or by the discretion of any Governmental Entity before which any Proceeding seeking enforcement may be brought, (ii) Axcelis, or its applicable Subsidiary, has performed all obligations required to be performed by it under the Axcelis Material Contracts, and it is not (with or without notice or lapse of time, or both) in breach or default thereunder and, to the Knowledge of Axcelis, no other party to any Axcelis Material Contract is (with or without notice or lapse of time, or both) in breach or default thereunder, (iii) since December 31, 2023, neither Axcelis nor any of its Subsidiaries has received written notice of any actual, alleged, possible or potential violation of, or failure to comply with, any term or requirement of any Axcelis Material Contract, and (iv) neither Axcelis nor any of its Subsidiaries has received any written notice of the intention of any party to cancel, terminate, materially change the scope of rights under or fail to renew any Axcelis Material Contract.

4.17 Intellectual Property.

(a) Section 4.17(a) of the Axcelis Disclosure Schedule sets forth a complete and accurate list of all (i) issued patents and pending patent applications, (ii) Trademark registrations and applications, (iii) copyright registrations and applications, and (iv) internet domain name registrations, in each case that are owned, or purported to be owned, by Axcelis or any of its Subsidiaries (collectively, the “Axcelis Registered Intellectual Property”). Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, Axcelis owns all right, title and interest in the Axcelis Registered Intellectual Property free and clear of all Liens other than Liens created by Veeco or Permitted Liens, and each such item of Axcelis Registered Intellectual Property is subsisting, and, to the Knowledge of Axcelis, each such registered item is valid and enforceable.

(b) Neither the execution and delivery of this Agreement by Axcelis, nor the performance of this Agreement by Axcelis, will result in the loss, forfeiture, termination, or impairment of, or give rise to a right of any Person to limit, terminate, or consent to the continued use of, any rights of Axcelis or any of its Subsidiaries in any Intellectual Property except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect.

(c) Except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to the business of Axcelis and its Subsidiaries, to the Knowledge of Axcelis, neither Axcelis nor any of its Subsidiaries nor the conduct of their business (i) is infringing, misappropriating or otherwise violating, and has not during the last three (3) years infringed, misappropriated, or otherwise violated, the Intellectual Property rights of any Person, or (ii) currently constitutes, and has not during the last three (3) years constituted, unfair competition or trade practices under the Laws of any jurisdiction in which it conducts its business. Neither Axcelis nor any of its Subsidiaries has received any written charge, complaint, claim, demand, or notice in the last three (3) years (or earlier, if presently not resolved) alleging any such infringement, misappropriation or other violation (including any claim that Axcelis or any of its Subsidiaries must license or refrain from using any Intellectual Property rights of any Person) which alleged infringement, misappropriation or other violation, if true, would reasonably be expected to be, individually or in the aggregate, material to the business of Axcelis and its Subsidiaries. To the Knowledge of Axcelis, no Person is infringing, misappropriating or otherwise violating any Intellectual Property owned by Axcelis or any of its Subsidiaries except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect. Neither Axcelis nor any of its Subsidiaries has made or asserted any charge, complaint, claim, demand or notice in the last three (3) years (or earlier, if presently not resolved) alleging any such infringement, misappropriation or other violation which alleged infringement, misappropriation or other violation, if true, would reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect.

(d) Axcelis and its Subsidiaries have taken commercially reasonable steps to maintain, police and protect the Intellectual Property owned or purported to be owned by Axcelis or its Subsidiaries and that is material to their business (“Axcelis Material Intellectual Property”). Except as has not had and would not

reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, all Axcelis Material Intellectual Property that derives actual or potential economic value from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use has been maintained in confidence in accordance with protection procedures that are in accordance with procedures customarily used in the industry to protect rights of like importance and, to the Knowledge of Axcelis, adequate for protection against unauthorized disclosure or use. To the Knowledge of Axcelis, there has been no unauthorized disclosure of any Axcelis Material Intellectual Property that constitutes confidential information. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, to the Knowledge of Axcelis, all former and current officers, directors, employees, personnel, consultants, advisors, agents, and independent contractors of Axcelis and its Subsidiaries, and each of their predecessors, who have contributed to or participated in the conception and development of Intellectual Property for such entities have entered into valid and binding proprietary rights agreements with Axcelis or one of its Subsidiaries or predecessors, vesting ownership of such Intellectual Property in Axcelis or one of its Subsidiaries or predecessors. No such Person has asserted, and to the Knowledge of Axcelis, no such Person has, any right, title, interest or other claim in, or the right to receive any royalties or other consideration with respect to, any Axcelis Material Intellectual Property.

(e) Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, no Axcelis Software contains, or has contained, is or has been linked with, derived from, or distributed with, or developed using, any Open Source Materials in a manner that requires, pursuant to the applicable Open Source License, any Axcelis Software: (i) be disclosed or distributed in source code form; (ii) be licensed for the purpose of making modifications or derivative works; or (iii) be redistributable at no charge (in each case, except for the applicable, unmodified third party Open Source Material itself). Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, Axcelis and its Subsidiaries are and have been in compliance with the terms and conditions of each Open Source Material license to which they are subject.

(f) Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, none of the Axcelis Software contains any Contaminants. Axcelis and its Subsidiaries have implemented industry standard procedures to mitigate against the likelihood that the Axcelis Software contain any Contaminants, except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, to the Knowledge of Axcelis, there has been no cyber-attack, unauthorized access to or use of (whether without authorization or in breach of an authorization) or harm to any IT Assets (or any Software, information, or data stored on any IT Assets).

(g) Except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to the business of Axcelis and its Subsidiaries, (i) neither Axcelis nor its Subsidiaries has disclosed or delivered to any escrow agent or any other Person (other than an employee bound by a binding and enforceable written confidentiality agreement) any of the Source Code for any Axcelis Software, and no other Person has the right, contingent or otherwise, to obtain access to such Source Code; (ii) no event has occurred, and no circumstance or condition exists, that (with or without notice or lapse of time or both) will, or would, result in the release, delivery, license or other disclosure of any of the Source Code for any Axcelis Software to any Person who is not as of the date hereof a current employee bound by a binding and enforceable written confidentiality agreement; (iii) the consummation of the Transactions will not constitute a Source Code escrow release condition to require release of Source Code for any Axcelis Software from escrow; and (iv) no requests have been made to Axcelis, its Subsidiaries, or any escrow agent, for release of Source Code for any Axcelis Software.

(h) Except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to the business of Axcelis and its Subsidiaries, neither Axcelis nor its Subsidiaries is itself a member of and has not participated in any patent pool, standards setting organization, special interest group, forum, consortium, committee, working group, trade association, or other organization pursuant to the rules of which it is obligated to license any existing or future copyrights or patents to any Person or to refrain from asserting any existing or future copyrights or patents against any Person. Without limiting the foregoing, neither Axcelis nor its Subsidiaries is a member of the Open Invention Network.

(i) None of the execution and delivery of this Agreement, the consummation of the Transactions, or the performance by Axcelis or any of its Subsidiaries of its obligations hereunder: (i) conflicts or will conflict with, or alters or impairs or will alter or impair, any of Axcelis or its Subsidiaries' rights in, to and under any Intellectual Property or the validity, enforceability, use, right to use, ownership, registration, right to register, priority, duration, scope, or effectiveness of any such Intellectual Property, (ii) will alter any, or trigger any additional, royalties, license fees, honoraria or other payment obligations of Axcelis or Veeco or their respective Subsidiaries or (iii) will result in the grant, assignment or transfer to any other Person of any license or other right or interest, or otherwise encumber, any of the Intellectual Property owned or purported to be owned by Axcelis or its Subsidiaries or, pursuant to any Contract to which Axcelis or its Subsidiaries is a party, any other Intellectual Property of Veeco or its affiliates.

(j) Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, the IT Assets of Axcelis and its Subsidiaries operate in all material respects in accordance with their documentation and functional specifications and as required by Axcelis and its Subsidiaries to operate the business of Axcelis and its Subsidiaries as presently conducted and have not, in the last three (3) years, materially malfunctioned or failed. Axcelis and its Subsidiaries have implemented commercially reasonable measures to protect the confidentiality and security of such IT Assets and information stored or contained therein against any unauthorized use, access, interruption or corruption. Axcelis and its Subsidiaries have implemented commercially reasonable data backup, data storage, system redundancy and disaster avoidance procedures with respect to their IT Assets.

4.18 Data Privacy. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, in the last three (3) years, (a) Axcelis and its Subsidiaries have been in compliance with applicable Laws that govern Axcelis's and its Subsidiaries' collection, use, disclosure and protection of Personal Information (collectively, "Axcelis Data Privacy and Security Laws"), (b) Axcelis and its Subsidiaries have implemented and maintained commercially reasonable organizational, physical, and technical measures designed to protect Personal Information in its or their possession or control against unauthorized access, acquisition, alteration, modification, or use, (c) there has been no material unauthorized access, acquisition, alteration, modification, use or loss or other misuse of Personal Information maintained or processed by or on behalf of Axcelis and its Subsidiaries and (d) Axcelis and its Subsidiaries have not received any written notification from any Person that alleges a violation of any Axcelis Data Privacy and Security Laws and are not and have not been subject to any investigation by a Governmental Entity relating to any Axcelis Data Privacy and Security Laws.

4.19 Broker's Fees. Except for financial advisor fees set forth in Section 4.19 of the Axcelis Disclosure Schedule, neither Axcelis nor any of its Subsidiaries nor any of their respective officers or directors on behalf of Axcelis or such Subsidiaries has employed any financial advisor, broker or finder or incurred any liability for any financial advisory fee, broker's fees, commissions or finder's fees in connection with any of the Transactions.

4.20 Opinion of Axcelis's Financial Advisor. J.P. Morgan Securities LLC, Axcelis's financial advisor, has delivered to the Axcelis Board an opinion in writing or orally (which, if rendered orally, will be confirmed in writing) to the effect that, as of the date thereof and based upon and subject to the assumptions, qualifications, limitations and other matters set forth therein, the Veeco Exchange Ratio provided for in this Agreement is fair, from a financial point of view, to Axcelis.

4.21 Ownership of Veeco Common Stock. Neither Axcelis nor any of its affiliates or associates is, nor at any time during the last three (3) years has Axcelis or any of its affiliates or associates been, an "interested stockholder" of Veeco as defined in Section 203 of the DGCL. Axcelis and its Subsidiaries, affiliates and associates do not beneficially own any shares of Veeco Common Stock, Veeco Preferred Stock or other securities of Veeco or any options, warrants or other rights to acquire Veeco Common Stock or other securities of, or any other economic interest (through derivative securities or otherwise) in, Veeco.

4.22 Insurance. All insurance policies (including policies providing casualty, liability and workers compensation coverage, but excluding any Axcelis Benefit Plan) to which Axcelis or any of its Subsidiaries is currently a party are in full force and effect, and, to the Knowledge of Axcelis, have been issued by licensed insurers, all premiums due and payable in respect of such insurance policies have been paid, and no notice of cancellation or termination has been received with respect to any such policies, except for such cancellations

or terminations which would have not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect, each of Axcelis and its Subsidiaries is, and since December 31, 2023 has been, insured with respect to its assets and properties and the conduct of its business in such amounts and against such risks as are in its reasonable judgment sufficient for compliance with Law and as are adequate to protect its assets and properties and the conduct of its business.

4.23 Takeover Provisions. Assuming the accuracy of Veeco's representation and warranty set forth in Section 3.21, the Axcelis Board has taken and will take all actions so that the restrictions (whether procedural, voting, approval, fairness or otherwise) applicable to business combinations contained in Section 203 of the DGCL and any other Takeover Provisions are, and will be, inapplicable to the execution, delivery and performance of this Agreement, and the timely consummation of the Merger and any other Transactions and will not restrict, impair or delay the ability of Veeco to vote or otherwise exercise all rights as a stockholder. No "fair price," "moratorium," "control share acquisition" or other similar Takeover Provisions or any anti- takeover provision in the Axcelis Charter or the Axcelis Bylaws is, or at the Effective Time will be, applicable to the Axcelis Securities, the Merger or the other Transactions.

4.24 Assets. Other than the Axcelis Owned Real Property and the Axcelis Leased Real Property, Axcelis or a Subsidiary of Axcelis has good and marketable title to, or good and valid leasehold interests in, all of the material tangible assets reflected as owned, leased or used by it on the most recent consolidated balance sheet of Axcelis contained in the Axcelis SEC Documents filed prior to the date hereof (except for properties or assets that have been sold or disposed of in the ordinary course of business consistent with past practice since the date of such balance sheet) free and clear of any Liens, except for Permitted Liens.

4.25 Top Customers and Suppliers.

(a) Section 4.25(a) of the Axcelis Disclosure Schedule sets forth a true, complete and correct list of each customer who, for the year ended December 31, 2023 or for the year ended December 31, 2024, was one of the twenty (20) largest sources of revenues for Axcelis, based on revenues in this period (each, an "Axcelis Top Customer"). As of the date hereof, neither Axcelis nor any of its Subsidiaries has received written notice from any Axcelis Top Customer that such customer intends to terminate or materially and adversely modify existing Contracts with Axcelis or any of its Subsidiaries.

(b) Section 4.25(b) of the Axcelis Disclosure Schedule sets forth a true, complete and correct list of each supplier who, for the year ended December 31, 2023 or for the year ended December 31, 2024, was one of the twenty (20) largest suppliers for Axcelis, based on amounts paid or payable in this period (each, an "Axcelis Top Supplier"). As of the date hereof, neither Axcelis nor any of its Subsidiaries has received any written notice from any Axcelis Top Supplier that such supplier intends to terminate or materially and adversely modify existing Contracts with Axcelis or any of its Subsidiaries.

4.26 Product Defects and Warranties.

(a) Since December 31, 2023, all Axcelis Products that are sold and currently supported by Axcelis or any of its Subsidiaries have been provided in conformity with Axcelis's and its Subsidiaries' applicable contractual commitments, warranties and specifications, except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to Axcelis and its Subsidiaries, taken as a whole.

(b) Axcelis's warranty reserve reflected on the most recent Axcelis SEC Financial Statements was calculated utilizing historical warranty experience rates consistent with past practice and, to the Knowledge of Axcelis, was sufficient as of the date of the most recent Axcelis SEC Financial Statements to cover the unexpired warranty liabilities of Axcelis and its Subsidiaries for any products (including Axcelis Products) sold by Axcelis or any of its Subsidiaries to their respective customers as of the date of the most recent Axcelis SEC Financial Statements, except as has not been and would not reasonably be expected to be, individually or in the aggregate, material to Axcelis and its Subsidiaries, taken as a whole. Since the most recent Axcelis SEC Financial Statements, Veeco has not materially modified its practices in calculating warranty reserves. To the Knowledge of Axcelis, Axcelis's current warranty reserve is sufficient as of the date hereof to cover the unexpired warranty liabilities of Axcelis and its Subsidiaries for any products (including Axcelis Products) sold by Axcelis or any of its Subsidiaries to their respective customers as of the date hereof.

4.27 Merger Sub. Since its date of incorporation, Merger Sub has not carried on any business or conducted any operations other than the execution of this Agreement, the performance of its obligations hereunder and matters ancillary thereto. The authorized capital stock of Merger Sub consists of 1,000 shares of common stock, par value \$0.01 per share, all of which have been validly issued, are fully paid and nonassessable and are owned directly or indirectly by Axcelis free and clear of any Liens.

4.28 No Other Representations or Warranties. Axcelis hereby acknowledges and agrees that, except for the representations and warranties set forth in Article 3, (a) none of Veeco, or any of its stockholders or representatives, or any other Person, has made or is making any express or implied representation or warranty with respect to Veeco or its business or operations, including with respect to any information provided or made available to Axcelis or any of its affiliates, stockholders or representatives, or any other Person, or, except as otherwise expressly set forth in this Agreement, had or has any duty or obligation to provide any information to Axcelis or any of its affiliates, stockholders or Representatives, or any other Person, in connection with this Agreement, the Transactions or otherwise, and (b) to the fullest extent permitted by Law, none of Veeco, nor any of its affiliates, stockholders or representatives, or any other Person, will have or be subject to any liability or indemnification or other obligation of any kind or nature to Axcelis, or any of its affiliates, stockholders or representatives, or any other Person, resulting from the delivery, dissemination or any other distribution to Axcelis or any of its affiliates, stockholders or representatives, or any other Person, or the use by Axcelis or any of its affiliates, stockholders or representatives, or any other Person, of any such information provided or made available to any of them by Veeco, or any of its affiliates, stockholders or representatives, or any other Person, and (subject to the express representations and warranties of Veeco set forth in Article 3) Axcelis and its Subsidiaries, affiliates, stockholders and representatives, or any other Person, expressly disclaim reliance on any such information (including the accuracy or completeness thereof) or any representations or warranties or other statements or omissions that may have been made by Veeco or any Person with respect to Veeco other than the representations and warranties set forth in this Agreement.

ARTICLE 5

COVENANTS

5.1 Conduct of Business by Veeco and its Subsidiaries Pending the Effective Time. Veeco agrees that, between the date of this Agreement and the Effective Time, except as set forth in Section 5.1 of the Veeco Disclosure Schedule, as required by Law or as otherwise expressly contemplated or required by this Agreement, unless Axcelis shall otherwise consent in writing (such consent not to be unreasonably withheld, conditioned or delayed), Veeco will, and will cause each of its Subsidiaries to, (i) conduct its operations only in the ordinary course of business, (ii) use its commercially reasonable efforts to keep available the services of the current officers, employees and consultants of Veeco and each of its Subsidiaries and to preserve the goodwill and current relationships of Veeco and each of its Subsidiaries with Persons with which Veeco or any of its Subsidiaries has business relations, and (iii) use its commercially reasonable efforts to preserve intact its business organization and comply with all applicable Laws; provided that no action or omission by Veeco or any of its Subsidiaries with respect to any matter specifically addressed by any provision of Section 5.1(a)-(w) shall be deemed a breach of this sentence if such action is expressly permitted by Section 5.1(a)-(w) or set forth in Section 5.1 of the Veeco Disclosure Schedule. Without limiting the foregoing, except as set forth in Section 5.1 of the Veeco Disclosure Schedule, as required by Law or as otherwise expressly contemplated or required by this Agreement, Veeco shall not, and shall not permit any of its Subsidiaries to, between the date of this Agreement and the Effective Time, directly or indirectly, take any of the following actions without the prior written consent of Axcelis (such consent not to be unreasonably withheld, conditioned or delayed):

- (a) amend or otherwise change its certificate of incorporation or bylaws or equivalent organizational documents (including by merger consolidation or otherwise);
- (b) issue, sell, pledge, dispose of, grant, transfer or encumber, or authorize the issuance, sale, pledge, disposition, grant, transfer, or encumbrance of, any shares of capital stock of, or other Equity Interests in, Veeco or any of its Subsidiaries of any class, or securities convertible into, or exchangeable or exercisable for, any shares of such capital stock or other Equity Interests, or any options, warrants or other rights of any kind to acquire any shares of such capital stock or other Equity Interests or such

convertible or exchangeable securities, or any other ownership interest (including any such interest represented by Contract right), or any “phantom” stock, “phantom” stock rights, stock appreciation rights or stock based performance rights, of Veeco or any of its Subsidiaries, other than (i) the issuance of Veeco Common Stock in connection with the conversion of Veeco Preferred Stock, in each case, outstanding as of the date hereof in accordance with their terms, (ii) the issuance of Veeco Common Stock upon the vesting of Veeco RSUs or Veeco PSUs, in each case that are outstanding on the date hereof or issued in accordance with the terms of this Agreement, (iii) the issuance of any shares of Veeco Common Stock in accordance with the Veeco ESPP or (iv) as set forth in Section 5.1(b) of the Veeco Disclosure Schedule;

(c) sell, pledge, dispose of, transfer, lease, license, guarantee or encumber (except for Permitted Liens) (i) any property or assets of Veeco or any of its Subsidiaries with value in excess of \$2,000,000 or (ii) any Veeco Owned Real Property or Veeco Leased Real Property, except pursuant to existing Contracts or the sale or purchase of goods, products, inventory or personal property in the ordinary course of business consistent with past practice;

(d) (i) sell, assign, pledge, grant or acquire, agree to grant to or acquire from any Person, or otherwise encumber, transfer, license, abandon, place in the public domain, permit to lapse, disclose or agree to disclose or otherwise dispose of any Veeco Material Intellectual Property, except (A) pursuant to the terms of existing Contracts or the licensing of any such Intellectual Property on a non-exclusive basis in the ordinary course of business consistent with past practice, (B) abandonment or other disposition of such Intellectual Property that is no longer used or useful in the business of Veeco and its Subsidiaries or otherwise not economically practical to maintain, or (C) expiration of any such Intellectual Property at the end of its statutory term (or otherwise) in the ordinary course of business, or (ii) compromise, settle or agree to settle, or consent to judgment in, any one or more actions or institute any action concerning any Veeco Material Intellectual Property except in the ordinary course of business consistent with past practice;

(e) declare, set aside, make or pay any dividend or other distribution (whether payable in cash, shares, property or a combination thereof) with respect to any of its capital stock or other Equity Interests (other than dividends paid by a wholly owned Subsidiary of Veeco to Veeco or another wholly owned Subsidiary of Veeco) or enter into any agreement with respect to the voting or registration of its capital stock or other Equity Interests;

(f) reclassify, combine, split, subdivide or amend the terms of, or redeem, purchase or otherwise acquire, directly or indirectly, any of its capital stock or other Equity Interests, except for the withholding of shares of Veeco Common Stock to satisfy withholding Tax obligations with respect to awards granted pursuant to the Veeco Stock Plan and the acquisition by Veeco in the ordinary course of business consistent with past practice in connection with the forfeiture of awards pursuant to the terms of the Veeco Stock Plan upon termination of employment or service of an award holder;

(g) merge or consolidate Veeco or any of its Subsidiaries with any Person or adopt a plan of complete or partial liquidation or resolutions providing for a complete or partial liquidation, dissolution, restructuring, recapitalization or other reorganization of Veeco or any of its Subsidiaries, other than internal reorganizations in the ordinary course of business that would not have a material and adverse impact on Veeco and its Subsidiaries or the Transactions;

(h) acquire (including by merger, business combination, tender offer, consolidation, or acquisition of shares or assets) any interest in any Person or any assets, licenses, rights, product lines, operations or businesses thereof, in each case (i) with value in excess of \$1,000,000 or (ii) that would reasonably be expected to prevent or materially delay consummation of the Transactions, in each case other than (A) purchases of equipment and inventory in the ordinary course of business and (B) pursuant to the Contracts set forth on Section 5.1(h) of the Veeco Disclosure Schedule;

(i) repurchase, repay, refinance or incur any indebtedness for borrowed money, except as required by the terms of any such indebtedness as of the date hereof, or issue any debt securities or assume, guarantee or endorse, or otherwise as an accommodation become responsible for (whether directly, contingently or otherwise), the obligations of any Person (other than a wholly owned Subsidiary

of Veeco) for borrowed money, except for borrowings under the Existing Veeco Credit Facility or issuances of commercial paper for working capital and general corporate purposes in the ordinary course of business consistent with past practice;

(j) make any loans, advances or capital contributions to, or investments in, any other Person (other than any wholly owned Subsidiary of Veeco) in excess of \$10,000,000 in the aggregate;

(k) terminate, cancel, renew, or request or agree to any material change in or material waiver under any Veeco Material Contract, or enter into or materially amend any Contract that, if existing on the date hereof, would be a Veeco Material Contract, in each case other than in the ordinary course of business consistent with past practice;

(l) make or authorize any capital expenditure in excess of Veeco's capital expenditure budget as disclosed to Axcelis prior to the date hereof, other than capital expenditures that are not, in the aggregate, in excess of \$10,000,000;

(m) except to the extent required by applicable Law or the existing terms of any Veeco Benefit Plan disclosed in Section 3.11(a) of the Veeco Disclosure Schedule, or as set forth in Section 5.1(m) of the Veeco Disclosure Schedule: (A) increase, or commit to increase the compensation or benefits payable or to become payable to current or former directors, officers, employees or individual service providers of Veeco or its Subsidiaries; (B) grant any equity or equity-based awards; (C) grant or pay, or commit to grant or pay, any bonus, incentive, any rights to severance or termination pay or transaction or retention bonus payments to, or enter into any severance agreement with, any current or former director, officer, employee or individual service provider of Veeco or its Subsidiaries (including any obligation to gross-up, indemnify or otherwise reimburse any such individual for any Tax incurred by any such individual, including under Section 409A or 4999 of the Code); (D) establish, adopt, enter into or materially amend any Collective Bargaining Agreement or other Contract with any labor union or labor organization; (E) establish, adopt, enter into, amend or terminate any Veeco Benefit Plan (including any plan, agreement, program, policy or other arrangement that would be a Veeco Benefit Plan if it were in existence as of the date of this Agreement) other than in connection with routine, immaterial or ministerial amendments to health and welfare plans that do not materially increase benefits or result in a material increase in administrative costs; (F) amend or modify any performance criteria, metrics or targets under any Veeco Benefit Plan such that, as compared to those criteria, metrics or targets under any Veeco Benefit Plan in effect as of the date of this Agreement, the performance criteria, metrics or targets would reasonably be expected to be more likely to be achieved than in the absence of such amendment or modification; (G) take any action to waive any performance or vesting criteria or accelerate vesting, exercisability or funding under any Veeco Benefit Plan; or (H) hire or terminate the employment of any executive officer of Veeco other than terminations for cause, death or disability or take the actions described in Section 5.1(m)(9) of the Veeco Disclosure Schedule;

(n) forgive any loans to employees of Veeco or its Subsidiaries;

(o) engage in any "plant closing," "mass layoff" or similar act requiring notice under the Worker Adjustment and Retraining Notification Act of 1988, as amended (the "WARN Act"), or any similar federal, state, local or foreign Law;

(p) waive, release, pay, discharge or satisfy any claims, liabilities or obligations (absolute, accrued, contingent or otherwise) with value in excess of \$3,000,000, except in the ordinary course of business consistent with past practice and in accordance with their terms;

(q) make any change in accounting policies, practices, principles, methods or procedures, other than as required by GAAP or by a Governmental Entity;

(r) waive, release, assign, settle or compromise any claims or rights with value in excess of \$3,000,000 held by Veeco or any of its Subsidiaries;

(s) compromise, settle or agree to settle any Proceeding or investigation (including any Proceeding or investigation relating to this Agreement or the Transactions) other than compromises, settlements or agreements in the ordinary course of business consistent with past practice that involve only the

payment of monetary damages not in excess of \$3,000,000 individually or in the aggregate, in any case without the imposition of equitable relief on, or the admission of wrongdoing by, Veeco or any of its Subsidiaries;

(t) except in the ordinary course of business: (i) make, change or revoke any material Tax election, (ii) change any Tax accounting period for purposes of a material Tax or material method of Tax accounting, (iii) file any material amended Tax Return, (iv) settle or compromise any audit or proceeding relating to a material amount of Taxes, (v) agree to an extension or waiver of the statute of limitations with respect to a material amount of Taxes, (vi) enter into any “closing agreement” within the meaning of Section 7121 of the Code (or any similar provision of state, local, or non-U.S. Law) with respect to any material Tax, or (vii) surrender any right to claim a material Tax refund;

(u) convene any annual or special meeting (or any adjournment thereof) of the stockholders of Veeco, other than the Veeco Stockholders Meeting and any Veeco annual meeting of stockholders (only if such Veeco annual meeting is not otherwise combined with the Veeco Stockholders Meeting);

(v) fail to use reasonable efforts to maintain existing material insurance policies contemplated by Section 3.22 of the Veeco Disclosure Schedule or comparable replacement policies to the extent available for a reasonable cost; or

(w) authorize or enter into any Contract to do any of the foregoing or otherwise make any commitment to do any of the foregoing.

5.2 Conduct of Business by Axcelis and its Subsidiaries Pending the Effective Time. Axcelis agrees that, between the date of this Agreement and the Effective Time, except as set forth in Section 5.2 of the Axcelis Disclosure Schedule, as required by Law or as otherwise expressly contemplated or required by this Agreement, unless Veeco shall otherwise consent in writing (such consent not to be unreasonably withheld, conditioned or delayed), Axcelis will, and will cause each of its Subsidiaries to, (i) conduct its operations only in the ordinary course of business, (ii) use its commercially reasonable efforts to keep available the services of the current officers, employees and consultants of Axcelis and each of its Subsidiaries and to preserve the goodwill and current relationships of Axcelis and each of its Subsidiaries with Persons with which Axcelis or any of its Subsidiaries has business relations, and (iii) use its commercially reasonable efforts to preserve intact its business organization and comply with all applicable Laws; provided that no action or omission by Axcelis or any of its Subsidiaries with respect to any matter specifically addressed by any provision of Section 5.2(a)-(w) shall be deemed a breach of this sentence if such action is expressly permitted by Section 5.2(a)-(w) or set forth in Section 5.2 of the Axcelis Disclosure Schedule. Without limiting the foregoing, except as set forth in Section 5.2 of the Axcelis Disclosure Schedule, as required by Law or as otherwise expressly contemplated or required by this Agreement, Axcelis shall not, and shall not permit any of its Subsidiaries to, between the date of this Agreement and the Effective Time, directly or indirectly, take any of the following actions without the prior written consent of Veeco (such consent not to be unreasonably withheld, conditioned or delayed):

(a) amend or otherwise change its certificate of incorporation or bylaws or equivalent organizational documents (including by merger, consolidation or otherwise);

(b) issue, sell, pledge, dispose of, grant, transfer or encumber, or authorize the issuance, sale, pledge, disposition, grant, transfer, or encumbrance of, any shares of capital stock of, or other Equity Interests in, Axcelis or any of its Subsidiaries of any class, or securities convertible into, or exchangeable or exercisable for, any shares of such capital stock or other Equity Interests, or any options, warrants or other rights of any kind to acquire any shares of such capital stock or other Equity Interests or such convertible or exchangeable securities, or any other ownership interest (including any such interest represented by Contract right), or any “phantom” stock, “phantom” stock rights, stock appreciation rights or stock based performance rights, of Axcelis or any of its Subsidiaries, other than (i) the issuance of Axcelis Common Stock upon the vesting of Axcelis RSUs (including performance-based Axcelis RSUs) that are outstanding as of the date hereof or issued in accordance with the terms of this Agreement, (ii) in connection with the assumption and conversion of Veeco RSUs, Veeco PSUs and Veeco Restricted Stock Awards in accordance with the terms of this Agreement, (iii) the issuance of any shares of Axcelis Common Stock in accordance with the Axcelis ESPP or (iv) as set forth in Section 5.2(b) of the Axcelis Disclosure Schedule;

(c) sell, pledge, dispose of, transfer, lease, license, guarantee or encumber (except for Permitted Liens) (i) any property or assets of Axcelis or any of its Subsidiaries with value in excess of \$2,000,000 or (ii) any Axcelis Owned Real Property or Axcelis Leased Real Property, except pursuant to existing Contracts or the sale or purchase of goods, products, inventory or personal property in the ordinary course of business consistent with past practice;

(d) (i) sell, assign, pledge, grant or acquire, agree to grant to or acquire from any Person, or otherwise encumber, transfer, license, abandon, place in the public domain, permit to lapse, disclose or agree to disclose or otherwise dispose of any Axcelis Material Intellectual Property, except (A) pursuant to the terms of existing Contracts or the licensing of any such Intellectual Property on a non-exclusive basis in the ordinary course of business consistent with past practice, (B) abandonment or other disposition of such Intellectual Property that is no longer used or useful in the business of Axcelis and its Subsidiaries or otherwise not economically practical to maintain, or (C) expiration of any such Intellectual Property at the end of its statutory term (or otherwise) in the ordinary course of business, or (ii) compromise, settle or agree to settle, or consent to judgment in, any one or more actions or institute any action concerning any Axcelis Material Intellectual Property except in the ordinary course of business consistent with past practice;

(e) declare, set aside, make or pay any dividend or other distribution (whether payable in cash, shares, property or a combination thereof) with respect to any of its capital stock or other Equity Interests (other than dividends paid by a wholly owned Subsidiary of Axcelis to Axcelis or another wholly owned Subsidiary of Axcelis) or enter into any agreement with respect to the voting or registration of its capital stock or other Equity Interests;

(f) reclassify, combine, split, subdivide or amend the terms of, or redeem, purchase or otherwise acquire, directly or indirectly, any of its capital stock or other Equity Interests, except for the withholding of shares of Axcelis Common Stock to satisfy withholding Tax obligations with respect to awards granted pursuant to the Axcelis Stock Plan and the acquisition by Axcelis in the ordinary course of business consistent with past practice in connection with the forfeiture of awards pursuant to the terms of the Axcelis Stock Plan upon termination of employment or service of an award holder;

(g) merge or consolidate Axcelis or any of its Subsidiaries with any Person or adopt a plan of complete or partial liquidation or resolutions providing for a complete or partial liquidation, dissolution, restructuring, recapitalization or other reorganization of Axcelis or any of its Subsidiaries, other than internal reorganizations in the ordinary course of business that would not have a material and adverse impact on Axcelis and its Subsidiaries or the Transactions;

(h) acquire (including by merger, business combination, tender offer, consolidation, or acquisition of shares or assets) any interest in any Person or any assets, licenses, rights, product lines, operations or businesses thereof, in each case (i) with value in excess of \$1,000,000 or (ii) that would reasonably be expected to prevent or materially delay consummation of the Transactions, in each case other than (A) purchases of equipment and inventory in the ordinary course of business and (B) pursuant to the Contracts set forth on Section 5.2(h) of the Axcelis Disclosure Schedule;

(i) repurchase, repay, refinance or incur any indebtedness for borrowed money, except as required by the terms of any such indebtedness as of the date hereof, or issue any debt securities or assume, guarantee or endorse, or otherwise as an accommodation become responsible for (whether directly, contingently or otherwise), the obligations of any Person (other than a wholly owned Subsidiary of Axcelis) for borrowed money, except for borrowings under Axcelis's existing credit facilities or issuances of commercial paper for working capital and general corporate purposes in the ordinary course of business consistent with past practice;

(j) make any loans, advances or capital contributions to, or investments in, any other Person (other than any wholly owned Subsidiary of Axcelis) in excess of \$10,000,000 in the aggregate;

(k) terminate, cancel, renew, or request or agree to any material change in or material waiver under any Axcelis Material Contract, or enter into or materially amend any Contract that, if existing on the date hereof, would be an Axcelis Material Contract, in each case other than in the ordinary course of business consistent with past practice;

(l) make or authorize any capital expenditure in excess of Axcelis's capital expenditure budget as disclosed to Veeco prior to the date hereof, other than capital expenditures that are not, in the aggregate, in excess of \$10,000,000;

(m) except to the extent required by applicable Law or the existing terms of any Axcelis Benefit Plan disclosed in Section 4.11(a) of the Axcelis Disclosure Schedule or as set forth in Section 5.2(m) of the Axcelis Disclosure Schedule: (A) increase, or commit to increase the compensation or benefits payable or to become payable to current or former directors, officers, employees or individual service providers of Axcelis or its Subsidiaries; (B) grant any equity or equity-based awards; (C) grant or pay, or commit to grant or pay, any bonus, incentive, any rights to severance or termination pay or transaction or retention bonus payments to, or enter into any severance agreement with, any current or former director, officer, employee or individual service provider of Axcelis or its Subsidiaries (including any obligation to gross-up, indemnify or otherwise reimburse any such individual for any Tax incurred by any such individual, including under Section 409A or 4999 of the Code); (D) establish, adopt, enter into or materially amend any Collective Bargaining Agreement or other Contract with any labor union or labor organization; (E) establish, adopt, enter into, amend or terminate any Axcelis Benefit Plan (including any plan, agreement, program, policy or other arrangement that would be an Axcelis Benefit Plan if it were in existence as of the date of this Agreement) other than in connection with routine, immaterial or ministerial amendments to health and welfare plans that do not materially increase benefits or result in a material increase in administrative costs; (F) amend or modify any performance criteria, metrics or targets under any Axcelis Benefit Plan such that, as compared to those criteria, metrics or targets under any Axcelis Benefit Plan in effect as of the date of this Agreement, the performance criteria, metrics or targets would reasonably be expected to be more likely to be achieved than in the absence of such amendment or modification; (G) take any action to waive any performance or vesting criteria or accelerate vesting, exercisability or funding under any Axcelis Benefit Plan; or (H) hire or terminate the employment of any executive officer of Axcelis other than terminations for cause, death or disability;

(n) forgive any loans to employees of Axcelis or its Subsidiaries;

(o) engage in any "plant closing," "mass layoff" or similar act requiring notice under the WARN Act or any similar federal, state, local or foreign Law;

(p) waive, release, pay, discharge or satisfy any claims, liabilities or obligations (absolute, accrued, contingent or otherwise) with value in excess of \$3,000,000, except in the ordinary course of business consistent with past practice and in accordance with their terms;

(q) make any change in accounting policies, practices, principles, methods or procedures, other than as required by GAAP or by a Governmental Entity;

(r) waive, release, assign, settle or compromise any claims or rights with value in excess of \$3,000,000 held by Axcelis or any of its Subsidiaries;

(s) compromise, settle or agree to settle any Proceeding or investigation (including any Proceeding or investigation relating to this Agreement or the Transactions) other than compromises, settlements or agreements in the ordinary course of business consistent with past practice that involve only the payment of monetary damages not in excess of \$3,000,000 individually or in the aggregate, in any case without the imposition of equitable relief on, or the admission of wrongdoing by, Axcelis or any of its Subsidiaries;

(t) except in the ordinary course of business: (i) make, change or revoke any material Tax election, (ii) change any Tax accounting period for purposes of a material Tax or material method of Tax accounting, (iii) file any material amended Tax Return, (iv) settle or compromise any audit or proceeding relating to a material amount of Taxes, (v) agree to an extension or waiver of the statute of limitations with respect to a material amount of Taxes, (vi) enter into any "closing agreement" within the meaning of Section 7121 of the Code (or any similar provision of state, local, or non-U.S. Law) with respect to any material Tax, or (vii) surrender any right to claim a material Tax refund;

(u) convene any annual or special meeting (or any adjournment thereof) of the stockholders of Axcelis, other than the Axcelis Stockholders Meeting and any Axcelis annual meeting of stockholders (only if such Axcelis annual meeting is not otherwise combined with the Axcelis Stockholders Meeting);

(v) fail to use reasonable efforts to maintain existing material insurance policies contemplated by Section 4.22 of the Axcelis Disclosure Schedule or comparable replacement policies to the extent available for a reasonable cost; or

(w) authorize or enter into any Contract to do any of the foregoing or otherwise make any commitment to do any of the foregoing.

5.3 Preparation of the Form S-4 and the Joint Proxy Statement; Stockholders Meetings.

(a) As promptly as practicable after the execution of this Agreement, (i) Axcelis and Veeco shall jointly prepare and cause to be filed with the SEC, the Joint Proxy Statement to be sent to the stockholders of Axcelis and the stockholders of Veeco, as applicable, relating to the Axcelis Stockholders Meeting and the Veeco Stockholders Meeting and (ii) Axcelis and Veeco shall jointly prepare and Axcelis shall file with the SEC the Form S-4, in which the Joint Proxy Statement will be included as a prospectus, in connection with the registration under the Securities Act of the shares of Axcelis Common Stock to be issued in the Merger. Each of Veeco and Axcelis shall use its reasonable best efforts to have the Form S-4 declared effective as promptly as practicable after such filing (including by responding to comments of the SEC) and Axcelis shall use its reasonable best efforts to keep the registration statement effective as long as is necessary to consummate the Merger. Prior to the effective date of the Form S-4, each of Veeco and Axcelis shall take all action reasonably required to be taken under any applicable securities Laws in connection with the issuance of Axcelis Common Stock. Each of Axcelis and Veeco shall furnish all information as may be reasonably requested by the other party in connection with any such action and the preparation, filing and distribution of the Form S-4 and the Joint Proxy Statement. As promptly as practicable after the Form S-4 shall have become effective, each of Axcelis and Veeco shall use its reasonable best efforts to cause the Joint Proxy Statement to be mailed to its respective stockholders. No filing of, or amendment or supplement to, the Joint Proxy Statement will be made by Axcelis, and no filing of, or amendment or supplement to, the Joint Proxy Statement will be made by Axcelis or Veeco, in each case without providing the other party with a reasonable opportunity to review and comment thereon and considering in good faith the comments thereon of the other party. If at any time prior to the Effective Time any information relating to Axcelis or Veeco, or any of their respective affiliates, directors or officers, should be discovered by Axcelis or Veeco which should be set forth in an amendment or supplement to either the Form S-4 or the Joint Proxy Statement, so that either such document would not include any misstatement of a material fact or omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, the party that discovers such information shall promptly notify the other party and an appropriate amendment or supplement describing such information shall be promptly filed with the SEC and, to the extent required by Law, disseminated to the stockholders of Axcelis and the stockholders of Veeco. Axcelis shall notify Veeco promptly of the time when the Form S-4 has become effective, and of the issuance of any stop order or suspension of the qualification of the shares of Axcelis Common Stock issuable in connection with the Merger for offering or sale in any jurisdiction and Axcelis shall use its reasonable best efforts to have any such stop order or suspension lifted, reversed, or otherwise terminated. In addition, each party agrees to provide the other party and its legal counsel with copies of any written comments or requests, and shall promptly notify the other party of any oral comments or requests, that such party or its counsel may receive from time to time from the SEC or its staff with respect to the Form S-4 or the Joint Proxy Statement promptly after receipt of such comments or requests, and any written or oral responses thereto. Each party and their respective counsel shall be given a reasonable opportunity to review and comment on any such responses, and each party shall give due consideration to the additions, deletions or changes suggested thereto by the other party and their respective counsel. Neither Axcelis nor Veeco shall, and Axcelis and Veeco shall use reasonable best efforts to cause their respective Representatives not to, agree to participate in any substantive meeting or conference (including by telephone) with the SEC, or any member of the staff thereof, related to the Form S-4 or the Joint Proxy Statement unless it consults with the other party in advance and, to the extent permitted by the SEC, allows the other party to participate therein.

(b) Veeco Stockholders Meeting.

(i) Veeco shall, promptly following the date on which the Form S-4 has been filed with the SEC and the parties otherwise mutually determine to be appropriate, establish a record date for, and, as soon as practicable following the effectiveness of the Form S-4, duly call and give notice of and convene and hold a meeting of its stockholders (the “Veeco Stockholders Meeting”) for the purpose of seeking the Veeco Stockholder Approval; provided, however, that Veeco may postpone or adjourn the Veeco Stockholders Meeting (A) with the prior written consent of Axcelis, which consent shall not be unreasonably withheld, conditioned or delayed; (B) if a quorum has not been established; (C) to allow reasonable additional time for the filing and mailing of any supplemental or amended disclosure which the Veeco Board has determined in good faith after consultation with outside counsel is necessary under applicable Law and for such supplemental or amended disclosure to be disseminated and reviewed by Veeco’s stockholders prior to the Veeco Stockholders Meeting; (D) to allow reasonable additional time to solicit additional proxies, if and to the extent the requisite Veeco Stockholder Approval would not otherwise be obtained; or (E) if required by Law; provided, however, that in the case of clauses (B), (C), (D) and (E), the Veeco Stockholders Meeting shall not be postponed or adjourned for more than twenty (20) Business Days in the aggregate from the originally scheduled date of the Veeco Stockholders Meeting without the prior written consent of Axcelis, which consent shall not be unreasonably withheld, conditioned or delayed; provided, further, that in the event that Axcelis postpones or adjourns the Axcelis Stockholders Meeting in accordance with the terms of this Agreement, Veeco may postpone or adjourn the Veeco Stockholders Meeting for an equal number of days. Veeco shall, upon the reasonable request of Axcelis, advise Axcelis at least on a daily basis on each of the last seven (7) Business Days prior to the date of the Veeco Stockholders Meeting as to the aggregate tally of proxies received by Veeco with respect to the Veeco Stockholder Approval.

(ii) Veeco shall, through the Veeco Board, make the Veeco Recommendation and include such Veeco Recommendation in the Joint Proxy Statement (subject to Section 5.4) and, unless the Veeco Board has made a Veeco Adverse Recommendation Change in compliance with Section 5.4, use its reasonable best efforts to (A) solicit from its stockholders proxies in favor of the adoption of this Agreement and the Transactions, including the Merger, and (B) take all other action necessary or advisable to secure the Veeco Stockholder Approval. Except as expressly permitted in Section 5.4(b) and Section 5.4(d), neither the Veeco Board nor any committee thereof shall (x) withhold, withdraw, modify or qualify, or propose publicly to withhold, withdraw, modify or qualify, in a manner adverse to Axcelis, the approval, determination of advisability, or recommendation by the Veeco Board of, this Agreement, the Merger and the other Transactions, (y) make, or permit any director or executive officer to make, any public statement in connection with the Veeco Stockholders Meeting by or on behalf of the Veeco Board or such committee that would reasonably be expected to have the same effect or (z) approve, determine to be advisable, or recommend, or propose publicly to approve, determine to be advisable, or recommend, any Competing Proposal (the actions specified in the foregoing clauses (x), (y) and (z) being referred to as an “Veeco Adverse Recommendation Change”).

(c) Axcelis Stockholders Meeting.

(i) Axcelis shall, as soon as practicable following the date on which the Form S-4 has been filed with the SEC and the parties otherwise mutually determine to be appropriate, establish a record date for, and, as soon as practicable following the effectiveness of the Form S-4, duly call and give notice of and convene and hold a meeting of its stockholders (the “Axcelis Stockholders Meeting”) for the purpose of seeking the Axcelis Stockholder Approval; provided, however, that Axcelis may postpone or adjourn the Axcelis Stockholders Meeting (A) with the prior written consent of Veeco, which consent shall not be unreasonably withheld, conditioned or delayed; (B) if a quorum has not been established; (C) to allow reasonable additional time for the filing and mailing of any supplemental or amended disclosure which the Axcelis Board has determined in good faith after consultation with outside counsel is necessary under applicable Law and for such supplemental or amended disclosure to be disseminated and reviewed by Axcelis’s stockholders prior to the Axcelis Stockholders Meeting; (D) to allow reasonable additional time to solicit additional proxies, if and to the extent the requisite Axcelis Stockholder Approval would not otherwise be obtained; or (E) if required by Law; provided, however, that in the case of clauses (B), (C), (D) and (E), the Axcelis Stockholders Meeting shall not be postponed

or adjourned for more than twenty (20) Business Days in the aggregate from the originally scheduled date of the Axcelis Stockholders Meeting without the prior written consent of Veeco, which consent shall not be unreasonably withheld, conditioned or delayed; provided, further, that in the event that Veeco postpones or adjourns the Veeco Stockholders Meeting in accordance with the terms of this Agreement, Axcelis may postpone or adjourn the Axcelis Stockholders Meeting for an equal number of days. Axcelis shall, upon the reasonable request of Veeco, advise Veeco at least on a daily basis on each of the last seven (7) Business Days prior to the date of the Axcelis Stockholders Meeting as to the aggregate tally of proxies received by Axcelis with respect to the Axcelis Stockholder Approval.

(ii) Axcelis shall, through the Axcelis Board, make the Axcelis Recommendation and include such Axcelis Recommendation in the Joint Proxy Statement (subject to Section 5.4) and, unless the Axcelis Board has made an Axcelis Adverse Recommendation Change in compliance with Section 5.4, use its reasonable best efforts to (A) solicit from its stockholders proxies in favor of the approval of the Axcelis Share Issuance, and (B) take all other action necessary or advisable to secure the Axcelis Stockholder Approval. Except as expressly permitted in Section 5.4(b) and Section 5.4(d), neither the Axcelis Board nor any committee thereof shall (x) withhold, withdraw, modify or qualify, or propose publicly to withhold, withdraw, modify or qualify, in a manner adverse to Veeco, the approval, determination of advisability, or recommendation by the Axcelis Board of, the Share Issuance, (y) make, or permit any director or executive officer to make, any public statement in connection with the Axcelis Stockholders Meeting by or on behalf of the Axcelis Board or such committee that would reasonably be expected to have the same effect or (z) approve, determine to be advisable, or recommend, or propose publicly to approve, determine to be advisable, or recommend, any Competing Proposal (the actions specified in the foregoing clauses (x), (y) and (z) being referred to as a “Axcelis Adverse Recommendation Change”).

(d) Veeco and Axcelis will use their respective reasonable best efforts to set the record dates for and hold the Veeco Stockholders Meeting and the Axcelis Stockholders Meeting on the same date.

5.4 No Solicitation of Transactions.

(a) Each of Veeco and Axcelis shall immediately cease, and shall cause its respective Subsidiaries and Representatives to immediately cease, any discussions or negotiations with any Person that may be ongoing with respect to a Competing Proposal (including any provision of non-public information regarding Veeco and its Subsidiaries or Axcelis and its Subsidiaries, as applicable), or with respect to any proposal that could reasonably be expected to lead to a Competing Proposal, and shall request to have returned promptly (and, in any event, within two (2) Business Days of the date hereof) to Veeco or Axcelis, as applicable, or to have promptly destroyed, any confidential information that has been provided in any such discussions or negotiations. From the date hereof until the earlier of the Effective Time or the date of valid termination of this Agreement in accordance with Article 7, each of Veeco and Axcelis shall not, and shall cause its respective Subsidiaries and Representatives not to, directly or indirectly, (i) solicit, initiate or knowingly encourage or knowingly induce (including by way of furnishing information), or take any other action intentionally designed to facilitate, any inquiries or the making of any proposal which constitutes, or would reasonably be expected to lead to, any Competing Proposal, or (ii) engage in any discussions or negotiations regarding any Competing Proposal; provided, however, that if, prior to obtaining the Veeco Stockholder Approval (in the case of Veeco) or the Axcelis Stockholder Approval (in the case of Axcelis) and following the receipt of a bona fide written Competing Proposal made after the date hereof that the Veeco Board or Axcelis Board, as applicable, determines in good faith (after consultation with Veeco’s or Axcelis’s financial advisor and outside legal counsel) would reasonably be expected to lead to a Superior Proposal and that was not, directly or indirectly, solicited, initiated or knowingly encouraged in violation of this Section 5.4, the Veeco Board or the Axcelis Board, as applicable, determines in good faith, after consultation with financial advisors and outside legal counsel, as applicable, that a failure to take action with respect to such Competing Proposal would be inconsistent with its fiduciary duties under applicable Law, Veeco or Axcelis may, in response to such Competing Proposal, as applicable, and subject to compliance with Section 5.4(c), (A) furnish information with respect to Veeco or Axcelis, as applicable, to the Person making such Competing Proposal pursuant to an Acceptable Confidentiality Agreement, and (B) engage in discussions or negotiations with such Person (and such Person’s Representatives and financing sources (if any)) regarding such Competing Proposal. Except as expressly permitted by this Section 5.4, each of Axcelis and Veeco

shall not, and shall cause their respective Subsidiaries and Representatives not to, from and after the date of this Agreement until the earlier of the Effective Time or the date, if any, on which this Agreement is terminated pursuant to Article 7, directly or indirectly (1) approve, endorse, recommend or enter into, or publicly propose to approve, endorse, recommend or enter into, any letter of intent, memorandum of understanding, agreement in principle, acquisition agreement, merger agreement or similar definitive agreement (other than an Acceptable Confidentiality Agreement) with respect to any Competing Proposal; (2) take any action to make the provisions of any takeover statute inapplicable to any transactions contemplated by a Competing Proposal; (3) terminate, amend, release, modify or knowingly fail to enforce any provision of, or grant any permission, waiver or request under, any standstill, confidentiality or similar agreement entered into by the applicable party in respect of or in contemplation of a Competing Proposal (other than to the extent the Axcelis Board or the Veeco Board, as applicable, determines in good faith after consultation with outside legal counsel, that failure to take any of such actions under clause (3) would be inconsistent with its fiduciary duties under applicable Law); or (4) propose to do any of the foregoing. For the avoidance of doubt, nothing in this Section 5.4(a) shall relieve any party from its obligations under Section 5.6.

(b) Notwithstanding any other provision of this Agreement, including Section 5.3 but subject to compliance with this Section 5.4, prior to receipt of the Veeco Stockholder Approval, the Veeco Board may, or, prior to receipt of the Axcelis Stockholder Approval, the Axcelis Board may, in response to any bona fide written Competing Proposal that was not, directly or indirectly, solicited, initiated or knowingly encouraged in violation of this Section 5.4, effect a Veeco Adverse Recommendation Change or an Axcelis Adverse Recommendation Change, as applicable, if and only if (i) the Veeco Board or the Axcelis Board, as applicable, concludes in good faith, after consultation with Veeco's or Axcelis's financial advisor and outside legal counsel, that such Competing Proposal constitutes a Superior Proposal; (ii) the Axcelis Board or the Veeco Board, as applicable, provides the other party five (5) Business Days prior written notice of its intention to take such action (a "Competing Proposal Notice"), which notice shall include the information with respect to such Competing Proposal that is specified in Section 5.4(c), as well as a copy of such Competing Proposal (and if available, drafts of any Contract to effectuate such Competing Proposal) (it being agreed that neither the delivery of such notice by a party nor any public announcement thereof that such party determines it is required to make under applicable Law shall constitute a Veeco Adverse Recommendation Change or an Axcelis Adverse Recommendation Change, as applicable, unless and until such party shall have failed at or prior to the end of the period referred to in clause (iii) below (and, upon the occurrence of such failure, such notice and such public announcement shall constitute a Veeco Adverse Recommendation Change or an Axcelis Adverse Recommendation Change, as applicable) to determine (in the case where such Competing Proposal was not public) or to publicly announce (in the case where such Competing Proposal was public) that (A) it is recommending the Transactions and (B) such other Competing Proposal (taking into account (x) any modifications or adjustments made to the Transactions agreed to by the other party in writing and (y) any modifications or adjustments made to such other Competing Proposal) is not a Superior Proposal); (iii) during the five (5) Business Days following such written notice (the "Negotiation Period"), if requested by the other party, the Board of Directors effecting the recommendation change and its Representatives have negotiated in good faith with the other party regarding any revisions to the terms of the Transactions proposed by the other party in response to such Competing Proposal; and (iv) at the end of the five (5) Business Day period described in the foregoing clause (iii), the Veeco Board or Axcelis Board, as applicable, concludes in good faith, after consultation with Veeco's or Axcelis's outside legal counsel and financial advisors (and taking into account any adjustment or modification of the terms of this Agreement to which the other party has agreed in writing to make to the terms of the Transactions), that the Competing Proposal continues to be a Superior Proposal and, after consultation with Veeco's or Axcelis's outside legal counsel, that the failure to make a Veeco Adverse Recommendation Change or Axcelis Adverse Recommendation Change, as applicable, would be inconsistent with the fiduciary duties of the Veeco Board or Axcelis Board under applicable Law. Any material amendment or modification to any Competing Proposal shall require a new Competing Proposal Notice and the Negotiation Period shall be extended by an additional four (4) Business Days from the date of receipt of such new Competing Proposal Notice.

(c) In addition to the obligations of Axcelis and Veeco set forth in Section 5.4(a) and Section 5.4(b), Axcelis or Veeco shall promptly, and in any event no later than twenty-four (24) hours, after it receives (i) any Competing Proposal or indication by any Person that such Person is considering making a Competing

Proposal, (ii) any request for non-public information relating to Axcelis or Veeco or their respective Subsidiaries, other than requests for information that would not reasonably be expected to result in a Competing Proposal, or (iii) any inquiry or request for discussions or negotiations regarding any Competing Proposal, notify the other party orally and in writing of any of the foregoing occurrences, the identity of the person making such request, inquiry or Competing Proposal and a copy of such request, inquiry or Competing Proposal (or where no such copy is available, a reasonably detailed description of such request, inquiry or Competing Proposal). Each party shall keep the other party reasonably informed (orally and in writing) on a current basis (and in any event at the other party's request and otherwise no later than twenty-four (24) hours after the occurrence of any material changes, developments, discussions or negotiations) of the status of any request, inquiry or Competing Proposal (including the terms and conditions thereof and of any modification thereto), and any material developments, discussions and negotiations, including furnishing copies of any written inquiries, material correspondence and draft documentation, and written summaries of any material oral inquiries or discussions. Without limiting the foregoing, each party shall promptly (and in any event within twenty-four (24) hours) notify the other party orally and in writing if it determines to begin providing information or to engage in discussions or negotiations concerning a Competing Proposal pursuant to this Section 5.4. Each of Axcelis and Veeco agrees that, subject to applicable restrictions under applicable Law, it shall, prior to or concurrent with the time it is provided to any third parties, provide to the other party any non-public information concerning Axcelis or Veeco and their respective Subsidiaries that Axcelis or Veeco provided to any third party in connection with any Competing Proposal which was not previously provided to the other party.

(d) Notwithstanding anything in this Section 5.4 to the contrary, at any time prior to obtaining the Axcelis Stockholder Approval or the Veeco Stockholder Approval, the Axcelis Board or the Veeco Board, as applicable, may make an Axcelis Adverse Recommendation Change or a Veeco Adverse Recommendation Change, as applicable, if (i) such board determines that an Axcelis Intervening Event, in the case of the Axcelis Board, or a Veeco Intervening Event, in the case of the Veeco Board, has occurred and is continuing and (ii) such board determines in good faith (after consultation with outside legal counsel) that the failure to make an Axcelis Adverse Recommendation Change or a Veeco Adverse Recommendation Change, as applicable, in response to such Axcelis Intervening Event or Veeco Intervening Event, as applicable, would be inconsistent with its fiduciary duties under applicable Law; provided that (x) the Axcelis Board or the Veeco Board has given the other party at least five (5) Business Days prior written notice of its intention to take such action and specifying in reasonable detail the circumstances related to such determination and (y) prior to effecting an Axcelis Adverse Recommendation Change or a Veeco Adverse Recommendation Change, the applicable party has negotiated, and has caused its Representatives to negotiate, in good faith with the other party during such notice period to the extent such other party wishes to negotiate, to enable such party to revise the terms of this Agreement, such that the failure to make an Axcelis Adverse Recommendation Change or a Veeco Adverse Recommendation Change, as applicable, would not be inconsistent with its fiduciary duties under applicable Law.

(e) Nothing contained in this Agreement shall prohibit the Axcelis Board or the Veeco Board from (i) taking and disclosing to their stockholders, as applicable, a position contemplated by Rule 14d-9 or Rule 14e-2(a) promulgated under the Exchange Act regarding a Competing Proposal, or from issuing a "stop, look and listen" statement pending disclosure of its position thereunder, or (ii) making any disclosure to their stockholders regarding a Competing Proposal if the Veeco Board or Axcelis Board, as applicable, determines in good faith, after consultation with outside legal counsel, that the failure to make such disclosure would be inconsistent with its fiduciary duties under applicable Law, provided, that if any such disclosure pursuant to this clause (ii) has the substantive effect of withdrawing or adversely modifying the Axcelis Recommendation or the Veeco Recommendation, such disclosure shall be deemed to be an Axcelis Adverse Recommendation Change or a Veeco Adverse Recommendation Change, as applicable, for purposes of this Agreement (it being understood that any "stop, look or listen" communication that substantially contains only the information set forth in Rule 14d-9(f) shall not be deemed, in and of itself, to be an Axcelis Adverse Recommendation Change or a Veeco Adverse Recommendation Change).

(f) Notwithstanding any Axcelis Adverse Recommendation Change, Veeco Adverse Recommendation Change, as applicable, or any other provision of this Agreement to the contrary, unless this Agreement has been validly terminated pursuant to Section 7.1, (i) Axcelis shall cause the proposal to approve the issuance of Axcelis Common Stock in the Merger pursuant to this Agreement (the "Axcelis Share Issuance") to be

submitted to a vote of the Axcelis stockholders at the Axcelis Stockholder Meeting and (ii) Veeco shall cause the proposal to approve the Merger and the Transactions to be submitted to a vote of Veeco stockholders at the Veeco Stockholder Meeting.

(g) For purposes of this Agreement:

(i) “Axcelis Intervening Event” means any event, development or change in circumstances that materially affects the business, assets or operations of Axcelis or its Subsidiaries that first occurs, arises or becomes known to Axcelis or the Axcelis Board after the date of this Agreement, which event, development or change in circumstances was not reasonably foreseeable as of the date of this Agreement; provided, however, that in no event shall the following events, developments or changes in circumstances constitute an Axcelis Intervening Event: (1) the receipt, existence or terms of a Competing Proposal with respect to Axcelis or any matter relating thereto or consequence thereof; (2) any change in the price, or change in trading volume, of Axcelis Common Stock or Veeco Common Stock (provided, however, that the exception in this clause (2) shall not apply to the underlying causes giving rise to or contributing to such change or prevent any of such underlying causes from being taken into account in determining whether an Axcelis Intervening Event has occurred); (3) meeting or exceeding internal or analysts’ expectations, projections or results of operations (provided, however, that the exception in this clause (3) shall not apply to the underlying causes giving rise to or contributing to such circumstances or prevent any of such underlying causes from being taken into account in determining whether an Axcelis Intervening Event has occurred); or (4) changes in general economic, political or financial conditions or markets (including changes in interest rates, exchange rates, stock, bond and/or debt prices).

(ii) “Competing Proposal” shall mean, with respect to Axcelis or Veeco, as applicable, other than the Transactions, any proposal or offer from a third party relating to (A) a merger, reorganization, share exchange, consolidation, business combination, recapitalization, dissolution, liquidation, joint venture or similar transaction involving Axcelis or Veeco, as applicable, or any of their respective Subsidiaries; (B) the acquisition (whether by merger, consolidation, equity investment, joint venture, out license or otherwise) by any Person of twenty percent (20%) or more of the consolidated assets of Axcelis or Veeco, and their respective Subsidiaries, as determined on a book-value or fair-market-value basis; (C) the purchase or acquisition, in any manner, directly or indirectly, by any Person of twenty percent (20%) or more of the issued and outstanding shares of the Axcelis Common Stock or the Veeco Common Stock, as applicable, or any other Equity Interests in Axcelis or Veeco, as applicable; (D) any purchase, acquisition, tender offer or exchange offer that, if consummated, would result in any Person beneficially owning twenty percent (20%) or more of the shares of Axcelis Common Stock or Veeco Common Stock, as applicable, or any other Equity Interests of Axcelis, Veeco or any of their respective Subsidiaries, as applicable; or (E) any combination of the foregoing.

(iii) “Superior Proposal” means a Competing Proposal (except the references therein to “twenty percent (20%)” shall be replaced by “eighty percent (80%)”) made by a third party and which, in the good faith judgment of the Axcelis Board or the Veeco Board, as applicable, and after consultation with outside legal counsel and financial advisors, taking into account the various legal, financial, regulatory, timing, tax and other aspects of the Competing Proposal, including the financing terms thereof, the identity of the third party making such Competing Proposal and potential synergies expected to be realized from the Transactions (A) if accepted, is reasonably likely to be consummated, (B) if consummated, would result in a transaction that is more favorable to Axcelis’s stockholders or Veeco’s stockholders, as applicable, from a financial point of view, than the Merger and the other Transactions contemplated hereby (after giving effect to all adjustments or modifications to the terms thereof which may be agreed in writing to be made by the other party (including pursuant to Section 5.4(b)) and (C) if a cash transaction (in whole or in part), financing for which is then fully committed or reasonably determined to be available.

(iv) “Veeco Intervening Event” means any event, development or change in circumstances that materially affects the business, assets or operations of Veeco or its Subsidiaries that first occurs, arises or becomes known to Veeco or the Veeco Board after the date of this Agreement, which event, development or change in circumstances was not reasonably foreseeable as of the date of this Agreement; provided, however, that in no event shall the following events, developments or changes in circumstances

constitute a Veeco Intervening Event: (1) the receipt, existence or terms of a Competing Proposal with respect to Veeco or any matter relating thereto or consequence thereof; (2) any change in the price, or change in trading volume, of Axcelis Common Stock or Veeco Common Stock (provided, however, that the exception in this clause (2) shall not apply to the underlying causes giving rise to or contributing to such change or prevent any of such underlying causes from being taken into account in determining whether a Veeco Intervening Event has occurred); (3) meeting or exceeding internal or analysts' expectations, projections or results of operations (provided, however, that the exception in this clause (3) shall not apply to the underlying causes giving rise to or contributing to such circumstances or prevent any of such underlying causes from being taken into account in determining whether a Veeco Intervening Event has occurred); or (4) changes in general economic, political or financial conditions or markets (including changes in interest rates, exchange rates, stock, bond and/or debt prices).

5.5 Access to Information; Confidentiality.

(a) Upon reasonable advance written notice, each of Axcelis and Veeco shall (and shall cause their respective Subsidiaries and Representatives to) afford to the other party and its Representatives reasonable access during normal business hours, during the period prior to the Effective Time, to all its properties, books, Contracts and records and its officers, employees and Representatives and, during such period, each of Axcelis and Veeco shall (and shall cause its Subsidiaries and Representatives to) furnish promptly to the other party (i) a copy of each report, schedule, registration statement and other document filed, published, announced or received by it during such period pursuant to the requirements of applicable securities Laws (other than reports or documents which such party is not permitted to disclose under applicable Law) and (ii) consistent with its obligations under applicable Law, all other information concerning its business, properties and personnel as the other party may reasonably request; provided, however, none of Axcelis or Veeco or any of their respective Subsidiaries or Representatives shall be required to provide access to or disclose information where such information or access would, in the reasonable judgment of such party, (w) breach any agreement with any third party, (x) constitute a waiver of the attorney-client, work-product doctrine or other privilege held by such party, (y) otherwise violate any applicable Law or (z) unreasonably interfere with the conduct of the business of such party. In the event any of the restrictions in clauses (w) through (z) of the foregoing sentence shall apply, each party shall advise the other party of the subject matter of any such information that cannot be disclosed and the parties shall use their reasonable best efforts to make appropriate alternate disclosure arrangements, including adopting additional specific procedures to protect the confidentiality of sensitive material and to ensure compliance with applicable Laws. Any such information provided pursuant to this Section 5.5 shall be held in confidence to the extent required by, and in accordance with, the provisions of that certain Nondisclosure Agreement, dated August 22, 2025, as such agreement may be amended from time to time in accordance with its terms (the "Confidentiality Agreement"), between Axcelis and Veeco, which Confidentiality Agreement shall remain in full force and effect in accordance with its terms. Notwithstanding the foregoing, no party or any of its Representatives or affiliates shall be permitted to perform any on-site procedures (including an on-site environmental or other study) with respect to any property of the other party or the other party's subsidiaries without such other party's prior written consent.

(b) Each of the parties hereby agree that no investigation by any of the parties or their respective Representatives or information provided, made available or delivered pursuant to this Agreement shall affect the representations, warranties, covenants or agreements of any other party set forth herein.

5.6 Appropriate Action.

(a) Veeco, Axcelis and Merger Sub shall use their reasonable best efforts to consummate and make effective the Transactions, including using their reasonable best efforts to obtain, or cause to be obtained, all waivers, permits, consents, approvals, authorizations, qualifications, orders and expirations or terminations of applicable waiting periods (collectively, the "Consents") of all Governmental Entities and parties to Contracts with Veeco, Axcelis or any of their respective Subsidiaries that may be or become necessary or advisable for the performance of obligations pursuant to this Agreement and the consummation of the Transactions. The parties shall cooperate and assist one another in good faith (i) in connection with all actions to be taken pursuant to this Section 5.6(a), including the preparation and making of the filings referred to herein and, if requested, amending or furnishing additional information thereunder, and (ii) in seeking, as promptly as reasonably practicable, to obtain all such Consents. Upon the terms and subject to the

conditions set forth in this Agreement, each party agrees to make any filings required or advisable to be made pursuant to the HSR Act or other applicable Antitrust Laws and Investment Screening Laws with respect to the Transactions as promptly as reasonably practicable (and, in the case of the required Notification and Report Forms pursuant to the HSR Act, in any event, unless otherwise mutually agreed between Veeco and Acelis, within twenty (20) Business Days after the date hereof, it being understood that if on such twentieth (20th) Business Day a Government Shutdown shall be in effect and the applicable Governmental Entities are not accepting filings, such twentieth (20th) Business Day deadline shall be extended until the fifth (5th) Business Day after the date on which the Governmental Entities are accepting filings) and to supply as promptly as reasonably practicable to the appropriate Governmental Entities any additional information and documentary material that may be requested by such Governmental Entities pursuant to the HSR Act or such other applicable Antitrust Laws and Investment Screening Laws. All such antitrust filings and filings pursuant to any Investment Screening Laws to be made shall be made in substantial compliance with the requirements of the HSR Act and such other applicable antitrust Laws and Investment Screening Laws, as applicable. Acelis and Veeco shall jointly develop, consult and cooperate with one another with respect to the strategy for obtaining any Consents relating to the Transactions, including the HSR Act, other applicable Antitrust Laws and Investment Screening Laws, or responding to any request from, inquiry by, or investigation by any Governmental Entity in connection with this Agreement and the Transactions, including the timing and content of any registrations, filings, agreements, forms, notices, petitions, statements, submissions of information, applications and other documents, communications and correspondence contemplated by, made in accordance with or subject to this Section 5.6. Notwithstanding the immediately foregoing sentence, in the event of any disagreement between the parties relating to the strategy or content of any submission made in connection with obtaining any Consents relating to the Transactions, including the HSR Act, other applicable Antitrust Laws and Investment Screening Laws, the Parties shall escalate such dispute to the chief executive officer of Acelis and the chief executive officer of Veeco for resolution. If such dispute as to strategy or content is not resolved in a timely manner pursuant to the preceding sentence, Acelis shall have the right to make the final determination with respect to such dispute so long as such determination is consistent with the terms of this Agreement and is in good faith with the intention to receive all required Consents and consummate the Transactions as promptly as possible and without preference to the interests of Acelis over the interests of Veeco (the procedures with respect to determining strategy or content of any submission and resolving any disagreements between the parties with respect thereto described in this sentence and the immediately preceding two sentences, the "Regulatory Strategy Framework"); provided, however, it is understood and agreed that, notwithstanding the definition of Regulatory Strategy Framework, (x) the parties shall at all times remain obligated to use reasonable best efforts to consummate the Transactions pursuant to the first sentence of this Section 5.6(a) and (y) in no event shall the Regulatory Strategy Framework govern the decision by any party to pursue (or not) any specific remedies in connection with obtaining any Consents.

(b) In furtherance, and without limiting the generality, of the foregoing, the parties shall use their reasonable best efforts to cooperate with and assist each other in good faith to (i) determine, as promptly as reasonably practicable, which filings (if any) are required or advisable to be made pursuant to the HSR Act or other applicable Antitrust Laws and Investment Screening Laws with respect to the Transactions and are not otherwise set forth on Section 6.1(e) of the Veeco Disclosure Schedule, (ii) provide or cause to be provided as promptly as reasonably practicable to the other party all necessary information and assistance as any Governmental Entity may from time to time require of such party in connection with obtaining the relevant Consents in relation to such filings or in connection with any other review or investigation of the Transactions by a Governmental Entity pursuant to the HSR Act or other applicable Antitrust Laws and Investment Screening Laws and (iii) provide or cause to be provided as promptly as reasonably practicable all assistance and cooperation to allow the other party to prepare and submit any such filings or submissions required to be submitted under the HSR Act or other applicable Antitrust Laws and Investment Screening Laws, including providing to the other party any information that the other party may from time to time require for the purpose of any filing with, notification to, application with, or request for further information made by, any Governmental Entity in respect of any such filing, subject to the Regulatory Strategy Framework. To the extent permitted by applicable Antitrust Laws and not prohibited by any Governmental Entity, each party shall (1) keep the other apprised of the content and status of any material communications with, and communications from, any Governmental Entity with respect to the Transactions, including promptly notifying the other party of any communication it receives from any Governmental Entity relating to any

review or investigation of the Transactions under the HSR Act or other applicable Antitrust Laws and Investment Screening Laws, and (2) provide advance notice of and permit representatives of the other party to be present and participate at each meeting or teleconference relating to any review or investigation of the Transactions under the HSR Act or other applicable Antitrust Laws and Investment Screening Laws; provided, further, that each party shall be consulted in advance in connection with any material draft submission to any Governmental Entity in such meetings or teleconferences. To the extent permitted by applicable Law, the parties shall, and shall use their reasonable best efforts to cause their respective affiliates to provide each other with copies of all correspondence, filings or communications between them or any of their respective Representatives, on the one hand, and any Governmental Entity or members of its staff, on the other hand, with respect to this Agreement and the Transactions; provided, however, that materials may be redacted (x) to remove references concerning the valuation of Axcelis or Veeco and their respective Subsidiaries, as applicable; (y) as necessary to comply with any Contract or Laws; and (z) as necessary to address reasonable attorney-client or other privilege or confidentiality concerns. Each party may reasonably designate any competitively sensitive or any confidential business material provided to the other party under this Section 5.6(b) as “outside counsel only,” in which case such materials and the information contained therein shall be available only to the outside counsel of the recipient and will not be disclosed by such outside counsel to employees, officers, directors or other Representatives of the recipient unless express permission is obtained in advance from the source of the materials or its legal counsel.

(c) Each party shall, and shall cause its respective Subsidiaries to, respond as promptly as reasonably practicable to any inquiries or requests for information and documentary material received from any Governmental Entity in connection with any HSR Act, other applicable Antitrust Laws or Investment Screening Law matters related to this Agreement and the Transactions.

(d) Notwithstanding anything to the contrary in this Agreement, neither Axcelis, nor Veeco nor any of their respective affiliates shall, without the prior written consent of Veeco (in the case of Axcelis or its affiliates) or Axcelis (in the case of Veeco or its affiliates), propose, consent to, commit to or take any Divestiture Action that would result in a Detriment. For the purposes of this Section 5.6(d), a Divestiture Action would be deemed to result in a “Detriment” if such Divestiture Action, considered individually or in the aggregate with all other Divestiture Actions, would have an adverse impact that is material to (a) the reasonably anticipated benefits to Axcelis or Veeco of the Transactions, (b) the business of Axcelis and its Subsidiaries, taken as a whole, or (c) the business of Veeco and its Subsidiaries, taken as a whole; provided, that in no event shall Axcelis or Veeco be required to license any of the Intellectual Property of Axcelis, Veeco or any of their respective Subsidiaries.

5.7 Certain Notices. Each party shall give prompt notice to the other parties if any of the following occur after the date of this Agreement: (a) receipt of any notice or other communication in writing from any Person alleging that the consent or approval of such Person is or may be required in connection with the Transactions; (b) receipt of any notice or other communication from any Governmental Entity, Nasdaq (or any other securities market) in connection with the Transactions; or (c) such party becoming aware of the occurrence of an event that could prevent or delay beyond the Outside Date the consummation of the Transactions or that would reasonably be expected to result in any of the conditions to the Merger set forth in Article 6 not being satisfied; provided, however, that the delivery of any notice pursuant to this Section 5.7 shall not cure any breach of any representation, warranty, covenant or agreement contained in this Agreement or otherwise limit or affect the remedies available hereunder to the party receiving such notice. Veeco and Axcelis shall promptly provide, to the extent not publicly available, the other party with copies of all filings made by such party with any Governmental Entity in connection with the Transactions.

5.8 Public Announcements. Axcelis and Veeco agree that the press release announcing the execution and delivery of this Agreement shall be a joint release in the form heretofore agreed by the parties. Each party agrees that no other public release or announcement concerning the Transactions shall be issued by any party without the prior written consent of Axcelis and Veeco (which consent shall not be unreasonably withheld, conditioned or delayed), except (a) to the extent such release or announcement may be required by applicable Law or the rules or regulations of any applicable securities exchange or regulatory or governmental body to which the relevant party is subject, in which case the party required to make the release or announcement shall use its reasonable best efforts to allow each other party reasonable time to comment on such release or announcement in advance of such issuance and (b) for any such public release

or announcement made by any party with respect to a Competing Proposal, a Veeco Adverse Change of Recommendation, an Axcelis Adverse Change of Recommendation or matters related thereto in accordance with this Agreement.

5.9 Director and Officer Indemnification.

(a) From and after the Effective Time, Axcelis shall, and shall cause the Surviving Corporation to, indemnify, defend and hold harmless, and shall advance expenses as incurred, to the fullest extent permitted under (i) applicable Law, (ii) Veeco's and its Subsidiaries' organizational documents in effect as of the date of this Agreement, and (iii) any Contract of Veeco in effect as of the date of this Agreement, each present and former director and officer of Veeco (each, an "Indemnitee" and, collectively, the "Indemnitees") from and against any costs or expenses (including reasonable attorneys' fees), judgments, settlements, fines, losses, claims, damages or liabilities incurred in connection with any Proceeding or investigation, whether civil, criminal, administrative or investigative, arising out of or pertaining to matters existing or occurring at or prior to the Effective Time, including in connection with this Agreement or the Transactions.

(b) Axcelis agrees that all rights to exculpation, indemnification or advancement of expenses arising from, relating to, or otherwise in respect of, acts or omissions occurring prior to the Effective Time (including in connection with this Agreement or the Transactions) now existing in favor of an Indemnitee as provided in Veeco's or any Veeco Subsidiary's certificate of incorporation, bylaws or other organizational documents shall survive the Merger and shall continue in full force and effect in accordance with their terms. For a period of no less than six (6) years from the Effective Time, Axcelis shall cause the Surviving Corporation to, and the Surviving Corporation shall, maintain in effect the exculpation, indemnification and advancement of expenses provisions of the organizational documents of Veeco and its Subsidiaries, in effect as of the date of this Agreement, and shall not amend, repeal or otherwise modify any such provisions in any manner that would adversely affect the rights thereunder of any individuals who immediately before the Effective Time were current or former directors or officers of Veeco, provided, however, that all rights to exculpation, indemnification and expenses in respect of any Proceeding pending or asserted or any claim within such period shall continue until the final disposition of such proceeding.

(c) For six (6) years from and after the Effective Time, Axcelis shall maintain for the benefit of the Indemnitees, D&O insurance policies that provide coverage for events occurring prior to the Closing Date (the "D&O Insurance") that is substantially equivalent to and in any event not less favorable in the aggregate than the existing policies of Veeco, or, if substantially equivalent insurance coverage is unavailable, the best available coverage; provided, however, that Axcelis shall not be required to pay an annual premium for the D&O Insurance in excess of 300% of the last annual premium paid by Veeco prior to the date of this Agreement (it being understood and agreed that, in the event that the requisite coverage is not available for an annual premium less than or equal to 300% of such last annual premium, Axcelis shall nevertheless be obligated to provide such coverage as may be obtained for 300% of such last annual premium). The provisions of the immediately preceding sentence shall be deemed to have been satisfied if prepaid "tail" policies have been obtained by Veeco prior to the Effective Time, which policies provide such directors and officers with coverage for an aggregate period of six (6) years with respect to claims arising from facts or events that occurred on or before the Effective Time, including in respect of the Transactions. Veeco shall be permitted, at its sole discretion, to obtain such prepaid policies (subject to the aforementioned premium cap) that provide such coverage prior to the Effective Time. If such prepaid policies have been obtained prior to the Effective Time, the Surviving Corporation shall, and Axcelis shall cause the Surviving Corporation to, maintain such policies in full force and effect in accordance with their terms, and continue to honor the obligations thereunder, in accordance with this Section 5.9(c).

5.10 Stock Exchange Listing. Axcelis shall use its reasonable best efforts to cause the shares of Axcelis Common Stock to be issued in connection with the Merger to be listed on Nasdaq under a ticker symbol to be agreed upon in writing by Axcelis and Veeco prior to the Closing, subject to official notice of issuance, prior to the Effective Time. Prior to the Closing, Axcelis shall submit a listing application with Nasdaq (the "Nasdaq Listing Application") with respect to such shares of Axcelis Common Stock. Axcelis shall use its reasonable best efforts to have the Nasdaq Listing Application approved (subject to official notice of issuance) as promptly as practicable after such submission (including by responding to comments of Nasdaq). Veeco shall reasonably cooperate with Axcelis in the preparation of materials to be submitted to Nasdaq and the resolution of any comments thereto received from Nasdaq. No submission of,

or amendment or supplement to, the Nasdaq Listing Application will be made by Axcelis without providing Veeco and its legal counsel with a reasonable opportunity to review and comment thereon and Axcelis giving due consideration to the reasonable additions, deletions or changes suggested by Veeco and its legal counsel. In addition, Axcelis agrees to provide Veeco and its legal counsel with copies of any written comments or requests, and shall inform Veeco of any oral comments or requests, that Axcelis or its counsel may receive from time to time from Nasdaq or its staff with respect to the Nasdaq Listing Application promptly after receipt of such comments or requests, and any written or oral responses thereto. Veeco and its legal counsel shall be given a reasonable opportunity to review any such written responses, and Axcelis shall give due consideration to the additions, deletions or changes suggested thereto by Veeco and its legal counsel.

5.11 Section 16 Matters. Prior to the Effective Time, Axcelis and Veeco shall take all such steps as may be required to cause any dispositions of Veeco Common Stock (including derivative securities with respect to Veeco Common Stock) or acquisitions of Axcelis Common Stock (including derivative securities with respect to Axcelis Common Stock) resulting from the Transactions by each individual who is subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to Veeco, to be exempt under Rule 16b-3 promulgated under the Exchange Act.

5.12 Stockholder Litigation. Each of Axcelis and Veeco shall provide the other party with prompt written notice of, and the opportunity to participate in the defense of, any litigation brought by stockholders of Axcelis or stockholders of Veeco or in the name of Axcelis or Veeco against Axcelis or Veeco, as applicable, and/or their respective directors relating to the Transactions contemplated by this Agreement, including the Merger; provided, however, that no party shall compromise, settle, come to an arrangement regarding or agree to compromise, settle or come to an arrangement regarding any litigation arising or resulting from the Transactions contemplated by this Agreement, or consent to the same, without the prior written consent of the other party (not to be unreasonably withheld, conditioned or delayed).

5.13 Tax Matters.

(a) For U.S. federal income Tax purposes, it is intended that the Merger will qualify for the Intended Tax Treatment, and this Agreement will constitute, and is hereby adopted as, a “plan of reorganization” within the meaning of Treasury Regulations Section 1.368-2(g) and 1.368-3(a) and for purposes of Sections 354 and 361 of the Code. Each of Veeco and Axcelis shall (and shall cause each of its Subsidiaries and affiliates to) use commercially reasonable efforts to cause the Merger to qualify, and shall not knowingly take or cause to be taken any action (or knowingly fail to take any commercially reasonable action) that would reasonably be expected to prevent the Merger from qualifying for the Intended Tax Treatment. Each of Axcelis and Veeco shall, and shall cause its respective affiliates to, report the Merger in accordance with the Intended Tax Treatment, including filing the statement required by Treasury Regulations Section 1.368-3, and shall not take any position inconsistent with such treatment, unless otherwise required pursuant to a “determination” within the meaning of Section 1313(a) of the Code.

(b) Each of Veeco and Axcelis shall use commercially reasonable efforts to cooperate with one another to obtain any opinions required to be filed with the SEC regarding the Intended Tax Treatment in connection with the filing of the Form S-4 (the “SEC Opinion”), such opinion to be prepared by Morrison & Foerster LLP (“MoFo”), or such other counsel as may be reasonably acceptable to Axcelis and Veeco, it being understood that Skadden, Arps, Slate, Meagher & Flom LLP is mutually agreed to be acceptable other counsel. In connection with the foregoing (i) Veeco shall cause its officers to use commercially reasonable efforts to deliver to MoFo (or such other counsel delivering the SEC Opinion) a duly executed officer’s certificate in substantially the form set forth in Section 5.13(b) of the Veeco Disclosure Schedule, with any modifications reasonably requested by such counsel, and (ii) Axcelis shall cause its officers to use commercially reasonable efforts to deliver to MoFo (or such other counsel delivering the SEC Opinion) a duly executed officer’s certificate in substantially the form set forth in Section 5.13(b) of the Axcelis Disclosure Schedule, with any modifications reasonably requested by such counsel, in the case of each of clauses (i) and (ii), at such times as such counsel shall reasonably request (including in connection with the effectiveness of the registration statement or such other date(s) as determined necessary by counsel in connection with the filing of the Form S-4 or its exhibits and the Closing). Each of Axcelis and Veeco shall use commercially reasonable efforts to provide such other information as reasonably requested by the applicable counsel for purposes of rendering the SEC Opinion. Each of Axcelis and Veeco shall use commercially reasonable efforts not to take (or cause to be taken) any action that would cause to be untrue (or fail to take (or cause not to

be taken) any action which would cause to be untrue) any of the certifications, covenants and representations included in the certificates described in this Section 5.13(b).

(c) The parties agree that the tax year of Veeco for U.S. federal income tax purposes will end at the close of the Closing Date and that Veeco will join the U.S. federal consolidated tax return in which Axcelis is the common parent as of the opening of the next day. Axcelis shall prepare, file and post on its website (or otherwise mail to the stockholders of Veeco) a duly completed IRS Form 8937 with respect to the Merger not later than forty-five (45) days after the Closing Date.

5.14 Employee Matters.

(a) At and following the Effective Time, Axcelis will and will cause its Subsidiaries (including the Surviving Corporation and its Subsidiaries) to honor all obligations under the Veeco Benefit Plans in accordance with their terms as in effect immediately before the Effective Time; provided that nothing in this Section 5.14(a) is intended to prevent Axcelis from causing them to be enforced in accordance with their terms, including any reserved right to amend, modify, suspend, revoke or terminate them.

(b) Each employee of the Surviving Corporation and its Subsidiaries as of the Effective Time who continues employment with Axcelis or its Subsidiaries (including the Surviving Corporation and its Subsidiaries) following the Effective Time (each, a “Continuing Employee”), subject to continued employment, shall continue to be eligible for, commencing on the Closing Date and ending on the one-year anniversary of the Closing Date (i) an annual base salary or wage rate at least equal to the annual base salary or wage rate provided to such Continuing Employee immediately prior to the Closing Date, (ii) annual target cash and equity incentive opportunities (excluding, for the avoidance of doubt, any change of control, transaction, retention or similar arrangements) that, in the aggregate, are no less favorable than the annual aggregate target cash and equity incentive opportunities provided to such Continuing Employee as of immediately prior to the Closing Date (provided, that in lieu of an equity-based incentive opportunity, cash incentive compensation of equivalent value may be provided), (iii) retirement and health and welfare benefits (excluding any defined benefit arrangements, deferred compensation and retiree health and welfare arrangements) that are substantially comparable, in the aggregate, to the retirement and health and welfare benefits (excluding any defined benefit arrangements, deferred compensation and retiree health and welfare arrangements) to such Continuing Employee immediately prior to the Closing Date and (iv) severance payments and benefits that are no less favorable than the severance payments and benefits that such Continuing Employee would have been eligible to receive upon a termination of employment by Veeco or its Subsidiaries without cause under any applicable severance plan, policy, practice or arrangement sponsored or maintained by Veeco or its Subsidiaries as of the date of this Agreement (as listed on Section 3.11(a) of the Veeco Disclosure Schedule).

(c) Subject to applicable Law, Axcelis will and will cause its Subsidiaries (including the Surviving Corporation and its Subsidiaries) to give credit under each of their respective employee benefit plans, programs and arrangements (the “Post-Closing Plans”) to Continuing Employees for all service prior to the Effective Time with Veeco or its Subsidiaries, as applicable, or any predecessor employer (to the extent that such credit was given by Veeco or any of its Subsidiaries, as applicable) for all purposes for which such service was taken into account or recognized by Veeco or Axcelis or their respective Subsidiaries, as applicable, for purposes of eligibility for participation and vesting (but not accrual of benefits including under any defined benefit pension plan, other than for purposes of determining the level of vacation, travel and/or severance benefits), but not to the extent crediting such service would result in duplication of benefits and not for purposes of defined benefits plans or retiree welfare plans, except to the extent required by applicable Laws.

(d) In addition, and without limiting the generality of Section 5.14(a) or any other provisions herein, for purposes of each Post-Closing Plan providing medical, dental, pharmaceutical, vision and/or other health benefits to any Continuing Employee and his or her dependents, Axcelis will use its commercially reasonable efforts to and to cause its Subsidiaries (including the Surviving Corporation and its Subsidiaries) to, (i) cause all waiting periods, pre-existing condition exclusions, evidence of insurability requirements and actively-at-work requirements of such Post-Closing Plan to be waived for such Continuing Employee and his or her covered dependents, to the extent any such waiting periods, pre-existing condition exclusions, evidence of insurability requirements and actively-at-work requirements were waived or were inapplicable

under the comparable Veeco Benefit Plan, (ii) fully credit each Continuing Employee with all deductible payments, co-payments and other out-of-pocket expenses incurred by such Continuing Employee and his or her covered dependents under the medical, dental, pharmaceutical or vision benefit plans of Veeco or Axcelis (or their respective Subsidiaries), as applicable, prior to the Effective Time during the plan year in which the Effective Time occurs for the purpose of determining the extent to which such Continuing Employee has satisfied the deductible, co-payments, or maximum out-of-pocket requirements applicable to such Continuing Employee and his or her covered dependents for such plan year under any pre-Closing Veeco Benefit Plan providing medical, dental, pharmaceutical, vision or health benefits, as if such amounts had been paid in accordance with such plan, and (iii) credit the accounts of such Continuing Employees under any Post-Closing Plan that is a flexible spending plan with any unused balance in the account of such Continuing Employee under the applicable Veeco Benefit Plan.

(e) If requested by Axcelis no later than ten (10) days prior to the Closing Date, effective as of the day immediately prior to the Closing Date and contingent upon the occurrence of the Closing, Veeco shall terminate or cause the termination of each U.S. tax-qualified defined contribution plan provided to current and former employees of Veeco and its Subsidiaries (each, a “Veeco Qualified Plan”). In such event, prior to the Closing Date and thereafter (as applicable), Axcelis shall take any and all action as may be required, including amendments to a U.S. tax-qualified defined contribution plan maintained by Axcelis or one of its Subsidiaries (each, an “Axcelis Qualified Plan”), to permit each Continuing Employee to make rollover contributions of “eligible rollover distributions” (within the meaning of Section 402(c)(4) of the Code) in cash or notes (representing plan loans from the Veeco Qualified Plan) in an amount equal to the eligible rollover distribution portion of the account balance distributable to such Continuing Employee from such Veeco Qualified Plan to the corresponding Axcelis Qualified Plan. If the Veeco Qualified Plan is terminated as described herein, the Continuing Employees shall be eligible to participate in an Axcelis Qualified Plan as soon as administratively practicable following the Closing Date.

(f) Without limiting the generality of Section 8.8, this Section 5.14 shall be binding upon and inure solely to the benefit of the parties to this Agreement, and nothing in this Section 5.14, express or implied, shall confer upon any other Person any rights or remedies of any nature whatsoever under or by reason of this Section 5.14. Nothing in this Agreement, express or implied, is or shall be construed to establish, amend or modify any Veeco Benefit Plan or other employee or director compensation or benefit plan. The parties to this Agreement acknowledge and agree that the terms set forth in this Section 5.14 shall not create any right in any employee of Veeco or its Subsidiaries or any other Person to any continued employment with Veeco, Axcelis, the Surviving Corporation or their respective Subsidiaries or any right to compensation or benefits of any nature or kind whatsoever.

5.15 Cooperation; Integration Planning.

(a) Cooperation. Each of Axcelis and Veeco will, and will cause each of its respective Representatives to, use its reasonable best efforts, subject to applicable Laws, to cooperate with the other party in connection with planning the integration of the post-Closing business operations of Axcelis and Veeco.

(b) Integration Planning. As soon as reasonably practicable following the date hereof, Axcelis and Veeco shall establish a joint governance committee (the “Integration Planning Committee”) to consult with respect to transition and readiness matters as may be reasonably required in connection with the Transactions and in preparation for the Closing (the “Pre-Closing Integration Plan”). The Integration Planning Committee, and any subcommittee thereof, shall be comprised of an equal number of members from each of Axcelis and its Subsidiaries, on the one hand, and Veeco and its Subsidiaries, on the other hand, with the identity of such members to be determined by each party in its reasonable discretion. Prior to the Closing, the Integration Planning Committee and its subcommittees, as applicable, shall meet regularly with such frequency as may be reasonably agreed between Axcelis’s and Veeco’s representatives on the Integration Planning Committee. In the event of a disagreement between the Integration Planning Committee members appointed by Axcelis and Veeco with respect to a matter under consideration by such committee, such disagreement may, at election of any party, be referred to the Chief Executive Officers of each of Axcelis and Veeco for discussion and consideration.

(c) Independence. Nothing contained in this Agreement, including Section 5.1, Section 5.2 and this Section 5.15, shall give Axcelis, Merger Sub or any of their respective affiliates, directly or indirectly, the

right to control or direct Veeco's or Veeco's Subsidiaries' operations prior to the Effective Time, and nothing contained in this Agreement shall give Veeco, directly or indirectly, the right to control or direct Axcelis's or Axcelis's Subsidiaries' operations prior to the Effective Time. Prior to the Effective Time, each of Veeco, Axcelis and Merger Sub shall exercise, subject to the terms and conditions of this Agreement, complete control and supervision over its and its Subsidiaries' respective operations.

5.16 Stock Exchange Delisting and Deregistration. Axcelis and Veeco will cooperate and use their respective reasonable best efforts to cause the delisting of shares of Veeco Common Stock from Nasdaq and the deregistration of such shares under the Exchange Act as promptly as practicable following the Closing in compliance with applicable Law.

5.17 Treatment of Veeco Convertible Notes and Veeco Capped Call Instruments. (a) In respect of (i) the 2.875% Convertible Senior Notes due 2029 (the "Veeco Convertible Notes") outstanding under the Indenture (the "Veeco Convertible Notes Indenture") dated as of May 19, 2023, by and between Veeco and U.S. Bank Trust Company, National Association, as trustee (the "Trustee"), and (ii) those certain Base Capped Call Confirmations, dated as of May 13, 2020, between Veeco and each of Barclays Bank PLC, Societe Generale and Wells Fargo Bank, National Association with respect to the issuance of instruments representing rights to purchase shares of Veeco Common Stock from the applicable dealer entered into in connection with the issuance of Veeco's previously outstanding 3.75% Convertible Senior Notes due 2027 (collectively, the "Veeco Capped Call Instruments"), Veeco and Axcelis shall cooperate and take all steps that are required to supplement or amend the terms and conditions of the Veeco Convertible Notes, the Veeco Convertible Notes Indenture and the Veeco Capped Call Instruments, including by executing (and using reasonable best efforts to cause the Trustee, the relevant dealer or any other counterparty thereto to execute) any supplemental indentures, amendments or other documentation required under the Veeco Convertible Notes Indenture or the Veeco Capped Call Instruments, as applicable, in each case, on terms and conditions reasonably acceptable to Veeco and Axcelis, to effect (A) the treatment of the Veeco Convertible Notes in connection with the consummation of the Merger and the other Transactions as set forth in Section 2.7 of this Agreement and (B) modifications to the terms and conditions of the Veeco Capped Call Instruments to reflect the consummation of the Merger and the other Transactions as set forth in Section 2.7 of this Agreement. Veeco shall cooperate and use commercially reasonable efforts to allow the Veeco Capped Call Instruments to remain outstanding through the Effective Date if Axcelis so requests.

(b) Notwithstanding anything to the contrary in this Agreement, (i) in each case, as may be necessary to comply with all of the terms and conditions of the Veeco Convertible Notes Indenture in connection with the Merger and the other Transactions, Veeco shall (A) give or cause to be given any notices required to be delivered at or prior to the Effective Time to the Trustee and/or the holders of the Veeco Convertible Notes, (B) prepare any supplemental indentures required in connection with the Merger and the other Transactions and the consummation thereof to be executed and delivered to the Trustee at or prior to the Effective Time, in form and substance reasonably satisfactory to the Trustee and Axcelis and (C) deliver or cause to be delivered any opinions of counsel and any officer's certificates or other documents or instruments required to be delivered at or prior to the Effective Time to the Trustee and/or the holders of the Veeco Convertible Notes and (ii) at or prior to the Effective Time, Veeco may take any actions as may be permitted or contemplated under the terms of the Veeco Convertible Notes Indenture, including settling any conversions of any Veeco Convertible Notes in cash, shares of Veeco Common Stock or a combination of cash and shares of Veeco Common Stock, provided that Veeco shall provide Axcelis with reasonable advance notice of any such conversions and shall consult with Axcelis in good faith, and shall take into account Axcelis's views, regarding the settlement method applicable to any such conversions.

(c) Veeco shall provide Axcelis and its counsel reasonable opportunity to review and comment on any notices, certificates, press releases, supplemental indentures, legal opinions, officers' certificates or other documents or instruments required to be delivered pursuant to or in connection with any Veeco Convertible Notes, the Veeco Convertible Notes Indenture or the Veeco Capped Call Instruments prior to the dispatch or making thereof, and Veeco shall respond as promptly as reasonably practicable to any reasonable questions from, and reflect any reasonable comments made by, Axcelis or its counsel with respect thereto prior to the dispatch or making thereof.

(d) Prior to the Effective Time, Veeco shall not amend, modify or supplement the Veeco Convertible Notes Indenture or the Veeco Capped Call Instruments without the prior written consent of Axcelis, which consent shall not be unreasonably withheld, conditioned or delayed.

5.18 Treatment of Veeco Indebtedness. On or prior to the Closing Date (with drafts delivered at least (3) Business Days prior to the Closing Date), Veeco shall provide Axcelis with an executed payoff letter (the “Payoff Letter”) with respect to the Existing Veeco Credit Facility, which shall be in customary form and (i) indicate the total amount required to be paid to fully satisfy all principal (if any), interest (if any), prepayment premiums (if any), penalties (if any), breakage costs (if any), commitment or other fees and any other monetary obligations then due and payable under the Existing Veeco Credit Facility as of the anticipated Closing Date (and, if applicable, the daily accrual, or *per diem*, thereafter), subject to any applicable cash collateralization or similar requirements in the Existing Veeco Credit Facility (the “Payoff Amount”), together with wire transfer and payment instructions, (ii) state that upon receipt of the Payoff Amount in accordance with the Payoff Letter, the Existing Veeco Credit Facility and all related loan documents shall be discharged and terminated (other than provisions that by their express terms survive termination of the Existing Veeco Credit Facility), (iii) provide that all Liens and guarantees in connection with the Existing Veeco Credit Facility relating to the assets and properties of Veeco or any of its Subsidiaries securing the obligations under the Existing Veeco Credit Facility shall be released and terminated upon payment of the Payoff Amount on the Closing Date (or such time of receipt thereafter so long as the applicable *per diem* is included in such payment) and (iv) provide for the return of all possessory collateral (if any) in connection with the Existing Veeco Credit Facility (to the extent reasonably practicable, promptly following the Closing Date); provided that such Payoff Letter shall be contingent upon the occurrence of the Closing, unless otherwise agreed by Veeco.

5.19 ISRA. Axcelis and Veeco shall consult with each other to determine whether ISRA will be triggered by the Transactions and Veeco shall obtain Axcelis’s agreement on whether ISRA applies prior to making any submittals under ISRA. Should the parties determined that ISRA does apply, (i) Veeco shall promptly and timely make any necessary filings which are the obligation of the selling party under ISRA and (ii) Axcelis shall have the opportunity to review and comment in advance on any ISRA filings, which reasonable comments shall be incorporated by Veeco in good faith. Veeco or one of its Subsidiaries shall be identified on any required ISRA filings as the party responsible for conducting any ISRA investigations and remediation and for satisfying any financial assurance obligations under ISRA. In no event shall the satisfaction of any obligations under ISRA be a condition to any party’s obligations under this Agreement.

5.20 Takeover Provisions. If any Takeover Provision becomes or is deemed to be applicable to Veeco, Axcelis, Merger Sub, the Merger or any other Transactions, then each of Veeco, Axcelis, Merger Sub, and their respective boards of directors shall grant such approvals and take such actions as are necessary so that the Transactions may be consummated as promptly as practicable on the terms contemplated hereby and otherwise act to render such Takeover Provision inapplicable to the foregoing.

5.21 Obligations of Merger Sub. Axcelis shall cause Merger Sub to comply in all respects with each of the representations, warranties, covenants, obligations, agreements and undertakings made or required to be performed by Merger Sub in accordance with the terms of this Agreement, the Merger, and the other Transactions.

5.22 Merger Sub Stockholder Consent. Promptly following the execution of this Agreement, Axcelis shall execute and deliver, in accordance with Section 228 of the DGCL and in its capacity as the sole stockholder of Merger Sub, a written consent adopting this Agreement.

5.23 Filing of Form S-8. If necessary, Axcelis shall (a) file no later than ten (10) days after the Closing Date, a post-effective amendment to the Form S-4 or a registration statement on Form S-8 (or any successor form) with respect to the shares of Axcelis Common Stock issuable pursuant to any Veeco RSUs or Veeco PSUs converted into an equity award of Axcelis pursuant to Section 2.6 and (b) use reasonable best efforts to maintain the effectiveness of such registration statement or registration statements (and maintain the current status of the prospectus or prospectuses contained therein) for so long such equity awards remain outstanding.

ARTICLE 6

CONDITIONS TO CONSUMMATION OF THE MERGER

6.1 Conditions to Obligations of Each Party Under This Agreement. The obligations of Axcelis, Veeco and Merger Sub to consummate the Merger are subject to the satisfaction or waiver (to the extent permitted by applicable Law), at or prior to the Closing, of the following conditions:

(a) Stockholder Approvals. Veeco shall have obtained the Veeco Stockholder Approval, and Axcelis shall have obtained the Axcelis Stockholder Approval.

(b) Nasdaq Listing. The shares of Axcelis Common Stock issuable to the stockholders of Veeco pursuant to this Agreement (including those with respect to the Excess Shares) shall have been approved for listing on Nasdaq, subject to official notice of issuance.

(c) Statutes and Injunctions. No Law or Order shall have been promulgated, entered, enforced, enacted or issued by any Governmental Entity (whether temporary, preliminary or permanent) which prohibits, restrains or makes illegal the consummation of the Merger and shall continue in effect.

(d) Form S-4. The Form S-4 shall have become effective under the Securities Act and shall not be the subject of any stop order or pending Proceeding by the SEC seeking a stop order.

(e) HSR Act; Other Competition Authority Approvals and Foreign Investment Approvals. (i) Any applicable waiting period, together with any extensions thereof, under the HSR Act shall have expired or been terminated; and (ii) the approvals under Antitrust Laws, Investment Screening Laws and any other Law listed on Section 6.1(e) of the Veeco Disclosure Schedule shall have been obtained (or applicable waiting periods in connection therewith shall have expired) prior to Closing.

6.2 Conditions to Obligations of Axcelis and Merger Sub Under This Agreement. The obligations of Axcelis and Merger Sub to consummate the Merger are subject to the satisfaction or waiver (to the extent permitted by applicable Law), at or prior to the Closing, of the following conditions:

(a) The representations and warranties of Veeco set forth in this Agreement (except those representations and warranties set forth in the proviso below) shall be true and correct in all respects (without giving effect to any materiality or Veeco Material Adverse Effect qualifiers therein) as of the date of this Agreement and as of the Closing Date as though made on and as of such date (or, in the case of representations and warranties that address matters only as of a particular date, as of such date), except to the extent that any failures of such representations and warranties to be so true and correct, individually or in the aggregate, have not had and would not reasonably be expected to have a Veeco Material Adverse Effect; provided, that (i) the representations and warranties set forth in Section 3.1 (Corporate Organization), Section 3.3 (Authority; Execution and Delivery; Enforceability), Section 3.19 (Broker's Fees) and Section 3.20 (Opinion of Veeco's Financial Advisor) (x) that are qualified by materiality or by Veeco Material Adverse Effect shall be true and correct as so qualified as of the date of this Agreement and as of the Closing as though made on and as of such date (or, in the case of representations and warranties that address matters only as of a particular date, as of such date) and (y) that are not qualified by materiality or Veeco Material Adverse Effect shall be true and correct in all material respects as of the date of this Agreement and as of the Closing Date as though made on and as of such date (or, in the case of representations and warranties that address matters only as of a particular date, as of such date), (ii) the representations and warranties set forth in Section 3.2(a) (Veeco Capitalization) shall be true and correct in all respects on the Closing Date (or, in the case of representations and warranties that address matters only as of a particular date, as of such date), except for inaccuracies that are *de minimis* and (iii) the representation and warranty set forth in clause (b) of the first sentence of Section 3.6 (Absence of Certain Changes or Events) shall be true and correct in all respects as of the date of this Agreement and as of the Closing Date as though made on and as of such date. Axcelis shall have received a certificate validly executed and signed on behalf of Veeco by an executive officer of Veeco certifying that this condition has been satisfied.

(b) Veeco shall have performed or complied with, as applicable, all of the covenants and agreements required by this Agreement to be performed or complied with by it prior to Closing in all material respects, and Axcelis shall have received a certificate validly executed and signed on behalf of Veeco by an executive officer of Veeco certifying that this condition has been satisfied.

(c) No change, event, development, condition, circumstance or effect shall have occurred since the date of this Agreement that has had, or would reasonably be expected to have, individually or in the aggregate, a Veeco Material Adverse Effect.

6.3 Conditions to Obligations of Veeco Under This Agreement. The obligation of Veeco to consummate the Merger is subject to the satisfaction or waiver (to the extent permitted by applicable Law), at or prior to the Closing, of the following conditions:

(a) The representations and warranties of Axcelis set forth in this Agreement (except those representations and warranties set forth in the proviso below) shall be true and correct in all respects (without giving effect to any materiality or Axcelis Material Adverse Effect qualifiers therein) as of the date of this Agreement and as of the Closing Date as though made on and as of such date (or, in the case of representations and warranties that address matters only as of a particular date, as of such date), except to the extent that any failures of such representations and warranties to be so true and correct, individually or in the aggregate, have not had, and would not reasonably be expected to have, an Axcelis Material Adverse Effect; provided, that (i) the representations and warranties set forth in Section 4.1 (Corporate Organization), Section 4.3 (Authority; Execution and Delivery; Enforceability), Section 4.19 (Broker's Fees), Section 4.20 (Opinion of Axcelis's Financial Advisor) and Section 4.23 (Merger Sub) (x) that are qualified by Axcelis Material Adverse Effect shall be true and correct as so qualified as of the date of this Agreement and as of the Closing as though made on and as of such date (or, in the case of representations and warranties that address matters only as of a particular date, as of such date) and (y) that are not qualified by Axcelis Material Adverse Effect shall be true and correct in all material respects as of the date of this Agreement and as of the Closing Date as though made on and as of such date (or, in the case of representations and warranties that address matters only as of a particular date, as of such date), (ii) the representations and warranties set forth in Section 4.2(a) (Axcelis Capitalization) shall be true and correct in all respects on the Closing Date (or, in the case of representations and warranties that address matters only as of a particular date, as of such date), except for inaccuracies that are *de minimis*, and (iii) the representation and warranty set forth in clause (b) of the first sentence of Section 4.6 (Absence of Certain Changes or Events) shall be true and correct in all respects as of the date of this Agreement and as of the Closing Date as though made on and as of such date. Veeco shall have received a certificate validly executed and signed on behalf of Axcelis by an executive officer of Axcelis certifying that this condition has been satisfied.

(b) Axcelis and Merger Sub shall have performed or complied with, as applicable, all of the covenants and agreements required by this Agreement to be performed or complied with by it prior to Closing in all material respects and Veeco shall have received a certificate validly executed and signed on behalf of Axcelis by an executive officer of Axcelis certifying that this condition has been satisfied.

(c) No change, event, development, condition, circumstance or effect shall have occurred since the date of this Agreement that has had, or would reasonably be expected to have, individually or in the aggregate, an Axcelis Material Adverse Effect.

ARTICLE 7

TERMINATION, AMENDMENT AND WAIVER

7.1 Termination. This Agreement may be terminated, and the Merger contemplated hereby may be abandoned by action taken or authorized by the Board of Directors of the terminating party or parties, whether before or after the Axcelis Stockholder Approval or the Veeco Stockholder Approval:

(a) By mutual written consent of Axcelis and Veeco;

(b) By either Axcelis or Veeco:

(i) if any Law or final and non-appealable Order shall have been promulgated, entered, enforced, enacted or issued or shall be deemed to be applicable to the Merger by any Governmental Entity of competent jurisdiction which permanently prohibits, restrains or makes illegal the consummation of the Merger; provided, that the right to terminate this Agreement pursuant to this Section 7.1(b)(i) shall not be available to any party whose failure to perform any of its obligations under this Agreement is the principal cause of the promulgation, entry, enforcement, enactment or issuance of any such Law or Order;

(ii) if the Transactions shall not have been consummated on or prior to 11:59 p.m. Eastern time on September 30, 2026 (the "Initial Outside Date"); provided that if all of the conditions in

Article 6 other than one or more conditions in Section 6.1(c) (but solely with respect to the HSR Act and the other Laws set forth in Section 6.1(e) of the Veeco Disclosure Schedule) or Section 6.1(e) have been satisfied (other than conditions that by their nature are to be satisfied at the Closing and which conditions are capable of being satisfied at such time), or have been waived by Axcelis and Merger Sub or Veeco, as applicable, then the Initial Outside Date shall automatically be extended to 11:59 p.m. Eastern time on March 30, 2027 (the “First Extended Outside Date”), unless Axcelis and Veeco mutually agree to an earlier First Extended Outside Date; provided, further, that if at the First Extended Outside Date, all of the conditions in Article 6 other than one or more conditions in Section 6.1(c) (but solely with respect to the HSR Act and the other Laws set forth in Section 6.1(e) of the Veeco Disclosure Schedule) or Section 6.1(e) have been satisfied (other than conditions that by their nature are to be satisfied at the Closing and which conditions are capable of being satisfied at such time), or have been waived by Axcelis and Veeco, as applicable, then the First Extended Outside Date shall automatically be extended to 11:59 p.m. Eastern time on June 30, 2027 (the “Second Extended Outside Date”), unless Axcelis and Veeco mutually agree to an earlier Second Extended Outside Date; provided, even further, that that the right to terminate this Agreement pursuant to this Section 7.1(b)(ii) shall not be available to any party whose failure to perform any of its obligations under this Agreement is the principal cause of the failure to consummate the Transactions on or before such date;

(iii) if the Axcelis Stockholder Approval shall not have been obtained upon a vote taken thereon at the Axcelis Stockholders Meeting duly convened therefor or at any adjournment or postponement thereof; provided that the right to terminate this Agreement pursuant to this Section 7.1(b)(iii) shall not be available to Axcelis if Axcelis’s failure to perform any of its obligations under this Agreement is the principal cause of the failure to obtain the Axcelis Stockholder Approval; or

(iv) if the Veeco Stockholder Approval shall not have been obtained upon a vote taken thereon at the Veeco Stockholders Meeting duly convened therefor or at any adjournment or postponement thereof; provided that the right to terminate this Agreement pursuant to this Section 7.1(b)(iv) shall not be available to Veeco if Veeco’s failure to perform any of its obligations under this Agreement is the principal cause of the failure to obtain the Veeco Stockholder Approval; or

(c) By Veeco:

(i) if Axcelis shall have breached or failed to perform any of its representations, warranties or covenants contained in this Agreement, which breach or failure to perform (A) is incapable of being cured by Axcelis prior to the Outside Date or otherwise is not cured by the earlier of (x) twenty (20) Business Days following written notice to Axcelis by Veeco of such breach or (y) the Business Day prior to the Outside Date and (B) would result in a failure of any condition set forth in Section 6.3(a) or Section 6.3(b); or

(ii) if the Axcelis Board has effected an Axcelis Adverse Recommendation Change.

(d) By Axcelis:

(i) if Veeco shall have breached or failed to perform any of its representations, warranties or covenants contained in this Agreement, which breach or failure to perform (A) is incapable of being cured by Veeco prior to the Outside Date or otherwise is not cured by the earlier of (x) twenty (20) Business Days following written notice to Veeco by Axcelis of such breach or (y) the Business Day prior to the Outside Date and (B) would result in a failure of any condition set forth in Section 6.2(a) or Section 6.2(b); or

(ii) if the Veeco Board has effected a Veeco Adverse Recommendation Change.

7.2 Effect of Termination. In the event of the valid termination of this Agreement by either Axcelis or Veeco as provided in Section 7.1, written notice thereof shall forthwith be given by the terminating party to the other party specifying the provision hereof pursuant to which such termination is made. In the event of the valid termination of this Agreement pursuant to Section 7.1, this Agreement shall be terminated

and this Agreement shall forthwith become void and have no effect, without any liability or obligation on the part of Axcelis, Veeco or Merger Sub, other than this Section 7.2, Section 7.3 and Article 8, which provisions shall survive such termination; provided, that nothing herein shall relieve any party for any liability for any Willful Breach or fraud prior to such termination (which liability the parties acknowledge and agree shall include, pursuant to Section 261(a)(1) of the DGCL, monetary damages based on the loss of the economic benefit of the Transactions to the applicable party and its equityholders (which shall be deemed to be damages payable to such party)). No termination of this Agreement shall affect the obligations of the parties contained in the Confidentiality Agreement, all of which obligations shall survive the termination of this Agreement in accordance with their terms.

7.3 Termination Fees; Expenses.

(a) Except as otherwise provided in this Section 7.3 and except for (i) the expenses in connection with printing and mailing the Joint Proxy Statement and the Form S-4 required in connection with the actions specified in Section 5.3, (ii) all SEC filing fees relating to the Transactions and (iii) the fees in connection with the approvals required under Section 6.1(e) related to the Transactions (each of which fees and expenses shall be borne, in each case, equally by Axcelis and Veeco), all fees and expenses incurred by the parties shall be borne solely by the party that has incurred such fees and expenses and all such fees and expenses that are unpaid as of the Closing shall be paid by the applicable responsible party concurrently with the Closing.

(b) Axcelis shall pay to Veeco \$108,700,000 (the “Axcelis Termination Fee”) if this Agreement is terminated as follows:

(i) if this Agreement is terminated by Veeco pursuant to Section 7.1(c)(ii), then Axcelis shall pay the Axcelis Termination Fee (to the extent not previously paid) on or prior to the second (2nd) Business Day following such termination; and

(ii) (x) if this Agreement is terminated (A) pursuant to Section 7.1(b)(iii), (B) pursuant to Section 7.1(c)(i) or (C) pursuant to Section 7.1(b)(ii), and (y) in any such case a Competing Proposal shall have been publicly announced or otherwise communicated to the Axcelis Board (and not withdrawn) after the date of this Agreement and prior to the date of the Axcelis Stockholders Meeting, in the case of clause (A), or the date of termination, in the case of clauses (B) or (C), and (z) if within twelve (12) months after the date of such termination, a transaction in respect of a Competing Proposal is consummated or Axcelis enters into a definitive agreement in respect of a Competing Proposal, then Axcelis shall pay the Axcelis Termination Fee (less any Expenses previously paid to Veeco pursuant to Section 7.3(c)) on or prior to the second (2nd) Business Day following the date Axcelis consummates such transaction; provided, that, solely for purposes of this Section 7.3(b)(ii), the term “Competing Proposal” shall have the meaning ascribed thereto in Section 5.4(g)(i), except that all references to “twenty percent (20%)” shall be changed to “fifty percent (50%)”.

Any Axcelis Termination Fee due under this Section 7.3(b) shall be paid by wire transfer of immediately available funds.

(c) Axcelis shall pay to Veeco a fixed expense reimbursement amount of \$15,000,000, if this Agreement is terminated (i) pursuant to Section 7.1(b)(iii) (except if the Veeco Stockholder Approval had not been obtained upon a vote taken thereon at the Veeco Stockholders Meeting duly convened therefor or at any adjournment or postponement thereof) or (ii) pursuant to Section 7.1(c)(i). Any Expenses of Veeco due under this Section 7.3(c) shall be paid by wire transfer of immediately available funds on the second (2nd) Business Day following such termination.

(d) Veeco shall pay to Axcelis \$77,500,000 (the “Veeco Termination Fee”) if this Agreement is terminated as follows:

(i) if this Agreement is terminated by Axcelis pursuant to Section 7.1(d)(ii), then Veeco shall pay the Veeco Termination Fee (to the extent not previously paid) on or prior to the second (2nd) Business Day following such termination; and

(ii) (x) if this Agreement is terminated (A) pursuant to Section 7.1(b)(iv), (B) pursuant to Section 7.1(d)(i) or (C) pursuant to Section 7.1(b)(ii), and (y) in any such case a Competing Proposal

shall have been publicly announced or otherwise communicated to the Veeco Board (and not withdrawn) after the date of this Agreement and prior to the date of the Veeco Stockholders Meeting, in the case of clause (A), or the date of termination, in the case of clauses (B) or (C), and (z) if within twelve (12) months after the date of such termination, a transaction in respect of a Competing Proposal is consummated or Axcelis enters into a definitive agreement in respect of a Competing Proposal, then Veeco shall pay the Veeco Termination Fee (less any Expenses previously paid to Axcelis pursuant to Section 7.3(e)) on or prior to the second (2nd) Business Day following the date Veeco consummates such transaction; provided, that, solely for purposes of this Section 7.3(d)(ii), the term “Competing Proposal” shall have the meaning ascribed thereto in Section 5.4(g)(i), except that all references to “twenty percent (20%)” shall be changed to “fifty percent (50%)”.

Any Veeco Termination Fee due under this Section 7.3(d) shall be paid by wire transfer of immediately available funds.

(e) Veeco shall pay to Axcelis a fixed expense reimbursement of \$15,000,000, if this Agreement is terminated (i) pursuant to Section 7.1(b)(iv) (except if the Axcelis Stockholder Approval had not been obtained upon a vote taken thereon at the Axcelis Stockholders Meeting duly convened therefor or at any adjournment or postponement thereof) or (ii) pursuant to Section 7.1(d)(i). Any Expenses of Axcelis due under this Section 7.3(e) shall be paid by wire transfer of immediately available funds on the second (2nd) Business Day following such termination.

(f) The parties each agree that the agreements contained in this Section 7.3 are an integral part of the Transactions, and that, without these agreements, the parties would not enter into this Agreement. Accordingly, if a party fails to pay any amounts due under this Section 7.3 and, in order to obtain such payment, Veeco or Axcelis, as the case may be, commences a suit that results in a judgment against such party for such amounts, such party shall pay interest on such amounts from the date payment of such amounts were due to the date of actual payment at the rate equal to the prime rate published in the Wall Street Journal for the relevant period, together with the costs and expenses of the other party (including reasonable legal fees and expenses) in connection with such suit (collectively, the “Enforcement Costs”). Notwithstanding anything to the contrary in this Agreement, in the event that the Axcelis Termination Fee or the Veeco Termination Fee is payable and actually paid to Axcelis or Veeco in accordance with this Section 7.3, payment of such Axcelis Termination Fee or Veeco Termination Fee, as applicable, together with any applicable Enforcement Costs, shall be the sole and exclusive remedy of Axcelis or Veeco, as applicable, and its affiliates against any other party or such other party’s stockholders, directors, officers, affiliates and other Representatives, for any loss or damage based upon, arising out of or relating to this Agreement or the negotiation, execution or performance hereof or the Transactions contemplated hereby, except in the case of Willful Breach or fraud. Solely for purposes of establishing the basis for the amount thereof, and without in any way increasing the amount of the Axcelis Termination Fee or the Veeco Termination Fee, expanding the circumstances in which the Axcelis Termination Fee or the Veeco Termination Fee, as applicable, is to be paid or restricting or modifying the other rights of any party hereunder, in the event of the valid termination of this Agreement under circumstances in which the Axcelis Termination Fee or the Veeco Termination Fee is payable pursuant to this Section 7.3, it is agreed that each of the Axcelis Termination Fee and the Veeco Termination Fee is liquidated damages, and not a penalty, and the payment thereof in such circumstances is supported by due and sufficient consideration; provided, that no payment of an Axcelis Termination Fee or a Veeco Termination Fee shall be considered in lieu of, or a replacement or substitution for, damages incurred in the event of Willful Breach or fraud.

7.4 Amendment or Supplement. This Agreement may be amended, modified or supplemented by the parties by action taken or authorized by their respective Boards of Directors at any time prior to the Effective Time, whether before or after the Axcelis Stockholder Approval or the Veeco Stockholder Approval has been obtained; provided, that after the Axcelis Stockholder Approval or the Veeco Stockholder Approval has been obtained, no amendment shall be made that pursuant to applicable Law requires further approval or adoption by the stockholders of Axcelis or stockholders of Veeco, as applicable, without such further approval or adoption. This Agreement may not be amended, modified or supplemented in any manner, whether by course of conduct or otherwise, except by an instrument in writing specifically designated as an amendment hereto, signed on behalf of each of the parties.

7.5 Extension of Time; Waiver. At any time prior to the Effective Time, the parties may to the extent permitted by applicable Law, (a) extend the time for the performance of any of the obligations or acts of the other parties, (b) waive any inaccuracies in the representations and warranties of the other parties set forth in this Agreement or any document delivered pursuant hereto, or (c) waive compliance with any of the agreements or conditions of the other parties contained herein; provided, that after the Axcelis Stockholder Approval or the Veeco Stockholder Approval, as applicable, has been obtained, no waiver may be made that pursuant to applicable Law requires further approval or adoption by the stockholders of Axcelis or stockholders of Veeco, as applicable, without such further approval or adoption. Any agreement on the part of a party to any such waiver shall be valid only if set forth in a written instrument executed and delivered by a duly authorized officer on behalf of such party. No failure or delay of any party in exercising any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such right or power, or any course of conduct, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the parties hereunder are cumulative and are not exclusive of any rights or remedies which they would otherwise have hereunder.

ARTICLE 8

GENERAL PROVISIONS

8.1 Non-Survival of Representations and Warranties. None of the representations, warranties, covenants or agreements in this Agreement or in any instrument delivered pursuant to this Agreement shall survive the Effective Time, other than those covenants or agreements of the parties which by their terms apply, or are to be performed in whole or in part, after the Effective Time.

8.2 Notices. Any notices or other communications required or permitted under, or otherwise given in connection with, this Agreement shall be in writing and shall be deemed to have been duly given (a) when delivered or sent if delivered in person or sent by email transmission (notice deemed given upon transmission so long as there is no return error message or other notification of non-delivery received by the sender; provided that, electronic mail received after 6:00 p.m. Eastern time, shall be deemed received on the next day) or (b) on the next Business Day if transmitted by national overnight courier, in each case, as follows:

If to Veeco, addressed to it at:

Veeco Instruments Inc.
1 Terminal Drive
Plainview, New York 11803
Attention: John P. Kiernan, Senior Vice President and Chief Financial Officer
E-mail: jkiernan@veeco.com

with a copy (which shall not constitute notice) to:

Morrison & Foerster LLP
250 West 55th Street
New York, NY 10019
Attention: Spencer P. Klein and Joseph P. Sulzbach
Email: spencerklein@mofo.com and jsulzbach@mofo.com

If to Axcelis or Merger Sub, addressed to it at:

Axcelis Technologies, Inc.
108 Cherry Hill Drive
Beverly, Massachusetts 01915
Attention: Eileen Evans, Executive Vice President, HR/Legal and General Counsel
E-mail: eileen.evans@axcelis.com

with a copy (which shall not constitute notice) to:

Skadden, Arps, Slate, Meagher & Flom LLP
One Manhattan West
New York, NY 10001
Attention: Maxim O. Mayer-Cesiano
Email: maxim.mayercesiano@skadden.com

8.3 Certain Definitions. For purposes of this Agreement, the term:

“Axcelis Benefit Plan” means each “employee benefit plan” as defined in Section 3(3) of ERISA (whether or not subject to ERISA) and any other plan, policy, program, Contract, or arrangement providing compensation or other benefits to any current or former director, officer or employee (or to any dependent or beneficiary thereof) of Axcelis or any of its Subsidiaries, in each case that is maintained, sponsored or contributed to by Axcelis or any of its Subsidiaries, or under which Axcelis or any of its Subsidiaries has any obligation or liability, whether actual or contingent, including each employment, incentive, bonus, deferred compensation, profit-sharing, pension, retirement, vacation, holiday, sick pay, cafeteria, material fringe benefit, medical, disability, retention, severance, termination, change in control, stock purchase, stock option, stock appreciation, phantom stock, restricted stock, restricted stock unit or other equity-based compensation plans, policies, programs, practices or arrangements, in each case, whether written or unwritten, and which is not sponsored and administered by a Governmental Entity.

“Axcelis Disclosure Schedule” means the disclosure schedule delivered by Axcelis to Veeco prior to the execution of this Agreement.

“Axcelis Material Adverse Effect” means any change, event, development, condition, occurrence or effect that is, or would reasonably be expected to be, materially adverse to the business, condition (financial or otherwise), assets, liabilities or results of operations of Axcelis and its Subsidiaries, taken as a whole; provided, however, that none of the following shall be deemed in and of themselves, either alone or in combination, to constitute, and none of the following shall be taken into account in determining whether there has been, an Axcelis Material Adverse Effect: (i) any changes resulting from general market, economic, financial, capital markets, political or regulatory conditions, (ii) any changes or proposed changes of Law or GAAP, (iii) any changes resulting from any act of terrorism, war, national or international calamity, or any worsening thereof, (iv) any changes generally affecting the industries in which Axcelis and its Subsidiaries conduct their businesses, (v) any changes resulting from the execution of this Agreement or the announcement, the pendency or the consummation of the Merger, including any loss of employees or any disruption in or termination of (or loss of or other negative effect or change with respect to) supplier, distributor or similar business relationships or partnerships resulting from the Transactions (provided, that this clause (v) does not apply in the context of the representations and warranties set forth in Section 4.4), (vi) changes in Axcelis’s stock price or the trading volume of Axcelis’s stock or any change in the credit rating of Axcelis (but not, in each case, the underlying cause of any such changes, unless such underlying cause would otherwise be excepted from this definition), (vii) any changes or effects resulting from any action required to be taken by the terms of this Agreement, (viii) the failure to meet internal or analysts’ expectations, projections or results of operations (but not, in each case, the underlying cause of any such changes, unless such underlying cause would otherwise be excepted from this definition), or (ix) any Proceeding arising from or relating to the Merger or the other Transactions; provided, that in the case of clauses (i), (ii), (iii) and (iv), if and only to the extent such changes do not have a disproportionate impact on Axcelis and its Subsidiaries, taken as a whole, as compared to other participants in the industries in which Axcelis and its Subsidiaries conduct their businesses.

“Axcelis Preferred Stock” means Axcelis preferred stock, \$0.001 par value per share.

“Axcelis Products” means any and all products and services that are or have been since December 31, 2023 marketed, offered, sold, licensed, provided, distributed or supported by Axcelis or any of its Subsidiaries.

“Axcelis Software” means all Software owned or purported to be owned by, or exclusively licensed to, Axcelis or its Subsidiaries.

“Axcelis Stock Plan” means the 2012 Axcelis Equity Incentive Plan, as amended.

“Acceptable Confidentiality Agreement” means a confidentiality agreement that contains confidentiality and standstill provisions that are no less favorable in the aggregate to Axcelis or Veeco, as applicable, than those contained in the Confidentiality Agreement; provided that such confidentiality agreement may not include any provision calling for an exclusive right to negotiate with any party to this Agreement or otherwise conflicting with the obligations of any party under this Agreement.

“affiliate” means a Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, the first-mentioned Person.

“Anti-corruption Laws” means Laws relating to anti-bribery or anti-corruption (governmental or commercial) which apply to Veeco, Axcelis or their respective Subsidiaries, including Laws that prohibit the corrupt payment, offer, promise or authorization of the payment or transfer of anything of value (including gifts or entertainment), directly or indirectly, to any foreign Government Official or other Person to obtain a business advantage, including the FCPA, the U.K. Bribery Act of 2010 and all national and international Laws enacted to implement the OECD Convention on Combating Bribery of Foreign Officials in International Business Transactions.

“Antitrust Laws” means applicable supranational, national, federal, state, provincial or local Law designed or intended to prohibit, restrict or regulate actions having the purpose or effect of monopolizing or restraining trade or lessening competition in any other country or jurisdiction, including the HSR Act, the Sherman Act, the Clayton Act and the Federal Trade Commission Act, in each case, as amended, and other similar competition or antitrust Laws of any jurisdiction other than the United States.

“associate” has the meaning set forth in Section 203 of the DGCL.

“beneficial ownership” (and related terms such as “beneficially owned” or “beneficial owner”) has the meaning set forth in Rule 13d-3 under the Exchange Act.

“Business Day” means any date except Saturday or Sunday on which commercial banks are not required or authorized to close in New York, New York, United States.

“Code” means the United States Internal Revenue Code of 1986, as amended.

“Collective Bargaining Agreement” means any collective bargaining agreement, works council agreement, labor agreement or other labor-related agreement with any Labor Organization.

“Contract” means any agreements, arrangements, commitments, understandings, contracts, leases (whether for real or personal property), powers of attorney, notes, bonds, mortgages, indentures, deeds of trust, loans, evidences of indebtedness, purchase orders, letters of credit, settlement agreements, franchise agreements, undertakings, covenants not to compete, employment agreements, licenses, instruments, obligations, commitments, understandings, policies, purchase and sales orders, quotations and other commitments to which a Person is a party or to which any of the assets of such Person or its Subsidiaries are subject, whether oral or written, express or implied, including all amendments or modifications thereto.

“control” (including the terms “controlled by” and “under common control with”) means the possession, directly or indirectly or as trustee or executor, of the power to direct or cause the direction of the management or policies of a Person, whether through the ownership of stock or shares or as trustee or executor, by Contract or otherwise.

“DGCL” means the General Corporation Law of the State of Delaware, as amended.

“Disclosure Schedules” means the Axcelis Disclosure Schedule and the Veeco Disclosure Schedule.

“Divestiture Action” means, with respect to Veeco or Axcelis or their respective Subsidiaries, (i) selling or otherwise disposing of, or holding separate and agreeing to sell or otherwise dispose of, assets, categories of assets or businesses; (ii) terminating existing relationships, contractual rights or obligations; (iii) terminating any venture or other arrangement; (iv) creating any relationship, contractual rights or obligations; or (v) effectuating any other change or restructuring (and, in each case, to enter into agreements or stipulate to the entry of an order or decree or file appropriate applications with any Governmental

Entity in connection with any HSR Act, other applicable Antitrust Laws or Investment Screening Law matters related to this Agreement and the Transactions).

“Environmental Claim” means any Proceeding, investigation, order, demand, or notice (written or oral) by any Person or entity alleging actual or potential liability (including actual or potential liability for investigatory costs, cleanup costs, response costs, natural resources damages, property damages, personal injuries, attorneys’ fees or penalties) arising out of, based on, resulting from or relating to any Environmental Laws, Environmental Permits or the presence, or Release into the environment, of, or exposure to, any Hazardous Materials at any location, but shall not include any claims relating to products liability.

“Environmental Laws” means any and all applicable Laws regulating or relating to Hazardous Materials, pollution, protection of the environment (including ambient air, surface water, ground water, land surface, subsurface strata, wildlife, plants or other natural resources), and/or the protection of health and safety of persons from exposures to Hazardous Materials in the environment.

“Environmental Permits” means any permit, certificate, approval, identification number, license or other authorization required under, or issued pursuant to, an Environmental Law.

“Equity Interest” means any share, capital stock, partnership, member, membership or similar interest in any Person, and any option, warrant, right or security (including debt securities) convertible, exchangeable or exercisable thereto or therefor.

“ERISA” means the United States Employee Retirement Income Security Act of 1974, as amended.

“ERISA Affiliate” means any Person (whether or not incorporated) that, together with Axcelis or Veeco, as applicable, is considered under common control and treated as one employer under Section 414 of the Code.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Existing Veeco Credit Facility” means that certain Loan and Security Agreement, dated as of December 16, 2021 (as amended, restated, amended and restated, modified or otherwise supplemented), Veeco, the guarantors party thereto, the lenders party thereto from time to time, and HSBC Bank USA, National Association, as administrative agent and as collateral agent.

“Expenses” means, with respect to any Person, all reasonable and documented out-of-pocket fees and expenses (including all fees and expenses of counsel, accountants, financial advisors and investment bankers of such Person and its affiliates), incurred by such Person or on its behalf in connection with or related to the authorization, preparation, negotiation, execution and performance of this Agreement and the Transactions, any litigation with respect thereto, the preparation, printing, filing and mailing of the Joint Proxy Statement on Form S-4, the filing of any required notices under the HSR Act or foreign antitrust, competition, investment, trade regulation or similar Laws, or in connection with other regulatory approvals, and all other matters related to the Merger or the other Transactions.

“GAAP” means generally accepted accounting principles as applied in the United States.

“Government Official” means (i) any official, officer, employee, representative or any person acting in an official capacity for or on behalf of any Governmental Entity; (ii) any political party or party official or candidate for political office; (iii) any public international organization or any department or agency thereof; or (iv) any Person or other entity owned in whole or in part, or controlled by any Person described in the foregoing clauses (i), (ii) or (iii) of this definition.

“Government Shutdown” means any sequester, stoppage, shutdown, default or similar event of the United States federal government generally.

“Governmental Entity” means any transnational, national, federal, state, county, municipal, local or foreign government, or other political subdivision thereof, any entity exercising executive, legislative, judicial, regulatory, taxing or administrative functions of or pertaining to government, and any arbitrator or arbitral body (public or private) or panel of competent jurisdiction.

“group” has the meaning ascribed to in the Exchange Act, except where the context otherwise requires.

“Hazardous Materials” means any pollutants, contaminants or wastes and any other toxic, infectious, carcinogenic, reactive, corrosive, ignitable or flammable or otherwise hazardous substance, whether solid, liquid or gas, that is subject to regulation or remediation under any Environmental Laws, including friable asbestos, urea formaldehyde, PCBs, radon gas, crude oil or any fraction thereof, all forms of natural gas or petroleum products.

“HSR Act” means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations thereunder.

“Intellectual Property” means all domestic and foreign intellectual property rights, including all (a) inventions (whether or not patentable and whether or not reduced to practice), all improvements thereto, and all patents, patent applications, and patent disclosures, together with all provisionals, reissues, continuations, continuations-in-part, divisions, revisions, extensions, and reexaminations thereof, (b) Trademarks, (c) domain names, uniform resource locators and other names and locators associated with the Internet, and all registrations in connection therewith, (d) works of authorship (whether or not published), and all copyrights, designs and mask works, and all registrations, applications and renewals in connection therewith, (e) rights in Software and (f) trade secrets, confidential business information, and other proprietary information (including ideas, know-how, formulas, compositions, processes and techniques, research and development information, data, designs, drawings, specifications, research records, records of inventions, test information, financial, marketing and business data, pricing and cost information, business and marketing plans and proposals and customer and supplier lists and information).

“IRS” means the United States Internal Revenue Service.

“ISRA” means the New Jersey Industrial Site Recovery Act, N.J.S.A. 13:1K-6, et seq. and all implementing rules and regulations.

“IT Assets” means computers, Software, servers, workstations, routers, hubs, switches, circuits, networks, data communications lines and all other information technology equipment.

“Investment Screening Laws” means all Laws in any jurisdiction regulating investments on the basis of national security, national interest or public order grounds.

“Joint Proxy Statement” means a proxy statement or similar disclosure document or circular relating to the Axcelis Stockholders Meeting and the Veeco Stockholders Meeting.

“Knowledge” and “known” means the actual knowledge, following reasonable inquiry, of the officers of Veeco set forth in Section 8.3(a) of the Veeco Disclosure Schedule or of the officers of Axcelis set forth in Section 8.3(a) of the Axcelis Disclosure Schedule, as the case may be.

“Labor Organization” means any labor or trade union, works council, labor organization or employee representative body.

“Law” means any federal, state, provincial, municipal, local or foreign law, act, statute, code, ordinance, rule, regulation, circular, Order or arbitration award or finding of any Governmental Entity.

“Lien” means any lien, mortgage, pledge, conditional or installment sale agreement, encumbrance, defect in title, covenant, condition, restriction, charge, option, right of first refusal, easement, security interest, deed of trust, right-of-way, encroachment, or community property interest, or other claim or restriction of any nature, whether voluntarily incurred or arising by operation of Law (including any restriction on the voting of any security, any restriction on the transfer of any security or other asset, and any restriction on the possession, exercise or transfer of any other attribute of ownership of any asset); provided that, with respect to Intellectual Property, “Lien” shall not include any non-exclusive license granted thereunder.

“Nasdaq” means the Nasdaq Global Select Market.

“Open Source Material” means any Software or other materials that (i) are distributed as “free software” or “open source software” (as such terms are commonly understood in the software industry),

including Software code or other materials that are licensed under a Creative Commons License, open database license, the Mozilla Public License, the GNU General Public License, GNU Lesser General Public License, Common Public License, Apache License, BSD License, or MIT License and all other licenses identified by the Open Source Initiative as “open source licenses” or (ii) are licensed pursuant to a license that requires or that conditions any rights granted in such license upon: (x) a requirement that any disclosure, distribution or licensing of any other Software be at no charge; (y) a requirement that any other licensee of the Software or other materials be permitted to access the source code of, modify, make derivative works of, or reverse-engineer any other Software; or (z) a requirement that any other Software be redistributable by other licensees of the Software or other materials (such licenses or agreements are collectively, “Open Source Licenses”).

“Order” means any order, ruling, writ, injunction, decree, circular, judgment, award, injunction, settlement or stipulation issued, promulgated, made, rendered, entered into or enforced by or with any Governmental Entity (in each case, whether temporary, preliminary or permanent).

“Other Covered Party” means any political party or party official, or any candidate for political office.

“Outside Date” means the Initial Outside Date, unless the Initial Outside Date has been extended pursuant to the provisos in Section 7.1(b)(ii), in which case, the term “Outside Date” shall mean the date to which the Initial Outside Date has been so extended.

“Permitted Liens” means (i) Liens for current Taxes, or governmental assessments, charges or claims of payment not yet delinquent or the amount or validity of which is being contested in good faith by appropriate Proceedings and for which adequate reserves in accordance with GAAP have been established in the latest financial statements of Axcelis included in the Axcelis SEC Documents or Veeco included in the Veeco SEC Documents, as the case may be, (ii) mechanics’, workmen’s, repairmen’s, warehousemen’s and carriers’ Liens arising in the ordinary course of business consistent with past practice for sums not yet delinquent or the validity of which are being contested in good faith by appropriate Proceeding and for which adequate reserves have been established in accordance with GAAP, (iii) any Lien that is disclosed on the most recent consolidated balance sheet of Veeco or Axcelis, as applicable, or notes thereto (or securing liabilities reflected on such balance sheet); (iv) Liens created by or on behalf of, and with the written approval of both Veeco and Axcelis or their respective successors or assigns; (v) any such matters of record, Liens and other imperfections of title that do not and would not reasonably be expected to, individually or in the aggregate, materially impair the continued ownership, use and operation, or value, of the assets to which they relate; and (vi) restrictions on transfers under applicable securities Laws.

“Person” means an individual, corporation, limited company, limited liability company, partnership, association, trust, unincorporated organization, Governmental Entity, other entity or group (as defined in Section 13(d) of the Exchange Act).

“Personal Information” means any information relating to an identified or identifiable individual that constitutes “personal information,” “personal data,” “personally identifiable information” or any similar term under any applicable Law.

“Proceeding” means any suit, action, proceeding, arbitration, mediation, audit, hearing, inquiry or, to the Knowledge of the Person in question, investigation (in each case, whether civil, criminal, administrative, investigative, formal or informal) commenced, brought, conducted or heard by or before, or otherwise involving, any Governmental Entity.

“Release” means disposing, discharging, injecting, spilling, leaking, pumping, pouring, leaching, dumping, emitting, escaping or emptying into or upon the indoor or outdoor environmental, including any soil, sediment, subsurface strata, surface water, groundwater, ambient air, the atmosphere or any other media.

“Representatives” means, with respect to any Person, such Person’s officers, directors, employees, accountants, legal counsel, financial advisors, consultants, financing sources and other advisors and representatives.

“SEC” means the Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Software” means computer programs and other software and code, whether in Source Code, object code or other form.

“Source Code” means computer programming code in human readable form that is not suitable for machine execution without the intervening steps of interpretation or compilation, including all comments and procedural code as well as all related development documents.

“Subsidiary” means, with respect to any Person, any corporation, partnership, joint venture or other legal entity of which such Person (either alone or through or together with any other Subsidiary), owns, directly or indirectly, a majority of the stock or other Equity Interests, the holders of which are generally entitled to vote for the election of the board of directors or other governing body of such corporation, partnership, joint venture or other legal entity, or any Person that would otherwise be deemed a “subsidiary” under Rule 12b-2 promulgated under the Exchange Act.

“Takeover Provisions” means any “moratorium,” “control share acquisition,” “fair price,” “interested stockholder,” “affiliate transaction,” “business combination” or other antitakeover Laws, including Section 203 of the DGCL, or similar state anti-takeover Laws and regulations, and any similarly restrictive provision in the Veeco Charter or the Veeco Bylaws or any equivalent organizational documents of any of its Subsidiaries.

“Tax Return” means any report, return (including information return), elections, claim for refund, declaration or similar documents filed or required to be filed with any Governmental Entity with respect to Taxes, including any attachment or schedule thereto, and including any amendments thereof.

“Taxes” means any and all U.S. federal, state, local or non-U.S. taxes, of any kind (together with any and all interest, penalties, additions to tax and additional amounts imposed with respect thereto) imposed by any Governmental Entity, including taxes on or with respect to income, franchise, windfall or other profits, gross receipts, occupation, severance, alternative minimum, estimated, property, sales, use, net worth, capital stock, payroll, employment, social security, workers’ compensation, unemployment compensation, escheat, unclaimed property and taxes in the nature of excise, withholding, ad valorem, stamp, transfer, value-added, gains tax and license, registration and documentation fees, and other taxes, fees, levies, duties, tariffs, imposts, assessments, obligations and charges of the same or a similar nature to any of the foregoing, whether disputed or not.

“Taxing Authority” means any Governmental Entity responsible for the administration, the imposition or the collection of any Tax.

“Trademarks” means trademarks, service marks, trade names, trade dress, logos, corporate names, brand names and other source indicators, together with all translations, adaptations, derivations, and combinations thereof, and all applications, registrations, and renewals in connection therewith.

“Trading Day” means a day on which the Nasdaq is open for the transaction of business.

“Treasury Regulations” means the United States Treasury regulations promulgated under the Code.

“Veeco Benefit Plan” means each “employee benefit plan” (whether or not subject to ERISA) as defined in Section 3(3) of ERISA and any other plan, policy, program, Contract, or arrangement providing compensation or other benefits to any current or former director, officer or employee (or to any dependent or beneficiary thereof) of Veeco or any of its Subsidiaries, in each case that is maintained, sponsored or contributed to by Veeco or any of its Subsidiaries, or under which Veeco or any of its Subsidiaries has any obligation or liability, whether actual or contingent, including each employment, incentive, bonus, deferred compensation, profit-sharing, pension, retirement, vacation, holiday, sick pay, cafeteria, material fringe benefit, medical, disability, retention, severance, termination, change in control, stock purchase, stock option, stock appreciation, phantom stock, restricted stock, restricted stock unit or other equity-based compensation plans, policies, programs, practices or arrangements, in each case, whether written or unwritten, which is not sponsored and administered by a Governmental Entity.

“Veeco Disclosure Schedule” means the disclosure schedule delivered by Veeco to Axcelis prior to the execution of this Agreement.

“Veeco Material Adverse Effect” means any change, event, development, condition, occurrence or effect that is, or would reasonably be expected to be, materially adverse to the business, condition (financial or otherwise), assets, liabilities or results of operations of Veeco and its Subsidiaries, taken as a whole; provided, however, that none of the following shall be deemed in and of themselves, either alone or in combination, to constitute, and none of the following shall be taken into account in determining whether there has been, a Veeco Material Adverse Effect: (i) any changes resulting from general market, economic, financial, capital markets, political or regulatory conditions, (ii) any changes or proposed changes of Law or GAAP, (iii) any changes resulting from any act of terrorism, war, national or international calamity, or any worsening thereof, (iv) any changes generally affecting the industries in which Veeco and its Subsidiaries conduct their businesses, (v) any changes resulting from the execution of this Agreement or the announcement, the pendency or the consummation of the Merger, including any loss of employees or any disruption in or termination of (or loss of or other negative effect or change with respect to) supplier, distributor or similar business relationships or partnerships resulting from the Transactions (provided, that this clause (v) does not apply in the context of the representations and warranties set forth in Section 3.4), (vi) changes in Veeco’s stock price or the trading volume of Veeco’s stock or any change in the credit rating of Veeco (but not, in each case, the underlying cause of any such changes, unless such underlying cause would otherwise be excepted from this definition), (vii) any changes or effects resulting from any action required to be taken by the terms of this Agreement, (viii) the failure to meet internal or analysts’ expectations, projections or results of operations (but not, in each case, the underlying cause of any such changes, unless such underlying cause would otherwise be excepted from this definition), or (ix) any Proceeding arising from or relating to the Merger or the other Transactions; provided, that in the case of clauses (i), (ii), (iii) and (iv), if and only to the extent such changes do not have a disproportionate impact on Veeco and its Subsidiaries, taken as a whole, as compared to other participants in the industries in which Veeco and its Subsidiaries conduct their businesses.

“Veeco Products” means any and all products and services that are or have been since December 31, 2023 marketed, offered, sold, licensed, provided, distributed or supported by Veeco or any of its Subsidiaries.

“Veeco PSU” means each award of performance stock units of Veeco that is denominated in shares of Veeco Common Stock that is subject to vesting, in whole or part, based on any performance or market-based condition and that is granted under any Veeco Stock Plan.

“Veeco Restricted Stock Award” means each award of shares of Veeco Common Stock that is granted under any Veeco Stock Plan and that remains subject to a substantial risk of forfeiture as of immediately prior to the Effective Time.

“Veeco RSU” means each award of restricted stock units of Veeco that is subject to vesting based solely on continued employment or service and that is granted under any Veeco Stock Plan.

“Veeco Software” means all Software owned or purported to be owned by, or exclusively licensed to, Veeco or its Subsidiaries.

“Veeco Stock Plan” means, collectively, the Veeco 2019 Stock Incentive Plan, as amended, and the Veeco 2013 Inducement Stock Incentive Plan.

“Willful Breach” means a material breach of this Agreement that is the consequence of an act or omission by a party with the actual knowledge that the taking of such act or failure to take such action would be a material breach of this Agreement.

8.4 Headings. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

8.5 Severability. If any term or other provision (or part thereof) of this Agreement is invalid, illegal or incapable of being enforced by any rule of Law or public policy, all other conditions and provisions (or part thereof) of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the Transactions is not affected in any manner materially adverse to any party. Upon such

determination that any term or other provision (or part thereof) is invalid, illegal or incapable of being enforced, the parties shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in an acceptable manner to the end that the Transactions are fulfilled to the extent possible.

8.6 Entire Agreement. This Agreement (together with the Exhibits, the Axcelis Disclosure Schedule, the Veeco Disclosure Schedule and the other documents delivered pursuant hereto) and the Confidentiality Agreement constitute the entire agreement of the parties and supersede all prior agreements and undertakings, both written and oral, among the parties, or any of them, with respect to the subject matter hereof.

8.7 Assignment. Neither this Agreement nor any of the rights, interests or obligations hereunder shall be assigned by any of the parties hereto, in whole or in part (whether by operation of law or otherwise), without the prior written consent of the other parties, and any attempt to make any such assignment without such consent shall be null and void. Subject to the preceding sentence, this Agreement will be binding upon, inure to the benefit of and be enforceable by the parties and their respective successors and assigns.

8.8 Parties in Interest. This Agreement shall be binding upon and inure solely to the benefit of the parties and their respective successors and assigns, and nothing in this Agreement, express or implied, other than (a) Section 5.9 (of which each Indemnitee and each of his or her heirs shall be an express third party beneficiary and have the right to enforce) and (b) following the Effective Time, Article II (of which each holder of shares of Veeco Common Stock, Veeco RSUs, Veeco PSUs, and Veeco Restricted Stock Awards immediately prior to the Effective Time shall be an express third party beneficiary and have the right to enforce), is intended to or shall confer upon any other Person any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement. Notwithstanding the foregoing, in the event of any party's Willful Breach or fraud and the termination of this Agreement, the other party's equityholders, acting solely through such other party from and after the termination, shall be beneficiaries of this Agreement and shall be entitled to pursue any and all legally available remedies, including equitable relief, and to seek recovery of all losses, liabilities, damages, costs and expenses of every kind and nature, including reasonable attorneys' fees and as set forth in Section 261(a)(1) of the DGCL; provided, that the rights granted pursuant to this sentence shall be enforceable only by such other party, on behalf of its equityholders, in such other party's sole discretion, it being understood and agreed such rights shall attach to such Equity Interests, and subsequently trade and transfer therewith and, consequently, any damages, settlements, or other amounts recovered or received by such other party with respect to such rights may, in such other party's sole discretion, be (i) distributed, in whole or in part, by such other party to the holders of Equity Interests in such other party of record as of any date determined by such other party or (ii) retained by such other party for the use and benefit of such other party on behalf of its equityholders in any manner such other party deems fit.

8.9 Mutual Drafting; Interpretation. Each party has participated in the drafting of this Agreement, which each party acknowledges is the result of extensive negotiations between the parties. If an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provision. For purposes of this Agreement, whenever the context requires: the singular number shall include the plural, and vice versa; each gender shall include each other gender. As used in this Agreement, the words "include" and "including," and variations thereof, shall not be deemed to be terms of limitation, but rather shall be deemed to be followed by the words "without limitation." As used in this Agreement, references to a "party" or the "parties" are intended to refer to a party to this Agreement or the parties to this Agreement. Except as otherwise indicated, all references in this Agreement to "Sections," "Exhibits," "Annexes" and "Schedules" are intended to refer to Sections of this Agreement and Exhibits, Annexes and Schedules to this Agreement. All references in this Agreement to "\$" are intended to refer to U.S. dollars. Unless otherwise specifically provided for herein, the term "or" shall not be deemed to be exclusive. In this Agreement, when determining whether an item is "material" to Axcelis or Veeco, the term "material" shall be interpreted to mean, as applicable, "material to the business of Axcelis and its Subsidiaries, taken as a whole" or "material to the business of Veeco and its Subsidiaries, taken as a whole." The parties intend that each representation, warranty and covenant contained herein will have independent significance. If any party has breached or violated, or if there is an inaccuracy in, any representation, warranty

or covenant contained herein in any respect, the fact that there exists another representation, warranty or covenant related to the same subject matter (regardless of the relative levels of specificity) which the party has not breached or violated, or in respect of which there is not an inaccuracy, will not detract from or mitigate the fact that the party has breached or violated, or there is an inaccuracy in, the first representation, warranty or covenant. As used in this Agreement, documents or other information or materials will be deemed to have been “made available” by a party if such documents, information or materials have been continuously made accessible to the other party by 12:00 p.m. Eastern time on the date of this Agreement.

8.10 Governing Law; Consent to Jurisdiction; Waiver of Trial by Jury.

(a) This Agreement shall be governed by, and construed in accordance with, the Laws of the State of Delaware, without regard to laws that may be applicable under conflicts of laws principles (whether of the State of Delaware or any other jurisdiction) that would cause the application of the Laws of any jurisdiction other than the State of Delaware.

(b) Each of the parties hereby irrevocably and unconditionally submits, for itself and its property, to the exclusive jurisdiction of the Court of Chancery of the State of Delaware or, in the event, but only in the event, that such court shall not have jurisdiction over such action or proceeding, the Superior Court of the State of Delaware (Complex Commercial Division) or, if jurisdiction over the action or proceeding is vested exclusively in the federal courts of the United States of America, the United States District Court for the District of Delaware, and any appellate court from any thereof (such courts, the “Chosen Courts”), in any Proceeding arising out of or relating to this Agreement or the Transactions or for recognition or enforcement of any judgment relating thereto, and each of the parties hereby irrevocably and unconditionally (i) agrees not to commence any such Proceeding except in such Chosen Courts, (ii) agrees that any claim in respect of any such Proceeding may be heard and determined in the Chosen Courts, (iii) waives, to the fullest extent it may legally and effectively do so, any objection which it may now or hereafter have to the laying of venue of any such Proceeding in any such court, and (iv) waives, to the fullest extent permitted by Law, the defense of an inconvenient forum to the maintenance of such Proceeding in any such Chosen Court. Each of the parties agrees that a final judgment in any such Proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by Law. Each party to this Agreement irrevocably consents to service of process in the manner provided for notices in Section 8.2. Nothing in this Agreement will affect the right of any party to this Agreement to serve process in any other manner permitted by Law.

(c) EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE IT HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT AND ANY OF THE AGREEMENTS DELIVERED IN CONNECTION HEREWITH OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (I) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE EITHER OF SUCH WAIVERS, (II) IT UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF SUCH WAIVERS, (III) IT MAKES SUCH WAIVERS VOLUNTARILY, AND (IV) IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 8.10(c).

8.11 Counterparts. This Agreement may be executed in multiple counterparts, and by the different parties hereto in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

8.12 Delivery by Email. This Agreement, and any amendments hereto, waivers hereof or consents or notifications hereunder, to the extent signed and delivered by email (including via DocuSign or in “portable document form” (pdf)), shall be treated in all manner and respects as an original contract and shall be considered to have the same binding legal effects as if it were the original signed version thereof delivered in person. No party shall raise the use of email to deliver a signature or the fact that any signature or Contract

was transmitted or communicated by email as a defense to the formation of a legally binding contract, and each such party forever waives any such defense.

8.13 Specific Performance. The parties agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent actual or threatened breaches of this Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state or foreign jurisdiction having jurisdiction, this being in addition to any other remedy to which they are entitled at Law or in equity. The parties waive, in connection with any action for specific performance or injunctive relief, the defense of adequacy of remedies at Law and any requirement under Law to post a bond or other security as a prerequisite to obtaining equitable relief.

8.14 Disclosure Schedules. The parties acknowledge and agree that (a) the inclusion of any items or information in the Disclosure Schedules that are not required by this Agreement to be so included is solely for the convenience of parties, (b) the disclosure by the parties of any matter in the Disclosure Schedules shall not be deemed to constitute an acknowledgement by any party that the matter is required to be disclosed by the terms of this Agreement or that the matter is material or significant, (c) if any section of the Disclosure Schedules lists an item or information in such a way as to make its relevance to the disclosure required by or provided in another section of the Disclosure Schedules or the statements contained in any Section of this Agreement reasonably apparent, the matter shall be deemed to have been disclosed in or with respect to such other section, notwithstanding the omission of an appropriate cross-reference to such other section or the omission of a reference in the particular representation and warranty to such section of the Disclosure Schedules, (d) except as provided in clause (c) above, headings have been inserted in the Disclosure Schedules for convenience of reference only, (e) the Disclosure Schedules are qualified in their entirety by reference to specific provisions of this Agreement and (f) the Disclosure Schedules and the information and statements contained therein are not intended to constitute, and shall not be construed as constituting, representations or warranties of the parties except as and to the extent provided in this Agreement.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, each of the parties has caused this Agreement to be executed and delivered as of the date first written above by their respective officers thereunto duly authorized.

AXCELIS TECHNOLOGIES, INC.

By: /s/ Russell J. Low

Name: Russell J. Low, Ph.D.

Title: President and Chief Executive Officer

VICTORY MERGER SUB, INC.

By: /s/ Russell J. Low

Name: Russell J. Low, Ph.D.

Title: President

VEECO INSTRUMENTS INC.

By: /s/ William J. Miller

Name: William J. Miller, Ph.D.

Title: Chief Executive Officer

[Signature Page to Agreement and Plan of Merger]

Opinion of J.P. Morgan Securities LLC

September 30, 2025

The Board of Directors
Axcelis Technologies, Inc.
108 Cherry Hill Drive
Beverly, Massachusetts 01915

Members of the Board of Directors:

You have requested our opinion as to the fairness, from a financial point of view, to Axcelis Technologies, Inc. (the "Company") of the Exchange Ratio (as defined below) in the proposed merger (the "Transaction") of a wholly-owned subsidiary of the Company with Veeco Instruments Inc. (the "Merger Partner"). Pursuant to the Agreement and Plan of Merger (the "Agreement") among the Company, Victory Merger Sub, Inc. ("Merger Sub") and the Merger Partner, the Merger Partner will become a wholly-owned subsidiary of the Company, and each outstanding share of common stock, par value \$0.01 per share, of the Merger Partner (the "Merger Partner Common Stock"), other than shares of Merger Partner Common Stock held in treasury or owned by the Merger Partner, the Company, Merger Sub or their respective wholly-owned subsidiaries, will be converted into the right to receive 0.3575 (the "Exchange Ratio") of a share of the Company's common stock, par value \$0.001 per share (the "Company Common Stock").

In connection with preparing our opinion, we have (i) reviewed a draft dated September 30, 2025 of the Agreement; (ii) reviewed certain publicly available business and financial information concerning the Merger Partner and the Company and the industries in which they operate; (iii) compared the financial and operating performance of the Merger Partner and the Company with publicly available information concerning certain other companies we deemed relevant and reviewed the current and historical market prices of the Merger Partner Common Stock and the Company Common Stock and certain publicly traded securities of such other companies; (iv) reviewed certain internal financial analyses and forecasts prepared by or at the direction of the managements of the Merger Partner and the Company relating to their respective businesses, as well as the estimated amount and timing of the cost savings and related expenses and synergies expected to result from the Transaction (the "Synergies"); and (v) performed such other financial studies and analyses and considered such other information as we deemed appropriate for the purposes of this opinion.

In addition, we have held discussions with certain members of the management of the Merger Partner and the Company with respect to certain aspects of the Transaction, and the past and current business operations of the Merger Partner and the Company, the financial condition and future prospects and operations of the Merger Partner and the Company, the effects of the Transaction on the financial condition and future prospects of the Company, and certain other matters we believed necessary or appropriate to our inquiry.

In giving our opinion, we have relied upon and assumed the accuracy and completeness of all information that was publicly available or was furnished to or discussed with us by the Merger Partner and the Company or otherwise reviewed by or for us. We have not independently verified any such information or its accuracy or completeness and, pursuant to our engagement letter with the Company, we did not assume any obligation to undertake any such independent verification. We have not conducted or been provided with any valuation or appraisal of any assets or liabilities of the Merger Partner or the Company, nor have we evaluated the solvency of the Merger Partner or the Company under any state or federal laws relating to bankruptcy, insolvency or similar matters. In relying on financial analyses and forecasts provided to us or derived therefrom, including the Synergies, we have assumed that they have been reasonably prepared based on assumptions reflecting the best currently available estimates and judgments by management as to the expected future results of operations and financial condition of the Merger Partner and the Company to which such analyses or forecasts relate. We express no view as to such analyses or forecasts (including the Synergies) or the assumptions on which they were based. We have also assumed that the Transaction and the other transactions contemplated by the Agreement will qualify as a tax-free reorganization for United States federal income tax purposes, and will be consummated as described in the Agreement, and that the

definitive Agreement will not differ in any material respects from the draft thereof furnished to us. We have also assumed that the representations and warranties made by the Company and the Merger Partner in the Agreement and the related agreements are and will be true and correct in all respects material to our analysis. We are not legal, regulatory or tax experts and have relied on the assessments made by advisors to the Company with respect to such issues. We have further assumed that all material governmental, regulatory or other consents and approvals necessary for the consummation of the Transaction will be obtained without any adverse effect on the Merger Partner or the Company or on the contemplated benefits of the Transaction.

Our opinion is necessarily based on economic, market and other conditions as in effect on, and the information made available to us as of, the date hereof. It should be understood that subsequent developments may affect this opinion and that we do not have any obligation to update, revise, or reaffirm this opinion. Our opinion is limited to the fairness, from a financial point of view, to the Company of the Exchange Ratio in the proposed Transaction and we express no opinion as to the fairness of the Exchange Ratio to the holders of any class of securities, creditors or other constituencies of the Company or as to the underlying decision by the Company to engage in the Transaction. Furthermore, we express no opinion with respect to the amount or nature of any compensation to any officers, directors, or employees of any party to the Transaction, or any class of such persons, relative to the Exchange Ratio in the Transaction or with respect to the fairness of any such compensation. We are expressing no opinion herein as to the prices at which the Merger Partner Common Stock or the Company Common Stock will trade at any future time.

We have acted as financial advisor to the Company with respect to the proposed Transaction and will receive a fee from the Company for our services, a substantial portion of which will become payable only if the proposed Transaction is consummated. In addition, the Company has agreed to indemnify us for certain liabilities arising out of our engagement. Please be advised that during the two years preceding the date of this letter, neither we nor our affiliates have had any other material financial advisory or other material commercial or investment banking relationships with the Company or the Merger Partner. We and our affiliates hold, on a proprietary basis, less than 1% of the outstanding Merger Partner Common Stock and 4.18% of the outstanding Company Common Stock. In the ordinary course of our businesses, we and our affiliates actively trade the debt and equity securities or financial instruments (including derivatives, bank loans or other obligations) of the Company or the Merger Partner for our own account or for the accounts of customers and, accordingly, we likely hold long or short positions in such securities or other financial instruments.

On the basis of and subject to the foregoing, it is our opinion as of the date hereof that the Exchange Ratio in the proposed Transaction is fair, from a financial point of view, to the Company.

The issuance of this opinion has been approved by a fairness opinion committee of J.P. Morgan Securities LLC. This letter is provided to the Board of Directors of the Company (in its capacity as such) in connection with and for the purposes of its evaluation of the Transaction. This opinion does not constitute a recommendation to any shareholder of the Company as to how such shareholder should vote with respect to the Transaction or any other matter. This opinion may not be disclosed, referred to, or communicated (in whole or in part) to any third party for any purpose whatsoever except with our prior written approval. This opinion may be reproduced in full in any proxy or information statement mailed to shareholders of the Company but may not otherwise be disclosed publicly in any manner without our prior written approval.

Very truly yours,

J.P. MORGAN SECURITIES LLC



UBS Securities LLC
1285 Avenue of the Americas
New York, NY 10019

September 30, 2025

The Board of Directors
Veeco Instruments Inc.
1 Terminal Drive
Plainview, NY 11803

Dear Members of the Board of Directors of Veeco Instruments Inc.:

We understand that Veeco Instruments Inc., a Delaware corporation (the "Company"), is considering a transaction whereby Acelis Technologies, Inc., a Delaware corporation ("Acelis"), will effect a merger involving the Company. Pursuant to the terms of an Agreement and Plan of Merger, draft dated as of September 30, 2025 (the "Agreement"), among Acelis, the Company and Victory Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of Acelis ("Sub"), Sub will be merged with and into the Company, with the Company continuing as the surviving corporation and a wholly owned subsidiary of Acelis (the "Transaction"). Pursuant to the terms of the Agreement, all of the issued and outstanding shares of the common stock, par value of \$0.01 per share, of the Company ("Company Common Stock"), other than Company Common Stock owned by the Company, Acelis or Sub or any wholly owned subsidiary of the Company, Acelis or Sub (or held in treasury by the Company), will be converted into the right to receive, for each outstanding share of Company Common Stock, 0.3575 (the "Exchange Ratio") shares of the common stock, par value \$0.001 per share, of Acelis ("Acelis Common Stock"). The terms and conditions of the Transaction are more fully set forth in the Agreement.

You have requested our opinion as to the fairness, from a financial point of view, to the holders of Company Common Stock (other than Acelis and its affiliates) of the Exchange Ratio provided for in the Transaction.

UBS Securities LLC ("UBS") has acted as financial advisor to the Company in connection with the Transaction and will receive a fee for its services, a portion of which is payable in connection with this opinion and a significant portion of which is contingent upon consummation of the Transaction. In addition, the Company has agreed to reimburse certain of our expenses arising, and indemnify us against certain liabilities that may arise, out of our engagement. UBS Group AG (the indirect parent of UBS) and its subsidiaries, branches and affiliates provide a wide range of commercial banking, investment banking and other activities (including wealth and investment management, corporate finance, subscription lines, asset management, securities issuing, trading and brokerage activities, research and other investment and financial businesses and services). In connection therewith, UBS and/or its affiliates may have provided services unrelated to the Transaction to the Company and its affiliates and/or Acelis and its affiliates and received compensation for such services. In addition, in the ordinary course of business, UBS, its affiliates and its and their respective employees may currently own or trade or otherwise originate, hedge or enforce interests in loans, debt and/or equity securities of the Company (including its affiliates) and/or Acelis for its own account or for the accounts of customers, and may at any time hold a long or short position in, or security interests over, such securities.

Our opinion does not address the relative merits of the Transaction as compared to other business strategies or transactions that might be available with respect to the Company or the Company's underlying business decision to effect the Transaction. Our opinion does not constitute a recommendation to any shareholder as to how such shareholder should vote or act with respect to the Transaction. At your direction, we have not been asked to, nor do we, offer any opinion as to the terms, other than the Exchange Ratio to the extent expressly specified herein, of the Agreement or any related documents or the form of the Transaction. In addition, we express no opinion as to the fairness of the amount or nature of any compensation to be received by any officers, directors or employees of any parties to the Transaction, or

any class of such persons, relative to the Exchange Ratio. We express no opinion as to what the value of Axcelis Common Stock will be when issued pursuant to the Transaction or the prices at which Axcelis Common Stock or Company Common Stock will trade at any time. In rendering this opinion, we have assumed, with your consent, that (i) the final executed form of the Agreement will not differ in any material respect from the draft that we have reviewed, (ii) the parties to the Agreement will comply with all material terms of the Agreement, and (iii) the Transaction will be consummated in accordance with the terms of the Agreement without any adverse waiver or amendment of any material term or condition thereof. We also have assumed that all governmental, regulatory or other consents and approvals necessary for the consummation of the Transaction will be obtained without any material adverse effect on the Company, Axcelis or the Transaction. We have not been authorized to solicit and have not solicited indications of interest in a transaction with the Company from any third party.

In arriving at our opinion, we have, among other things: (i) reviewed certain publicly available business and financial information relating to the Company and Axcelis; (ii) reviewed certain internal financial information and other data relating to the business and financial prospects of the Company that were not publicly available, including financial forecasts and estimates prepared by the management of the Company that you have directed us to utilize for purposes of our analysis; (iii) reviewed certain internal financial information and other data relating to the business and financial prospects of Axcelis that were not publicly available, including financial forecasts and estimates prepared by the management of the Company that you have directed us to utilize for purposes of our analysis; (iv) reviewed certain estimates of synergies prepared by the management of the Company that were not publicly available that you have directed us to utilize for purposes of our analysis; (v) conducted discussions with members of the senior management of the Company and Axcelis concerning the businesses and financial prospects of the Company and Axcelis; (vi) performed a discounted cash flow analysis of the Company in which we analyzed the future cash flows of the Company using financial forecasts and estimates prepared by the management of the Company; (vii) performed a discounted cash flow analysis of Axcelis in which we analyzed the future cash flows of Axcelis using financial forecasts and estimates prepared by the management of the Company; (viii) performed a pro forma discounted cash flow analysis in which we analyzed the future cash flows of Axcelis on a pro forma basis assuming the Transaction is consummated, using financial forecasts and estimates prepared by the management of the Company; (ix) reviewed publicly available financial and stock market data with respect to certain other companies we believe to be generally relevant; (x) reviewed current and historical market prices of Company Common Stock and Axcelis Common Stock; (xi) considered certain pro forma effects of the Transaction on Axcelis's financial statements; (xii) reviewed the Agreement; and (xiii) conducted such other financial studies, analyses and investigations, and considered such other information, as we deemed necessary or appropriate.

In connection with our review, with your consent, we have assumed and relied upon, without independent verification, the accuracy and completeness in all material respects of the information provided to or reviewed by us for the purpose of this opinion. In addition, with your consent, we have not made any independent evaluation or appraisal of any of the assets or liabilities (contingent or otherwise) of the Company or Axcelis, nor have we been furnished with any such evaluation or appraisal. With respect to the financial forecasts, estimates, synergies and pro forma effects referred to above, we have assumed, at your direction, that they have been reasonably prepared on a basis reflecting the best currently available estimates and judgments of the management of the Company as to the future financial performance of the Company, Axcelis and such synergies and pro forma effects. In addition, we have assumed with your approval that the financial forecasts and estimates, including synergies, referred to above will be achieved at the times and in the amounts projected. We also have assumed, with your consent, that the Transaction will qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended. Our opinion is necessarily based on economic, monetary, market and other conditions as in effect on, and the information available to us as of, the date hereof. The issuance of this opinion was approved by an authorized committee of UBS.

Based upon and subject to the foregoing, it is our opinion that, as of the date hereof, the Exchange Ratio provided for in the Transaction is fair, from a financial point of view, to the holders of Company Common Stock (other than Axcelis and its affiliates).

This opinion is provided for the benefit of the Board of Directors of the Company (in its capacity as such) in connection with, and for the purpose of, its evaluation of the Exchange Ratio provided for in the Transaction.

Very truly yours,

/s/ UBS SECURITIES LLC

UBS SECURITIES LLC

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