



26th Annual Needham Growth Conference

January 2024

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This presentation contains “forward-looking statements”, within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995, as amended, that are based on management’s expectations, estimates, projections and assumptions. Words such as “expects,” “anticipates,” “plans,” “believes,” “scheduled,” “estimates” and variations of these words and similar expressions are intended to identify forward-looking statements. Forward-looking statements include, but are not limited to, those regarding anticipated growth and trends in our businesses and markets, industry outlooks and demand drivers, our investment and growth strategies, our development of new products and technologies, our business outlook for current and future periods, our ongoing transformation initiative and the effects thereof on our operations and financial results; and other statements that are not historical facts. These statements and their underlying assumptions are subject to risks and uncertainties and are not guarantees of future performance. Factors that could cause actual results to differ materially from those expressed or implied by such statements include, without limitation: global trade issues, including the ongoing trade disputes between the U.S. and China, and changes in trade and export license policies; the level of demand for our products; global economic and industry conditions; our dependency on third-party suppliers and outsourcing partners; the timing of customer orders; our ability to develop, deliver and support new products and technologies; our ability to expand our current markets, increase market share and develop new markets; the concentrated nature of our customer base; our ability to obtain and protect intellectual property rights in key technologies; the effects of regional or global health epidemics, including the effects of the COVID-19 pandemic on the Company’s operations and on those of our customers and suppliers; our ability to achieve the objectives of operational and strategic initiatives and attract, motivate and retain key employees; the variability of results among products and end-markets, and our ability to accurately forecast future results, market conditions, and customer requirements; the impact of our indebtedness, including our convertible senior notes and our capped call transactions; and other risks and uncertainties described in our SEC filings on Forms 10-K, 10-Q and 8-K, and from time-to-time in our other SEC reports. All forward-looking statements speak only to management’s expectations, estimates, projections and assumptions as of the date of this presentation. The Company does not undertake any obligation to update or publicly revise any forward-looking statements to reflect events, circumstances or changes in expectations after the date of this presentation.

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Veeco at a Glance



Global provider of
semiconductor capital
equipment



Differentiated technologies with
opportunities to expand served
available markets

Patents

~400

Employees

~1,200

2023 Revenue

\$658M-
\$668M*

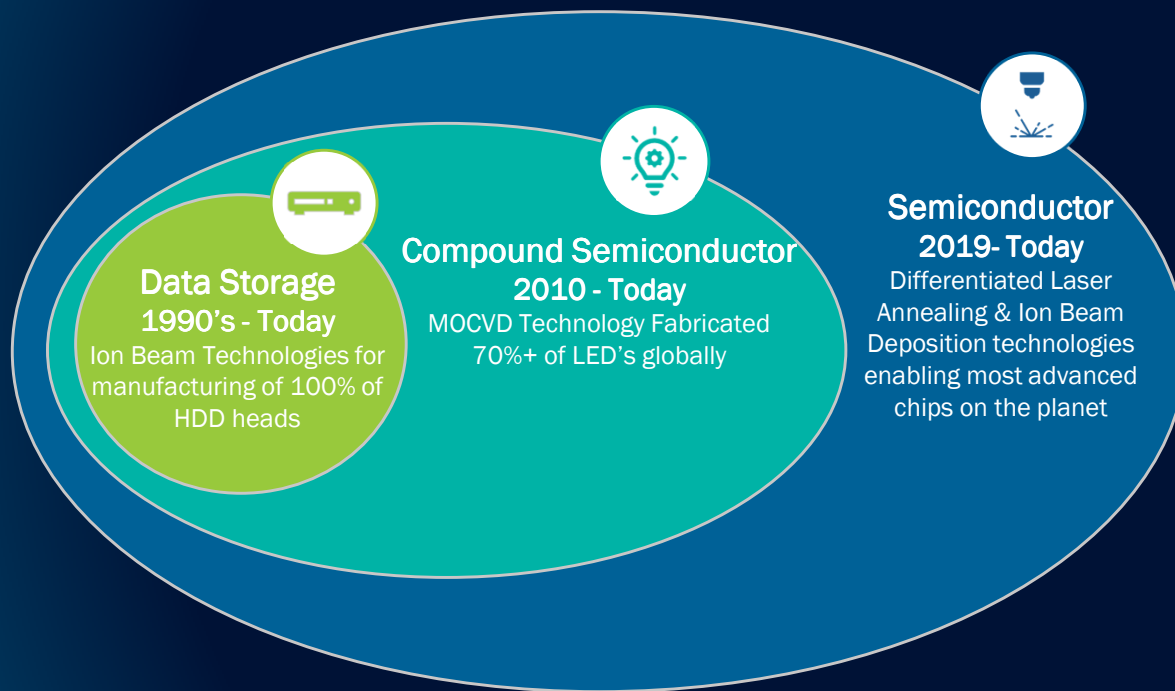


Solving customers high value
materials challenges



Financial strength and flexibility

Who is Veeco?



Strong History

Solving materials challenges

Growth Focus

Semiconductor & Compound Semiconductor

Well Positioned

Leading edge customers drive growth

Available Market



Veeco's Served Available Market to grow to ~4.0B

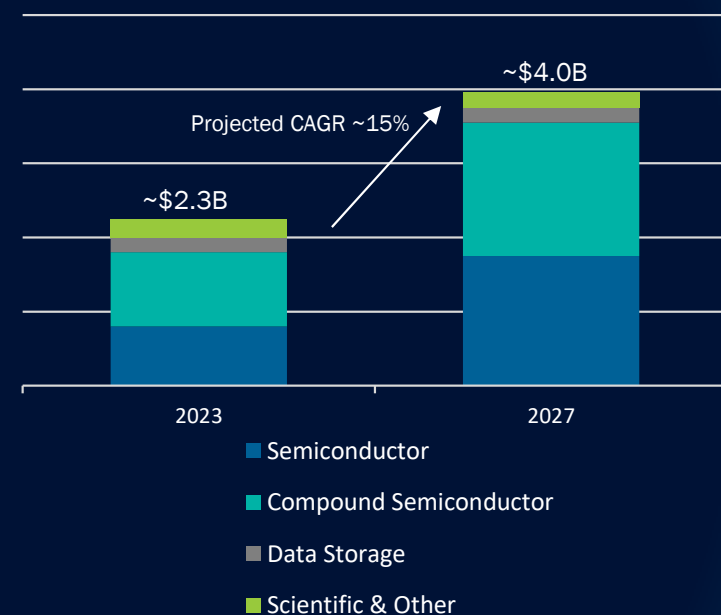


Semiconductor opportunity expected to grow to ~\$1.7B driven by Laser Annealing, Nanosecond Annealing and Ion Beam Deposition equipment



Compound Semiconductor opportunity expected to grow to ~\$1.8B driven by Epitaxy equipment for Power Electronics (SiC & GaN) and MicroLED's

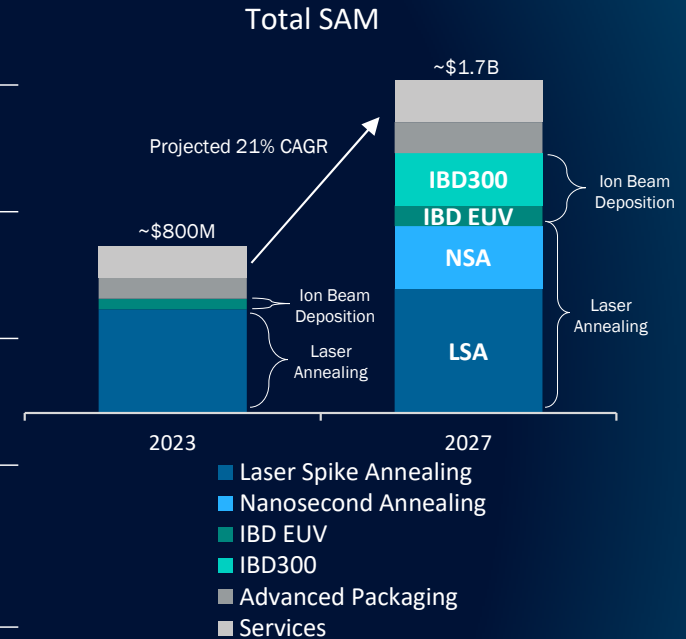
Total Veeco SAM



Semiconductor SAM Growth

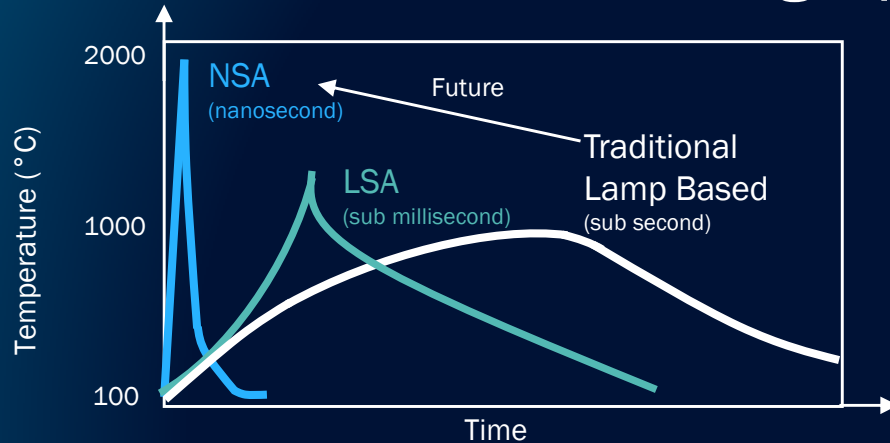
Key Drivers of SAM Growth (Systems Only)

		2023	2027
	Laser Spike Annealing (LSA)		
	PTOR at three Tier 1 logic and one Tier 1 memory customers' advanced nodes	~\$500M	~\$600M
New	Nanosecond Annealing (NSA)		
	- Under evaluation at two Tier 1 logic customers - Ideal for new advanced node 3D device applications, including backside power delivery	~\$0	~\$300M
	IBD EUV Mask Blanks		
	PTOR for EUV mask blank deposition	~\$50M	~\$100M
New	IBD300 Front End Semi		
	- Under evaluation at two Tier 1 memory customers - IBD differentiates vs. traditional PVD for deposition of high-density films requiring low resistivity - Key applications are memory bit-line & logic wiring	~\$0	~\$250M



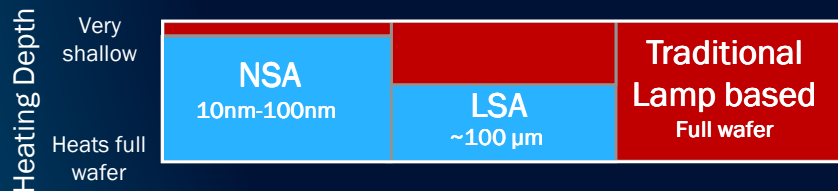
Laser Spike Annealing, Nanosecond Annealing and IBD300 to drive growth in Semiconductor market

Nanosecond Annealing Opportunity



- Solidifies Veeco's laser annealing leadership & helps drive the Semi industry roadmap
- Shipped two NSA500™ evaluations to Tier 1 logic customers in Q4 2023
- Opportunity to expand SAM in Logic and Memory
 - **Low thermal budget** steps including Backside Power Delivery and Contact Anneal for advanced nodes
 - **Material Modification** steps including void removal, recrystallization and grain growth
- Potential for initial HVM orders in late 2024 or 2025

Illustration of Wafer Cross Section



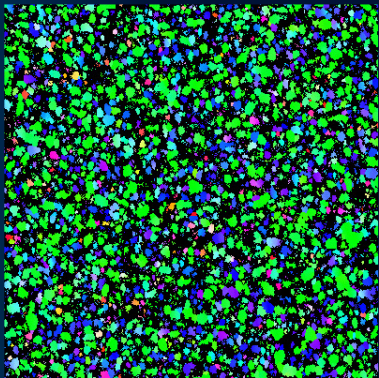
NSA to expand laser annealing to broad range of advanced node applications

IBD300– 300mm Front End Semi Opportunity

Illustration of grain size and distribution

TODAY

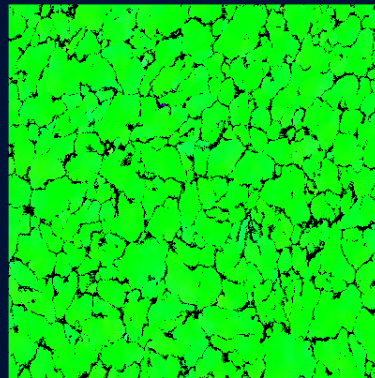
Traditional PVD



Non-uniform, randomly oriented grains of small size = higher resistivity

FUTURE

IBD

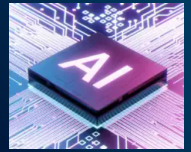


Uniformly oriented large grains = lowest resistivity

- Lower resistance metals essential for improved device performance & customer scaling
- IBD displays lower resistivity vs traditional PVD based on Tier 1 customer data
- Shipped two IBD300 evaluations to Tier 1 memory customers in Q4 2023
- Potential for initial HVM orders in late 2024 or 2025

Capitalizing on decades of experience and core IBD technology in Semiconductor market

Veeco Growth Technologies for Artificial Intelligence



GPU

Current PTOR

- Laser-Spike Annealing (LSA)
- IBD for EUV mask blanks

Additional Future Opportunities

- Nanosecond Annealing (NSA)
- IBD300 for low resistivity metals

High-Bandwidth Memory (HBM) DRAM

Current PTOR

- Laser-Spike Annealing (LSA)

Additional Future Opportunities

- Nanosecond Annealing (NSA)
- IBD300 for low resistivity metals

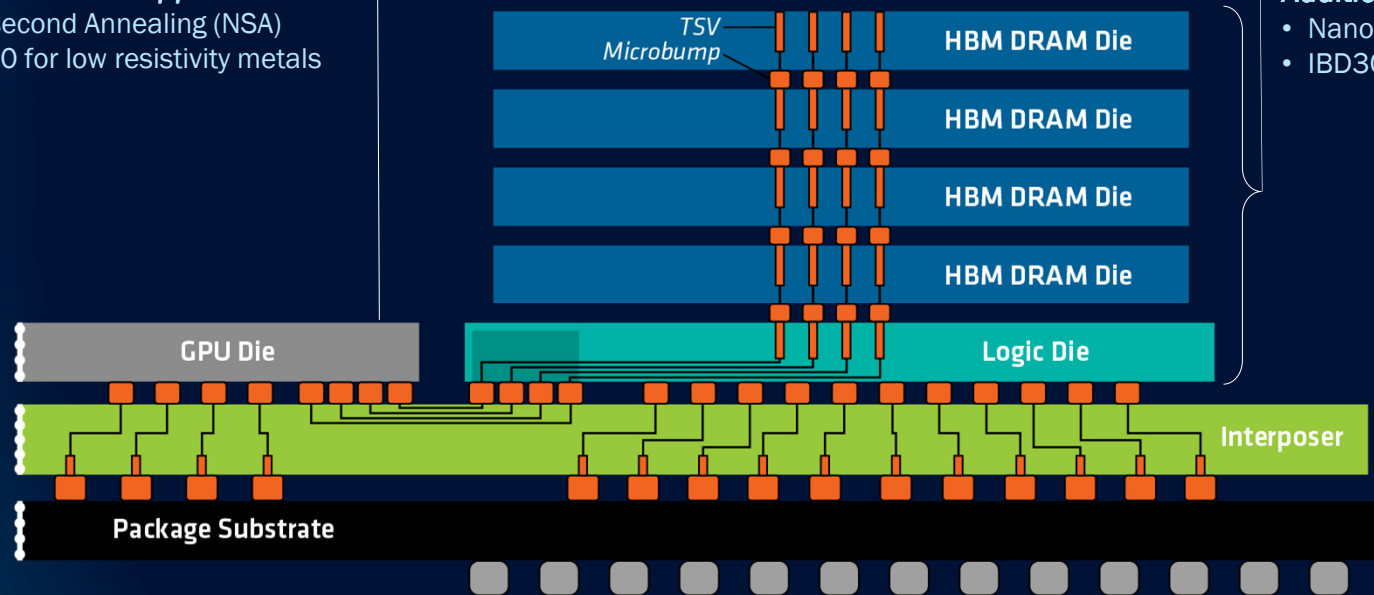
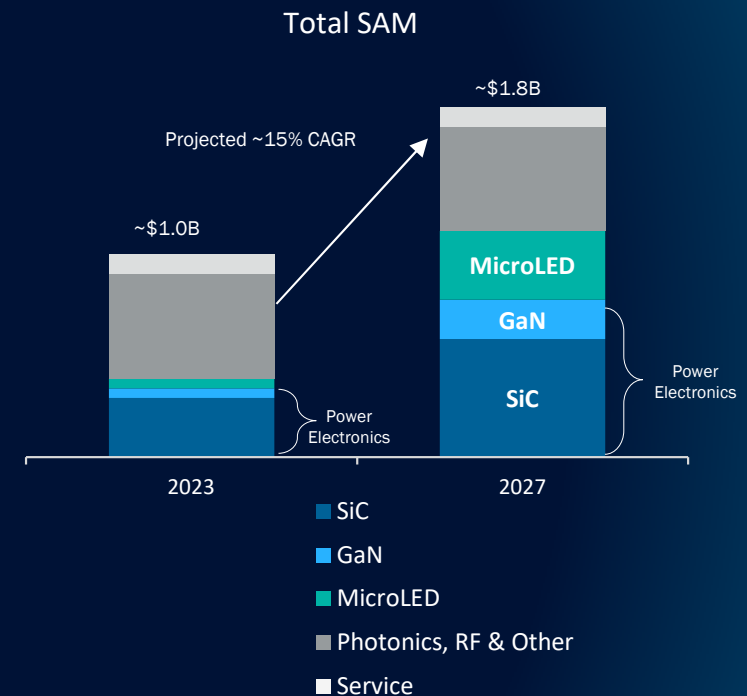


Illustration of typical AI chip

PTOR = Production Tool of Record
TSV = Through Silicon Via
GPU = Graphics Processing Unit
HBM = High-Bandwidth Memory
EUV = Extreme Ultraviolet
IBD = Ion Beam Deposition

Compound Semiconductor SAM Growth

	Key Drivers of SAM Growth (<i>Systems Only</i>)	2023	2027
SiC Power Electronics	Single wafer SiC CVD for 8 inch addresses high voltage and power applications such as EVs	~\$300M	~\$600M
GaN Power Electronics	Single wafer MOCVD platform for 8 & 12 inch GaN wafer sizes	~\$50M	~\$200M
MicroLED	- MOCVD batch platform for traditional red MicroLED - Single wafer MOCVD platform for disruptive red, green and blue on same wafer using GaN on Si	~\$50M	~\$350M



Significant growth opportunities in Epitaxy Equipment for Power Electronics and MicroLED's

Financials

Updated 2023 Guidance & Initial 2024 Outlook
Revenue By End Market



Q4 2023 Updated Guidance & Initial 2024 Outlook

Q4 2023

	Prior Guide	Updated Guide
Revenue	\$155M - \$175M	\$165M - \$175M
Non-GAAP Diluted EPS	\$0.35 - \$0.45	\$0.40 - \$0.45 *

FY 2023

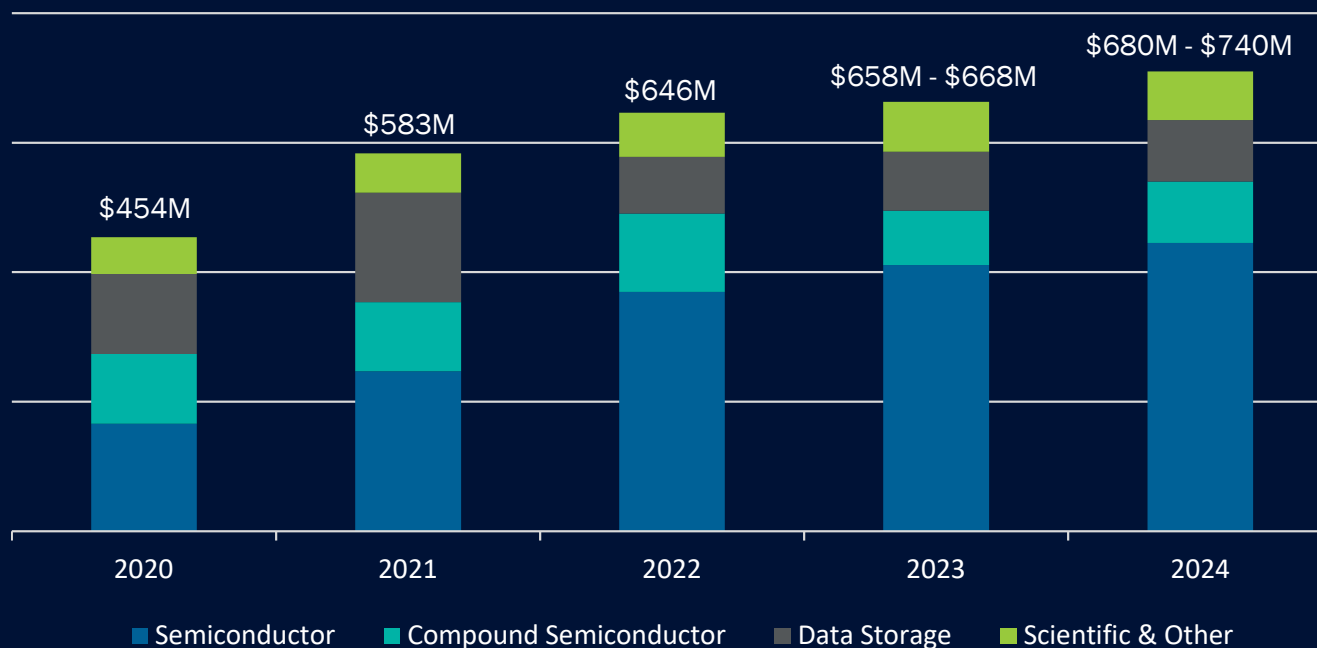
	Prior Guide	Updated Guide
Revenue	\$648M - \$668M	\$658M - \$668M
Non-GAAP Diluted EPS	\$1.55 - \$1.65	\$1.58 - \$1.65 *

FY 2024

	Initial Outlook
Revenue	\$680M - \$740M
Non-GAAP Diluted EPS	\$1.60 - \$1.90 *

2024 Initial Revenue Outlook points to ~7% YoY revenue growth at mid-point of guidance

Revenue by End-Market



Semiconductor revenue increases from 37% in 2020 to >60% in 2023 (CAGR of ~35%)

Executing Today & Well-Positioned for Long Term Growth

Today

- **Semiconductor** business to grow ~10% in 2023 despite a decline in WFE spending
- **Laser Annealing** expanding to new markets & applications in logic and memory
- Shipped first two **NSA & IBD300** systems to Tier 1 customers for evaluation

Future

- **Semiconductor** growth well positioned to outperform WFE growth, driven by new and existing products (LSA, NSA, IBD300)
- **Compound Semi** growth opportunities in SiC, GaN, and MicroLED

Thank You

2023 & FY 2024 Guidance GAAP to Non-GAAP Reconciliations

Q4 2023

- GAAP earnings per diluted share for the fourth quarter of 2023 is expected to be between \$0.27 and \$0.32. Excluded from Non-GAAP diluted EPS for the fourth quarter of 2023 are estimated share-based compensation expenses of \$0.10 per share, and estimated amortization expense of \$0.03 per share.

FY 2023

- Full year 2023 GAAP diluted loss per share is expected in the range of \$(0.70) to \$(0.59). Excluded from Non-GAAP diluted EPS for the full year 2023 are loss on extinguishment of debt charges of \$1.77 per share, estimated share-based compensation expenses of \$0.52 per share, estimated amortization expense of \$0.15 per share, while additional income tax expense of \$0.17 is included in Non-GAAP diluted EPS.

FY 2024

- GAAP earnings per diluted share for 2024 is expected between \$1.10 and \$1.40. Guidance regarding 2024 Non-GAAP earnings per diluted share excludes charges related to estimated share-based compensation expenses of \$0.47 per share and amortization expense of \$0.12 per share, while including additional estimated income tax expense of \$0.09.