

OPTICAL FIBER CONFERENCE INVESTOR RELATIONS COMMUNICATION

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Forward Looking Statements

Statements in this presentation and related webcast concerning Juniper Networks' business outlook; economic and market outlook; future financial and operating results; the expected impact of architectural transitions and timing of deployments with large customers; the expected impact of the adoption of ASC 606 on our future financial results; the expected impact of the Tax Cuts and Jobs Act on our business; execution of our capital return program; expectations with respect to market trends, future strategy; strength of certain customer segments; ability to expand business opportunities; expectations with respect to growth; focus on cost improvements; the strength of our solution portfolio and strategy; our ability to improve profitability and make necessary investments; and overall future prospects are forward-looking statements within the meaning of the Private Securities Litigation Reform Act that involve a number of uncertainties and risks. Actual results or events could differ materially from those anticipated in those forward-looking statements as a result of several factors, including: general economic and political conditions globally or regionally; business and economic conditions in the networking industry; changes in overall technology spending by our customers; the network capacity requirements of our customers and, in particular, cloud and communication service providers; contractual terms that may result in the deferral of revenue; the timing of orders and their fulfillment; manufacturing and supply chain constraints, changes or disruptions; availability of product components; delays in scheduled product availability; adoption of regulations or standards affecting Juniper Networks products, services or the networking industry; product defects, returns or vulnerabilities; significant effects of tax legislation and judicial or administrative interpretation of tax regulations, including the Tax Cuts and Jobs Act; litigation settlements and resolutions; the potential impact of activities related to the execution of capital return, restructurings and product rationalization; the impact of potential import tariffs, depending on their scope and how they are implemented; and other factors listed in Juniper Networks' most recent report on Form 10-Q or 10-K filed with the Securities and Exchange Commission. Note that our estimates as to tax rate and the impact of the Tax Cuts and Jobs Act on our business are based on current tax law, including current interpretations of the Tax Cuts and Jobs Act, and could be materially affected by changing interpretations of and additional legislation and guidance around the Act. All statements made in this presentation and related webcast are made only as of the date of this presentation. Juniper Networks undertakes no obligation to update the information in this presentation in the event facts or circumstances subsequently change.

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This presentation and related webcast may reference non-GAAP financial measures, including (without limitation) those related to: deferred revenue, gross margin; product gross margin; service gross margin; product gross margin as a percentage of product revenue; service gross margin as a percentage of service revenue; gross margin as a percentage of revenue; research and development expense; sales and marketing expense; general and administrative expense; operating expense; operating expense as a percentage of revenue; operating income; operating margin; provision for income tax; income tax rate; net income; and diluted earnings per share. For important commentary on why Juniper Networks considers non-GAAP information a useful view of the company's financial results and for reconciliations of these measures to GAAP financial measures, please refer to the "Investor Relations" section of our website at <http://investor.juniper.net>. With respect to future financial guidance provided on a non-GAAP basis, we exclude estimates for amortization of intangible assets, share-based compensation expenses, acquisition-related charges, restructuring benefits or charges, impairment charges, litigation settlement benefits or charges and resolution charges, supplier component remediation charges and recoveries, gain or loss on equity investments, retroactive impact of certain tax settlements, significant effects of tax legislation and judicial or administrative interpretation of tax regulations, including the impact of income tax reform, non-recurring income tax adjustments, valuation allowance on deferred tax assets, and the income tax effect of non-GAAP exclusions, and do not include the impact of any future acquisitions, divestitures, or joint ventures that may occur in the period. Juniper is unable to provide a reconciliation of non-GAAP guidance measures to corresponding GAAP measures on a forward-looking basis without unreasonable effort due to the overall high variability and low visibility of most of the foregoing items that have been excluded. The items that are being excluded are difficult to predict and a reconciliation could result in disclosure that would be imprecise or potentially misleading. Material changes to any one of these items could have a significant effect on our guidance and future GAAP results.



AGENDA

- The Tale Of Two Materials
- The Pluggable Optic Design End Game
- Manufacturing Yields Reach Silicon Heights
- Economic Advantages

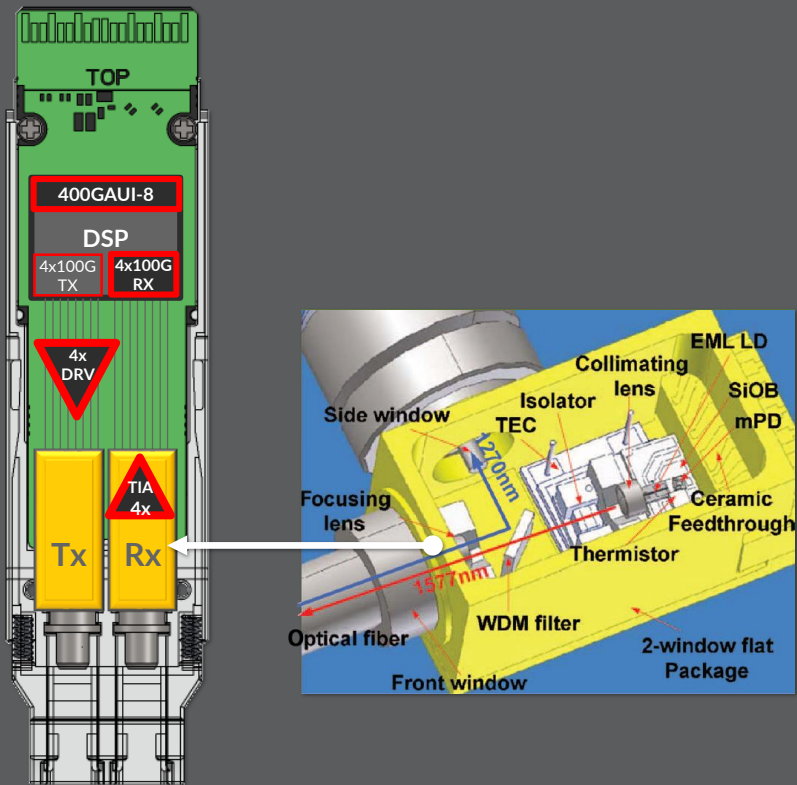
Silicon (SI)



Indium + Phosphide (InP)

CONVENTIONAL PLUGGABLE OPTICS DESIGN

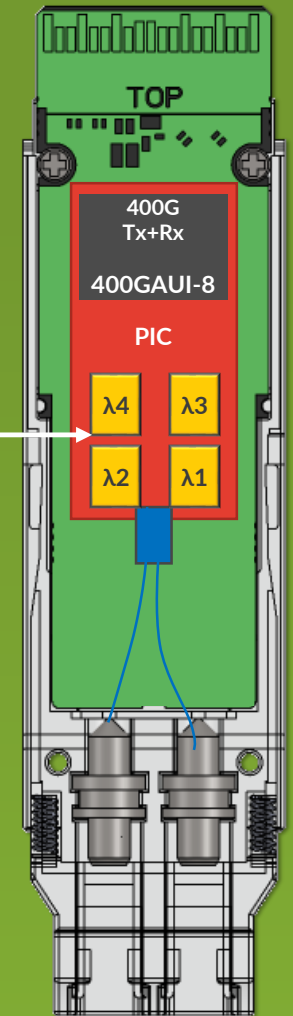
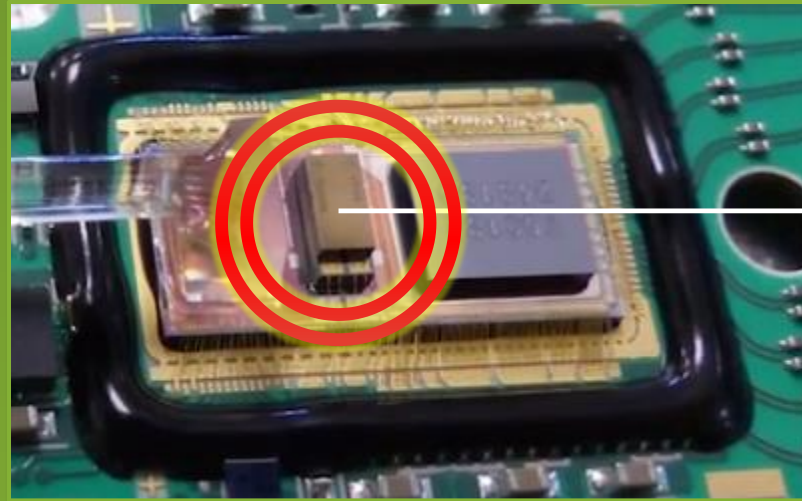
Transmitter Optical Subassembly



Labor Intensive

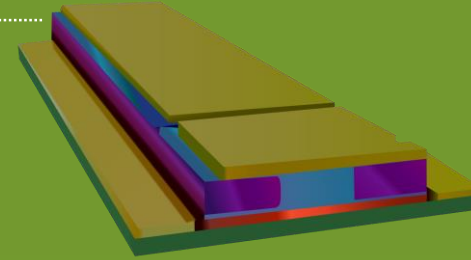


THE CURRENT STATE OF SILICON PHOTONICS DESIGN

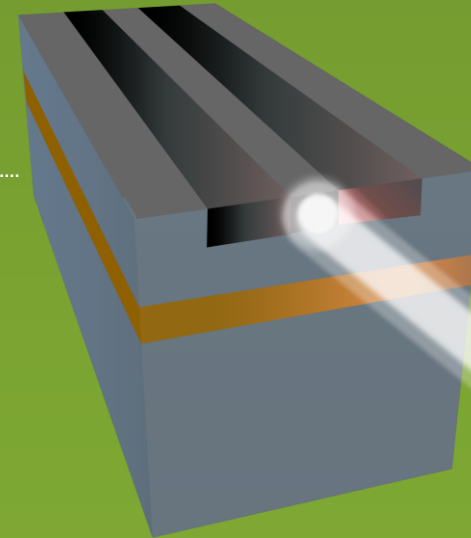


THE TALE OF TWO MATERIALS COMING TOGETHER

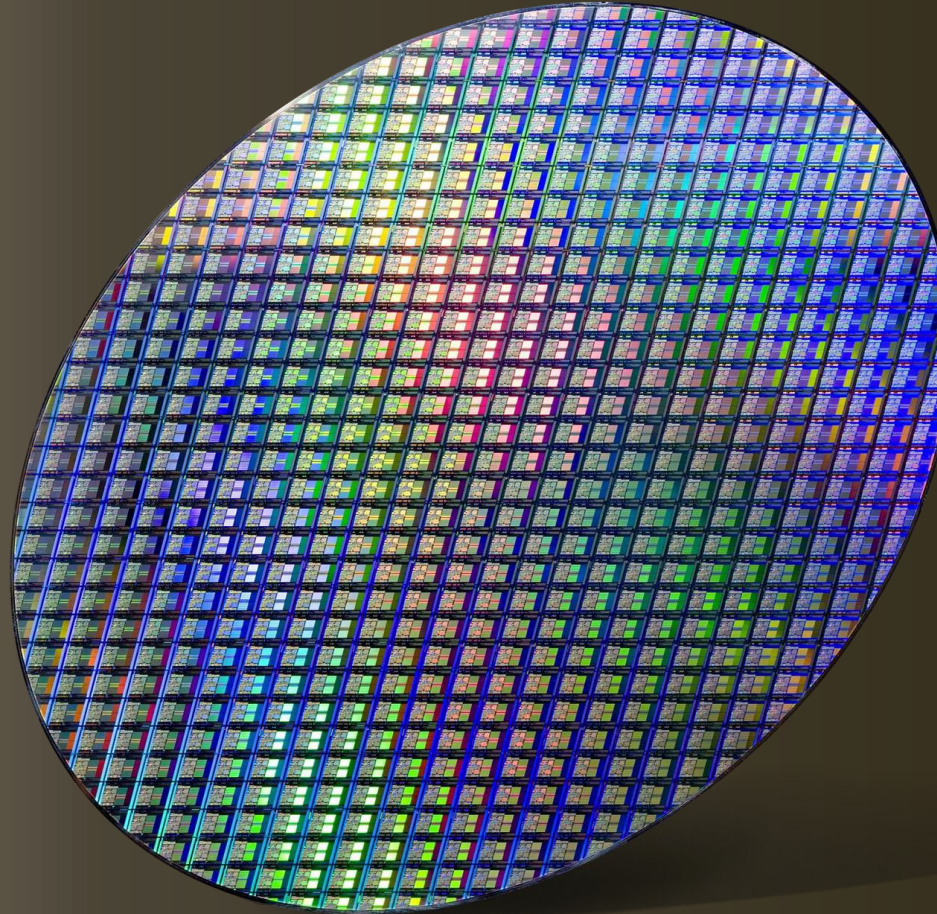
InP



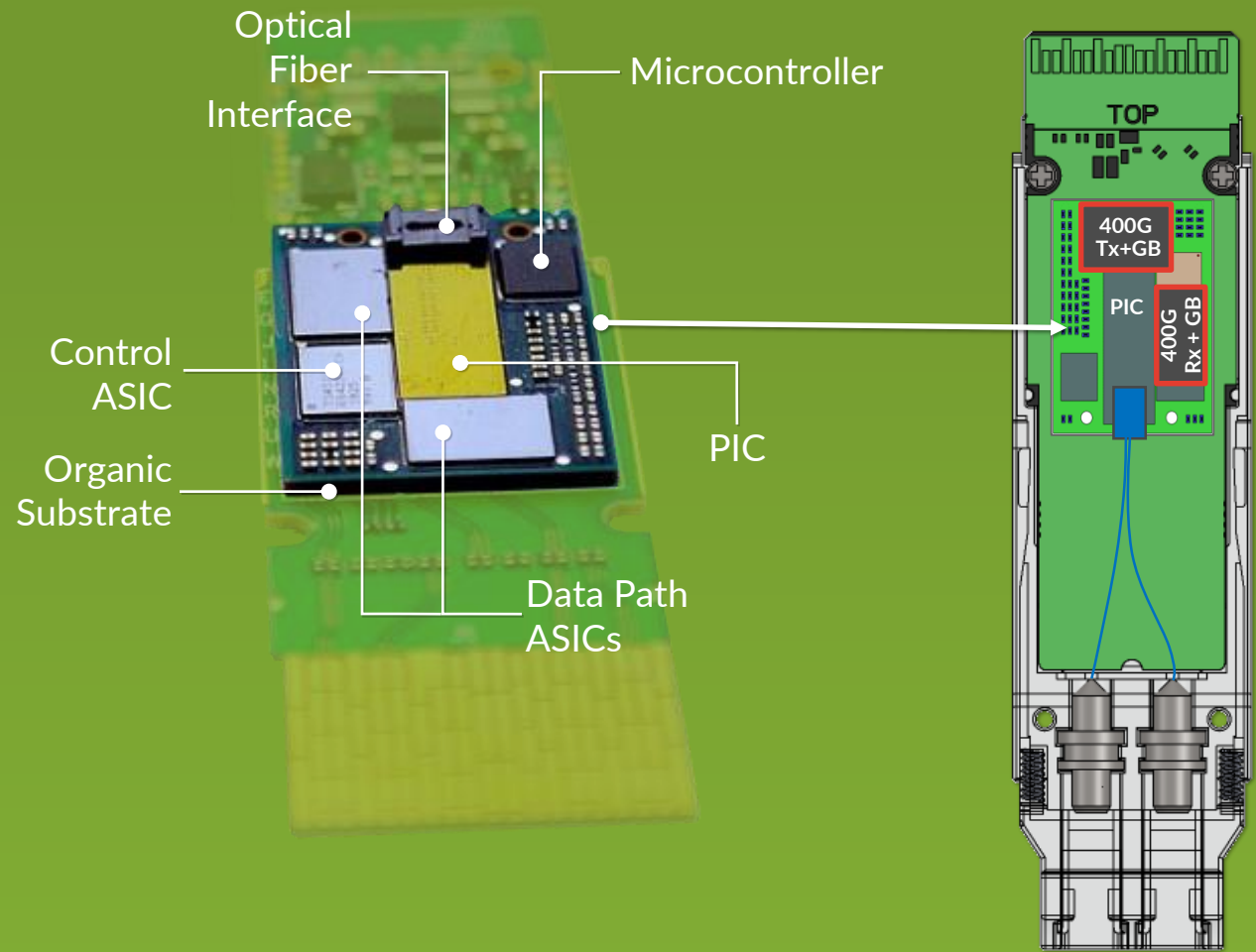
Si



JUNIPER ACHIEVES THE HOLY GRAIL



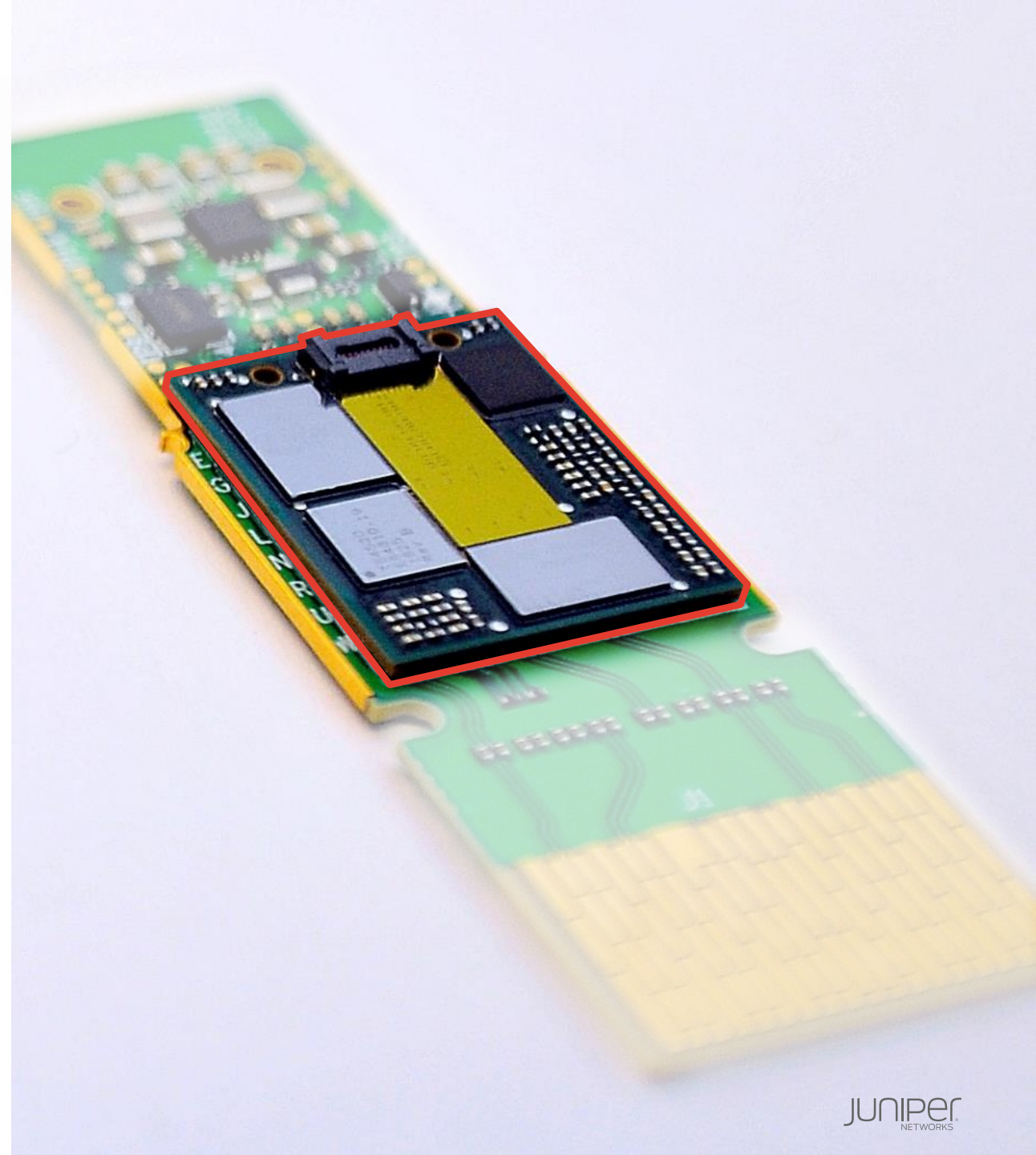
SILICON PHOTONICS DESIGN END GAME



INTEGRATED TROUBLESHOOTING

Integrated Optical Loopback Switch Between TX and RX

- Optical verification during manufacturing
- Leverage functionality for in-service network diagnostics



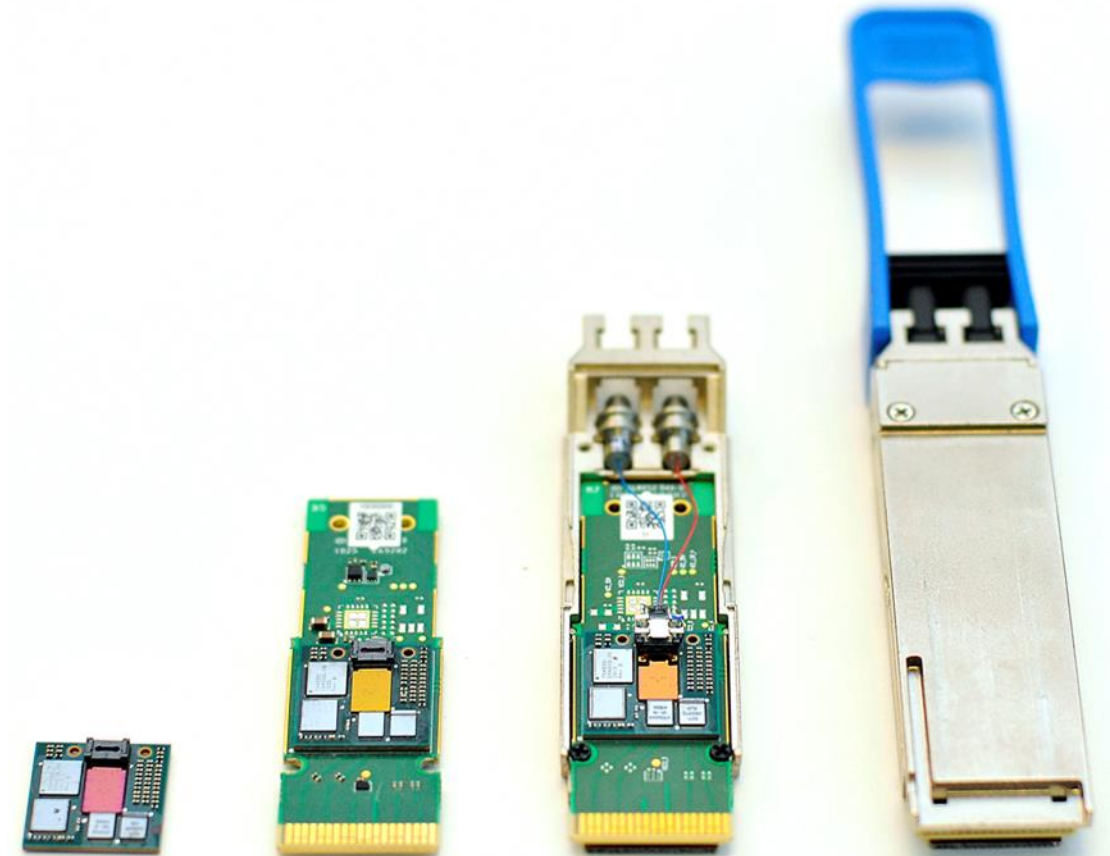
ENGINEERING PROWESS LEADS TO GREATER MANUFACTURING YIELDS

The Current Silicon Photonics limited by discrete laser attach

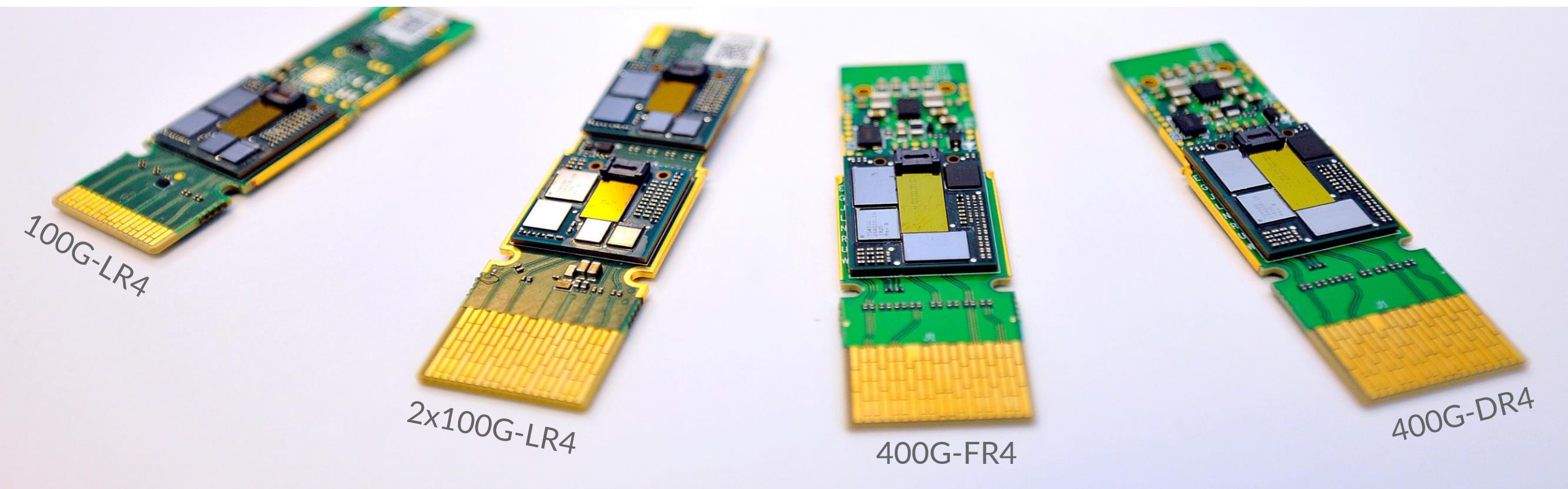
- If laser attach yield = 95%, 4-channel transceiver yield = 80%

Juniper's Silicon Photonics limited by assembly yields

- Very high (>99%)
- Independent of # of channels



SCALABLE SILICON PHOTONICS PLATFORM

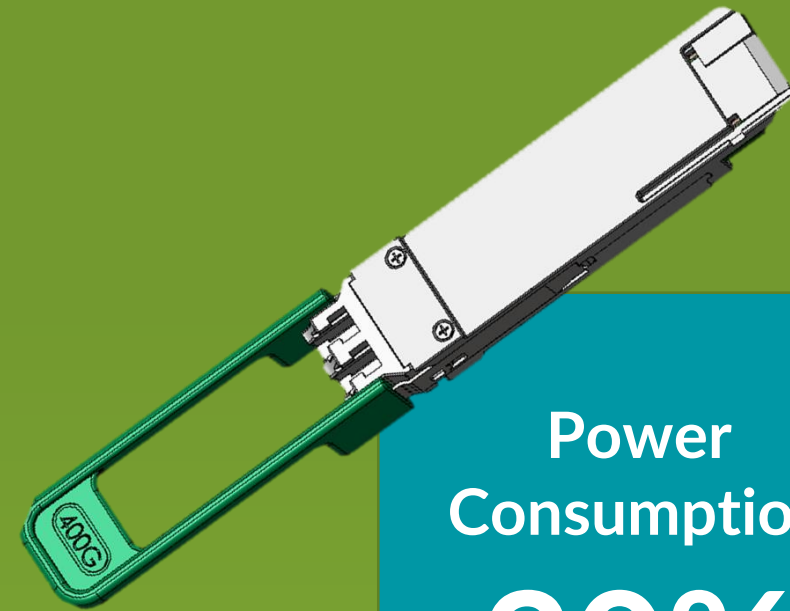


JUNIPER SILICON PHOTONIC ECONOMIC IMPACT

There are Over 400 Hyperscale Data Centers In the World

How Would a 20% Optical Power Savings Impact Them

- ~\$20.5M Annual Power Savings
- ~\$18.5M Annual AC Savings
- ~\$39M in Annual Opex Savings



Power
Consumption
20%
Below Market

THANK YOU

JUNIPER
NETWORKS | Engineering
Simplicity