



Q1'21 SUMMARY

NYSE: NPTN

May 2021

Forward Looking Statements and Other Important Cautions

This presentation includes statements that qualify as forward-looking statements under the Private Securities Litigation Reform Act of 1995. These forward-looking statements include statements about the following topics: future financial results, demand for the Company's high-speed products, and the Company's market position.

Forward-looking statements are subject to certain risks and uncertainties that could cause the actual results to differ materially. Those risks and uncertainties include, but are not limited to, such factors as: the Company's reliance on a small number of customers for a substantial portion of its revenues; market growth in key countries; possible reduction in or volatility of customer orders or delays in shipments of products to customers; timing of customer drawdowns of vendor-managed inventory; potential governmental trade actions; possible disruptions in the supply chain or in demand for the Company's products due to industry developments; the ability of the Company's vendors and subcontractors to supply or manufacture the Company's products in a timely manner; ability of the Company to meet customer demand; volatility in utilization of manufacturing operations and manufacturing costs; reductions in the Company's rate of new design wins, and/or the rate at which design wins go into production, and the rate of customer acceptance of new product introductions; potential pricing pressure that may arise from changing conditions in the industry or negotiating leverage of buyers; the impact of any previous or future acquisitions or divestitures of assets and related product lines; the discontinuance or end of life of products; changes in demand for the Company's products; the impact of competitive products and pricing and alternative technological advances; the accuracy of estimates used to prepare the Company's financial statements and forecasts; the timely and successful development and market acceptance of new products and upgrades to existing products; the difficulty of predicting future cash needs; the nature of other investment opportunities available to the Company from time to time; the Company's operating cash flow; changes in economic and industry projections; a decline in general conditions in the telecommunications equipment industry, the cloud and datacenter industry, or the world economy generally; and the effects of seasonality.

For further discussion of these risks and uncertainties, please refer to the documents the Company files with the SEC from time to time, including the Company's Annual Report on Form 10-K for the year ended December 31, 2020 and the Company's Quarterly Report of Form 10-Q for the three months ended March 31, 2021. All forward-looking statements are made as of the date of this presentation, and the Company disclaims any duty to update such statements.

You may obtain these documents for free by visiting EDGAR on the SEC website at www.sec.gov.

Non-GAAP and Adjusted EBITDA Measures vs. GAAP Financial Measures

The Company's non-GAAP and Adjusted EBITDA measures exclude certain GAAP financial measures. A reconciliation of the Non-GAAP and Adjusted EBITDA financial measures to the most directly comparable GAAP financial measures is provided in the financial schedules portion of its press release issued on April 29, 2021 and available in the Investor Relations section of the NeoPhotonics website. These non-GAAP financial measures differ from GAAP measures with the same captions and may differ from non-GAAP financial measures with the same or similar captions that are used by other companies. As such, these non-GAAP measures should be considered as a supplement to, and not as a substitute for, or superior to, financial measures calculated in accordance with GAAP.

The Company uses these non-GAAP financial measures to analyze its operating performance and future prospects, develop internal budgets and financial goals, and to facilitate period-to-period comparisons. NeoPhotonics believes that these non-GAAP financial measures reflect an additional way of viewing aspects of its operations that, when viewed with its GAAP results, provide a more complete understanding of factors and trends affecting its business.

NeoPhotonics:

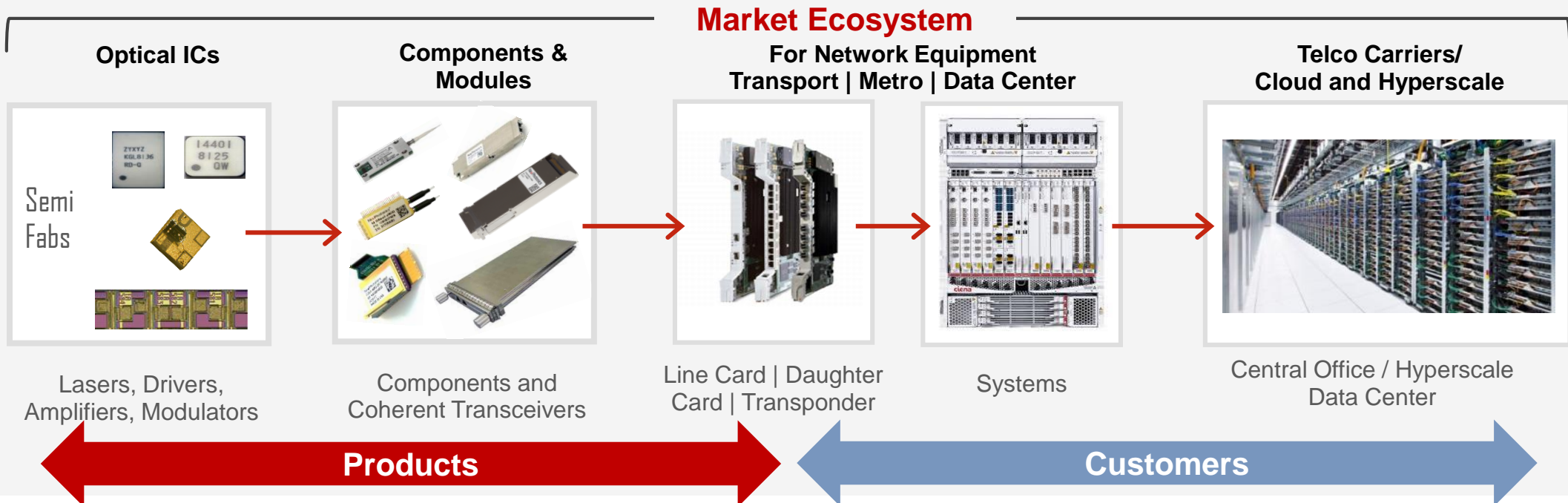
World leader in the highest speed optoelectronics - A New Era of Growth

Deep Technology for Highest Speed Cloud Solutions

- World's primary supplier of purest light tunable lasers
- Highest speed coherent suite ramping 64 & 96Gbaud components for 600Gbps and 800Gbps systems
- 400G / 400ZR / 400ZR+ coherent DCO modules enabled by silicon photonics modulator/receiver integration
- Unique C++ LASER™ for expanded spectrum and capacity

Financial and Operational Scale

- TTM Revenues as of Q1'21 of \$335 million
- Strong growth from products for 400G and above applications:
 - 134% YoY growth for 400G and above
 - Flat revenue quarter over quarter
 - These products grew to 52% of revenue in Q1'21



Our Strategy and Outlook

Our New Era of Growth is Driven by 400G-800Gbps Data Rates and Expanding Use Cases

Our strategy:

- Rapidly grow 400G and above product revenues from telecom equipment suppliers
- Ramp our new 400ZR and 400ZR+ coherent modules
- Coherent modules double our served market to include cloud and hyper-scale data center customers

Our outlook:

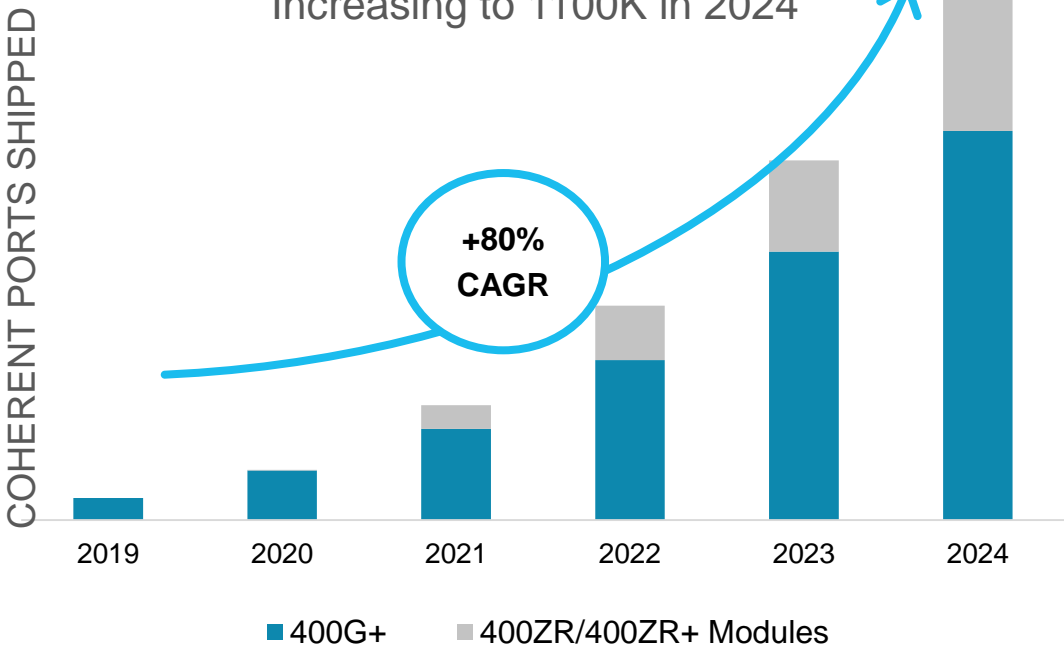
- 400G+ revenues continued to grow rapidly; 134% in Q1 year-over-year to non-Huawei customers to 52% of revenues.
- Continuing growth of 400G+ revenues over the year will drive accelerated growth for full year 2021.

Higher Bandwidth Driving Accelerated Growth

PROJECTIONS INCLUDE 400ZR+ OPPORTUNITY

Rapid Growth in 400G+ PORTS

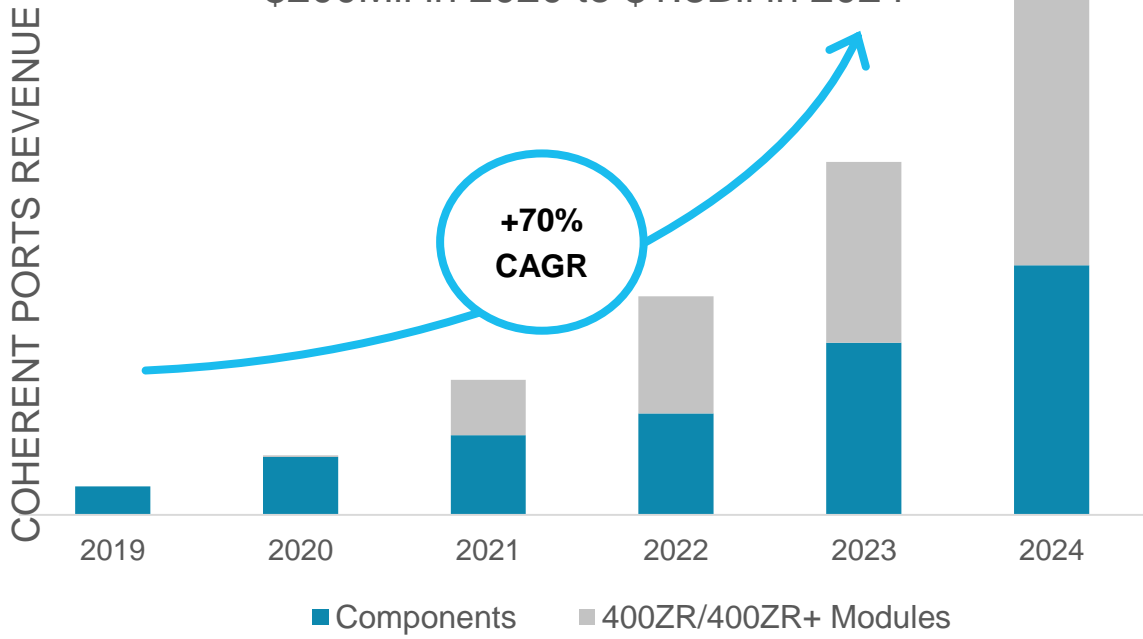
400G+ Ports Forecast at 110K in 2020
Increasing to 1100K in 2024



High Speed Coherent Is Technology of Choice

Total NPTN 400G+ TAM

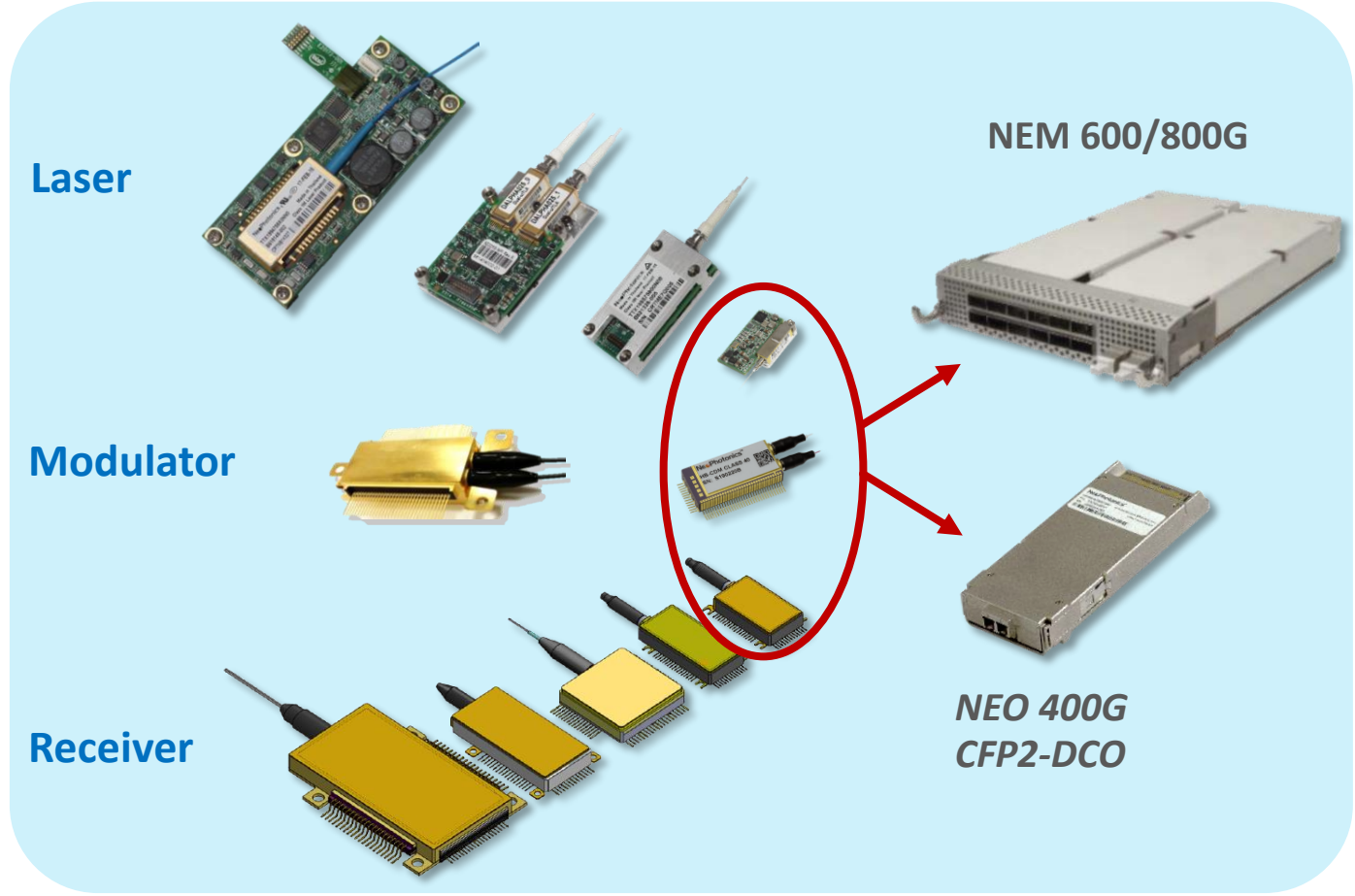
400G+ NPTN TAM Forecast to Increase from
\$200Mil in 2020 to \$1.8Bil in 2024



400ZR/ZR+ Modules and Chassis-based Components

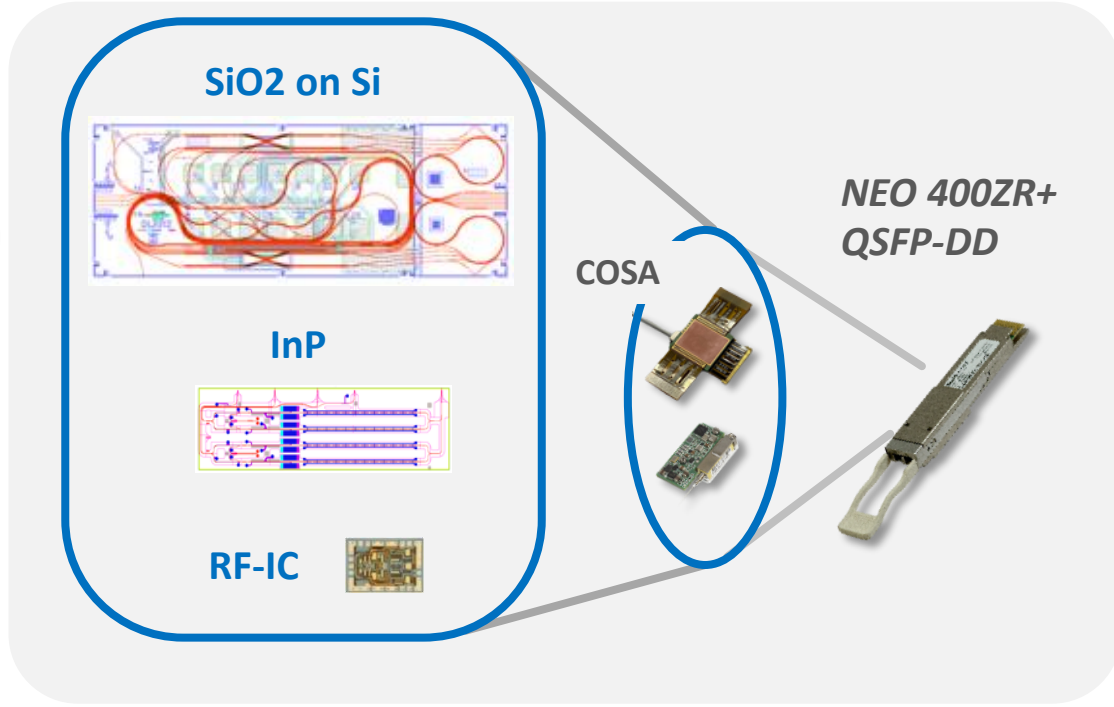
A Track Record of Leading Solutions for Larger Market Segments

NPTN Laser and InP Evolution 2010-2021



Coherent Evolution
100G → 800G

NPTN Silicon Photonics Evolution **2000**-2021

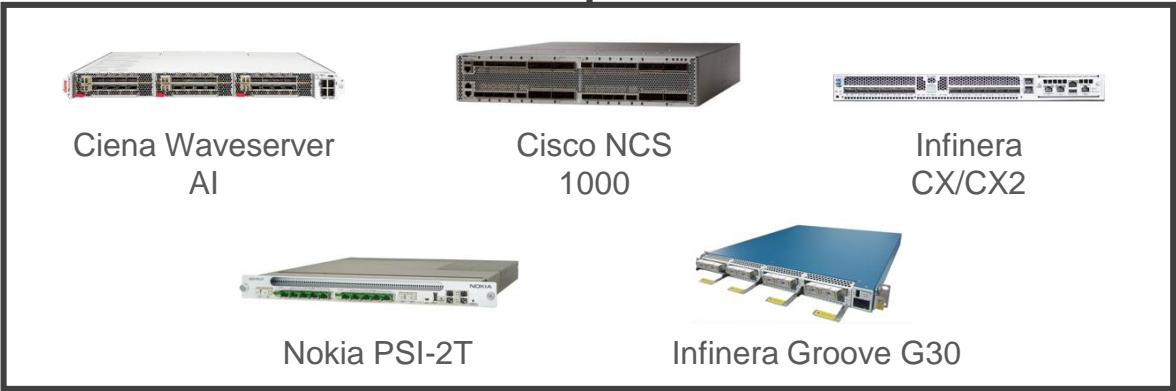
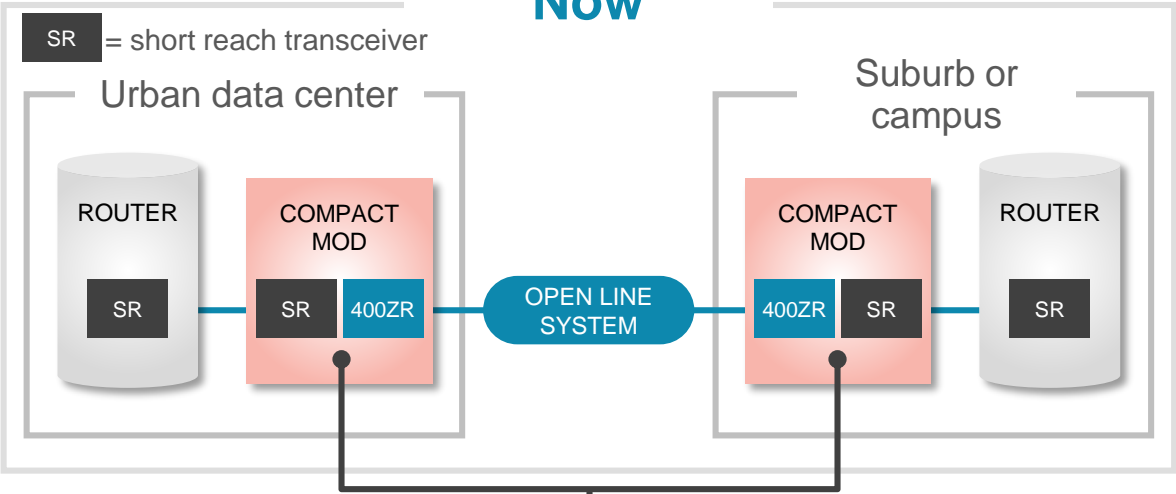


NeoPhotonics is the leading supplier with vertically integrated InP, Silicon Photonics and RF-ICs, uniquely positioned to address all ZR, ZR+ and LH segments with pluggable solutions.

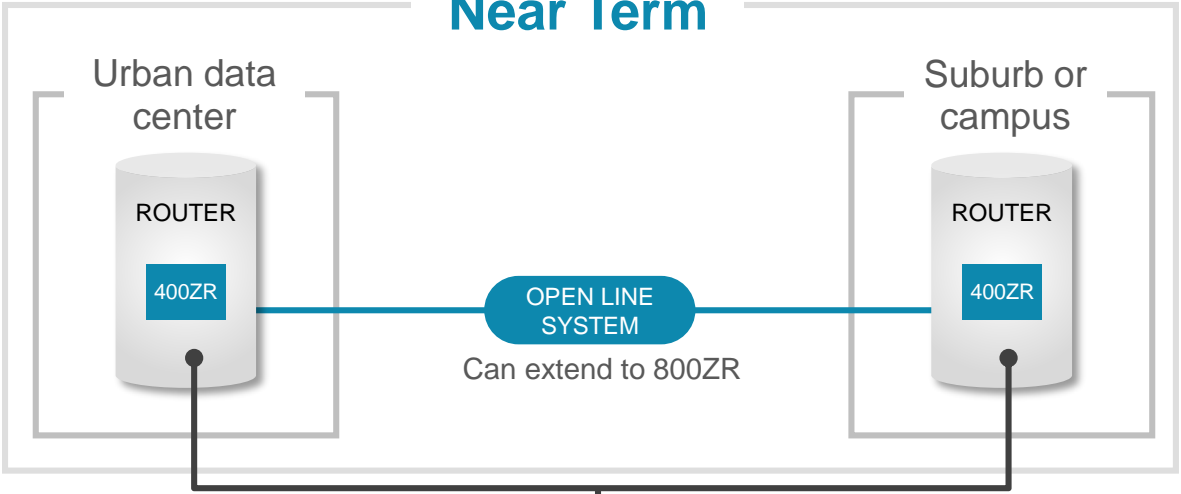
400ZR and 400ZR+ Are A “Sea Change” In DCI and Metro Networks

IP over DWDM will be displacing DWDM proprietary boxes with disaggregated 400ZR interconnections

Now



Near Term



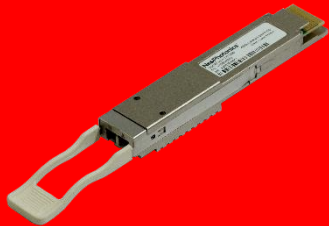
Powerful 400ZR Modules Yield Up To 75% Reduction In Cost Per Bit in DCI Networks

Fastest Growth of Coherent is 400G Modules and 600/800G Components

Pluggable 400ZR Modules Dominate Short Reach DCI/Edge; Chassis Based Systems Own Long Haul

DCI/Edge
(~100km)

400ZR Pluggable



GROWTH

400ZR+ Pluggable

Metro (~500km)

400ZR+
Pluggable



GROWTH

Chassis System

Long Haul
(~1000km)

400ZR+ Pluggable

GROWTH

Chassis System



- DCI/Edge Reaches
 - 80-120km
 - 400ZR Pluggables
 - QSFP-DD
- Metro Reaches
 - 400-600 km
 - 400ZR+ Modules
 - 600-800G Transponders
- Long Haul
 - ≥ 1000 km
 - High baud rates
 - Extended reach
 - Transponders

Hyperscale: QSFP-DD and OSFP 400ZR and 400ZR+ Modules

Growth Driver for 2021-2022 with new expanding TAM to hyperscalers

36 NeoPhotonics QSFP-DD Modules Operating in a fully populated Arista 1RU switch demonstrated effective operating performance within critical Thermal Load Limits



- Each of the world's leading operators of hyperscale data centers are in eval &/or qual stages for adopting NeoPhotonics 400ZR.
- We have demonstrated the successful operation of our modules at long haul distances of 2000 kilometers.
- This opens up a major fraction of the remaining communications market and further expanding growth potential.
- Expanded use cases for pluggable modules in metro and long haul

Three Vendors Have Are Able To Ship Compliant 400ZR Modules

NeoPhotonics Has A Decade Of High Volume Shipments Of Coherent Optical Components

Competitive Position of 400ZR Module Vendors

	NPTN	Vendor A	Vendor B
Status	Independent	Acquired	Acquired
Internal Laser	X		
Internal SiPho	X	X	X
Comp. Volume	X		
Internal DSP		X	X
Internal Driver	X		X
Internal TIA	X		X

- NPTN is vertically integrated on all optical components including ultra-narrow linewidth tunable lasers, receivers, modulators, drivers and TIAs
- NPTN supplies virtually all of the leading NEMs with our ultra-low noise tunable laser
 - More than 2 million NLW tunable lasers shipped
- NPTN Supplies 64 Gbaud and above Coherent Modulators and Receivers To Leading NEMs
 - More than 750 thousand ICRs shipped
- NPTN uses internal supply for the optical ICs including modulator drivers and TIAs.

Telco: CFP2-DCO 400G Module for Longer Reaches | Leveraging C++ Growth Driver for 2021-2022 with both China customers and western NEMs

Expanding Group of Customers

- NeoPhotonics, over the last 2 years, has become relevant to directly serve substantially all terrestrial comms markets. This is multiples of its previous served market in lasers and components.
 - ✓ Line-card performance in a pluggable form factor.
 - ✓ 400Gb/s for DCI and Metro network
 - ✓ Design based on NPTN industry leading coherent optics
 - ✓ Full Super C-band (C++) tunable
 - ✓ High performance to support unamplified 100km and amplified 2000km transmission
 - ✓ Commercial temperature operation with possibility to support extended temperature

Unique Value Proposition

High Volume NPTN Internal Components



Ultra-Narrow
Linewidth Tunable
Laser



64 GBaud Driver
Modulator (CDM)



64GBaud Micro
ICR with TIA



CFP2-DCO
400G Module

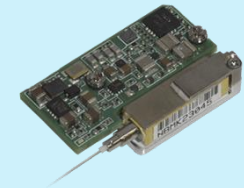
Differentiated Components Technology for the Highest Speed Over Distance

NPTN Is The Market Leading Provider of Highest Performance Optics

NPTN Optical Components Deliver *Critical* Performance Benefits

- **Narrow-Linewidth Tunable Laser (Nano ITLA)**

- **Narrow** Linewidth and **lowest** phase noise → **Increased** Distance & Capacity
- **Higher** optical output power → **Increased** Distance & Capacity
- **Lower** Power consumption → **Increased** Port density
- **Higher** Frequency accuracy and stability → **Increased** Capacity
- **Wider** tunable optical spectrum → **Increased** Capacity



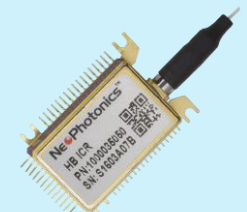
- **High Bandwidth Coherent Driver Modulator (HB-CDM)**

- **Higher** Bandwidth → **Increased** Capacity
- **Lower** Required driving voltage → **Lower** Power consumption
- **Lower** Insertion loss → **Higher** Optical output power → **Increased** Distance & Capacity
- **Lower** Power consumption → **Increased** Port density



- **High Bandwidth Intradyne Coherent Receiver (HB-ICR)**

- **Higher** Bandwidth → **Increased** Capacity
- **Lower** Thermal noise → **Improved** Link budget
- **Higher** Responsivity → **Improved** Link budget





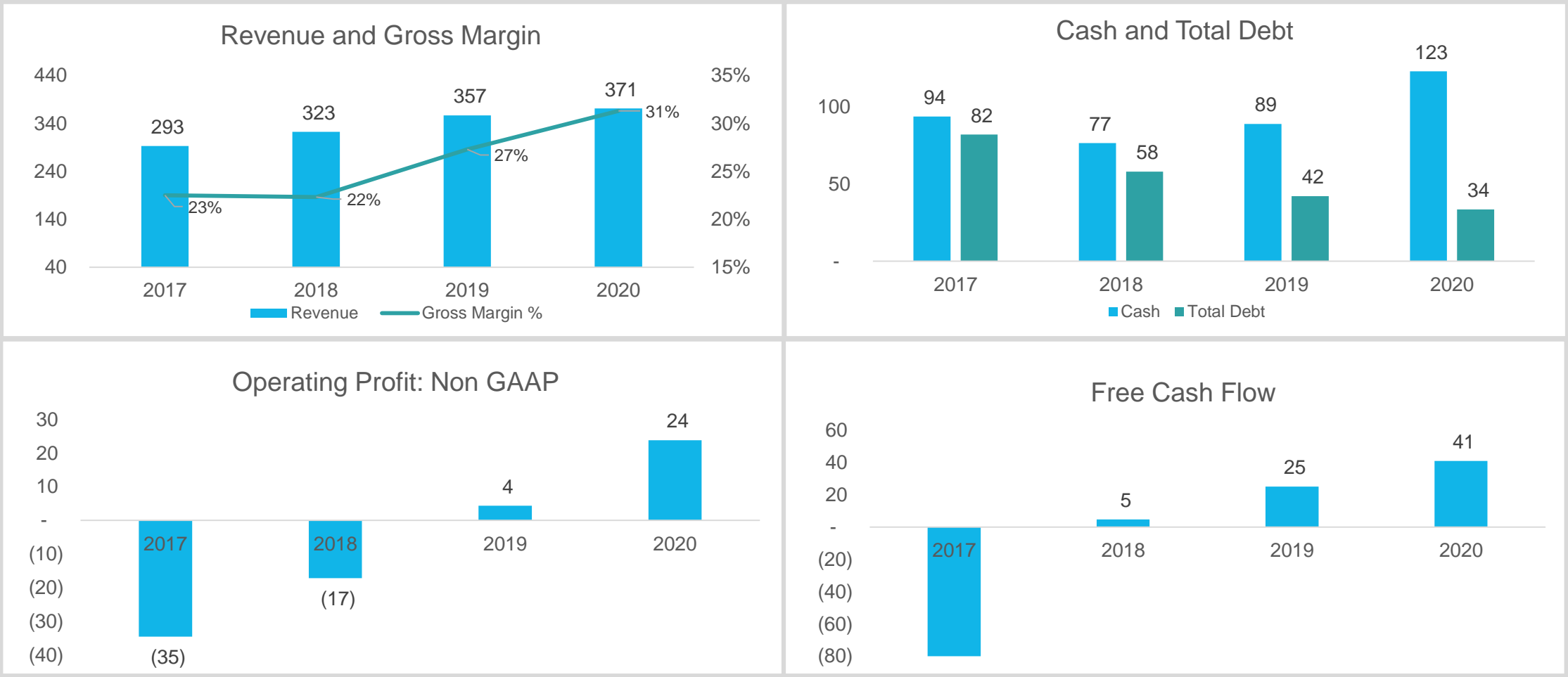
FINANCIAL VIEW

April 2021

Annual Financial Summary

(Non-GAAP, \$M)

Strong execution drove multi-year improvement prior to 2020 BIS restrictions.



NOTES: Non-GAAP results in 2020 exclude \$12.3 million of stock-based compensation expense, \$10.1 million for inventory write-downs, accelerated depreciation and restructuring expenses, \$1.0 million of amortization of acquisition-related intangibles and other costs, net gain of \$2.1 million of legal settlements and advisory services and a gain of \$1.0 million on the sale of assets.

Q1'21 Financial Summary

Following BIS restrictions, now executing shift to high speed components and coherent modules for data center interconnects

Q1'21 results met or beat forecasts across all metrics

Q1 2021	Non-GAAP Results	Outlook
Revenue	\$60.9M	\$57M-\$62M
Gross Margin	22.4%	18% to 22%
Operating Expenses	\$21.5M	\$22M to \$23M
EPS	(\$0.15)	(\$0.20) to (\$0.10)
Cash incl. STI & Restricted Cash	\$111M	

- 400G and above product ramp continues, up 134% yoy
- Strong product mix and cost reductions drove better than expected gross margin
- Operating expenses lower than expected on good execution of reductions and pushouts to Q2
- Cash is down \$12M from Q4, on buffering for supply chain risks and start of 400G module products
- Huawei is a customer, though immaterial

Notes:

The non-GAAP results for the first quarter of 2021 excludes a gain on the release of previously reserved materials for production of \$0.6 million, the impact of stock-based compensation expense of approximately \$3.3 million, of which \$0.5 million is estimated for cost of goods sold, accelerated depreciation, amortization & other costs of approximately \$0.5 million.

Outlook for Q2'21

Q2 revenue is impacted by light deployments and semiconductor shortages; risk will extend through the year. Shortages disproportionately impact the high end products, depressing gross margins. Long term demand remains robust.

Q2 2021	GAAP	Non-GAAP
Revenue	\$59M to \$65M	
Gross Margin	15% to 19%	17% to 21%
Operating Expenses	\$25M to \$26M	\$22.5M to \$23.5M
EPS	(\$0.35) to (\$0.25)	(\$0.30) to (\$0.20)

For 2021, we expect

- Continuing strong growth of 400G and beyond products, with 2H'21 production ramp of 400ZR and 400ZR+ modules.
- Revenue growth, excluding Huawei, of 25%-35%, on North American timing delay. EAR-compliant products to result in modest Huawei revenue.
- Inventory growth to buffer supply chain issues and ramp 400ZR component inventory.
- A return to operating profit in Q3'21

Notes:

The non-GAAP outlook for the second quarter of 2021 excludes the expected impact of stock-based compensation expense of approximately \$3.3 million, of which \$0.7 million is estimated for cost of goods sold, accelerated depreciation and amortization of \$0.4 million.

Non-GAAP EPS outlook assumes approximately 51.6 million basic shares outstanding.

NPTN Well Positioned to Deliver Accelerating Growth 2H'21 and Beyond

Market evolutions will fuel growth of NeoPhotonics

Market Growth Drivers

- Hyperscale Data Center move to 400G coherent interconnects is a \$1B+ market opportunity for NPTN.
- Bandwidth Deployment rates expanding, notably at highest speeds; accelerating post-pandemic
- 5G: More traffic, deployment, virtualization
- Edge computing with access functions and WAN services to the edge

Operational Growth Drivers for H2 2021

- NPTN is a leader in 400G capable components, ramping in the second half.
- Expansion into coherent module markets, both Cloud data center and Telecom, expands accessible markets and increases penetration of NPTN coherent components.
- Increased tender and transmission build out in China in the second half

Financial Drivers & Outlook

- Our Q1 revenue at \$61 million is 28% YoY growth and 52% 400G and above, excluding Huawei; reflects good progress toward objective.
- Near- and long-term outlook is supported by future demand for unparalleled next generation products



NeoPhotonics

Reference

See also:

www.neophotonics.com/blog/
and
lr.neophotonics.com

Q1'21 Additional Revenue Detail

By Region	Q1'20	Q2'20	Q3'20	Q4'20	Q1'21
China	60%	61%	56%	20%	25%
Americas	19%	16%	17%	17%	9%
Rest of World	21%	23%	27%	63%	66%
TOTAL	100%	100%	100%	100%	100%
By Product Group	Q1'20	Q2'20	Q3'20	Q4'20	Q1'21
High Speed Products	92%	90%	92%	92%	94%
Networking Products	8%	10%	8%	8%	6%
TOTAL	100%	100%	100%	100%	100%
400G+ Capable	14%	14%	26%	46%	52%
Customer Detail	Q1'20	Q2'20	Q3'20	Q4'20	Q1'21
Huawei	52%	52%	44%	0%	1%
Top 5	85%	82%	82%	75%	80%
Top 10	95%	94%	95%	90%	91%
TOTAL Customers >10%	2	2	3	4	4

Revenue by geography is based on “ship to” location. It is not necessarily reflective of end use location.

“High Speed Products” refers to transmitter, receiver and switching products for optical transmission applications at data rates of 100Gbps and faster.

“Networking Products” are sold in optical communications networks for use at data rates below 100Gbps; includes passive products that do not have a data rate.

400G+ capable includes products that are capable of handling speeds of 400G, 600G, 800G and higher.

Q1'21 P&L Performance (Non-GAAP)

(\$ Millions)	2019	Q1'20	Q2'20	Q3'20	Q4'20	2020	Q1'21	Target Model
Revenue \$	\$356.8	\$97.4	\$103.2	\$102.4	\$68.2	\$371.2	60.9	100%
Product Margin \$	117.6	34.8	37.4	37.7	25.4	135.4	24.7	
Product Margin %	33%	36%	36%	37%	37%	36%	41%	
Mfg. Inefficiencies	(15.2)	(4.2)	(1.4)	(2.4)	(6.2)	(14.2)	(7.4)	
Other COGS	(5.1)	(0.2)	(1.7)	(0.9)	(2.4)	(5.2)	(3.6)	
Gross Margin \$	97.3	30.4	34.3	34.4	16.8	116.0	13.7	
Gross Margin %	27%	31%	33%	34%	25%	31%	22%	35%
R&D	54.3	11.1	12.7	14.5	14.4	52.7	12.2	
S&M	13.7	3.1	3.5	3.1	3.4	13.2	3.3	
G&A	25.0	6.1	7.4	6.9	5.9	26.2	6.0	
TOTAL OPEX	93.0	20.3	23.6	24.5	23.7	92.2	21.5	25%
Operating Margin	\$4.3	\$10.1	\$10.7	\$9.9	(\$6.9)	\$23.9	(\$7.8)	
Operating Margin %	1%	10%	10%	10%	(10%)	6%	(13%)	10%
Adj. EBITDA	\$32.7	\$17.8	\$16.9	\$13.1	(\$4.5)	\$43.3	(\$0.7)	

Note:

Non-GAAP results in the first quarter of 2021 exclude a gain on the release of previously reserved materials for production of \$0.6 million, expenses of \$3.3 million of stock-based compensation, approximately \$0.5 million of accelerated depreciation, amortization and other charges.

Q1'21 P&L Performance (GAAP)

(\$ Millions)	2019	Q1'20	Q2'20	Q3'20	Q4'20	2020	Q1'21
Revenue \$	\$356.8	\$97.4	\$103.2	\$102.4	\$68.2	\$371.2	\$60.9
Cost of Goods Sold	268.0	67.7	69.7	78.0	52.7	268.1	47.6
Gross Margin \$	88.8	29.7	33.5	24.4	15.5	103.1	13.3
R&D	57.6	11.9	13.7	15.3	15.3	56.1	13.1
S&M	16.1	3.6	4.3	3.7	4.0	15.6	3.9
G&A	29.8	6.8	8.8	7.8	7.2	30.6	7.3
Other Charges	(0.1)	-	0.1	0.2	(3.1)	(2.8)	0.1
TOTAL OPEX	103.4	22.3	26.9	27.0	23.3	99.5	24.4
Operating Margin	(\$14.5)	\$7.4	\$6.6	(\$2.6)	(\$7.9)	\$3.6	(\$11.1)

Financial Measures GAAP to Non-GAAP Reconciliation

	2020	Q1'21
GAAP Net Income/(Loss)	(4.4)	(10.7)
Stock Based Compensation	12.3	3.3
Legal Settlement and Advisory Services	(2.1)	-
Gain/Loss on Sale of Assets	(1.0)	-
Accelerated Depreciation, Restructuring & Inventory Write Downs	10.1	(0.4)
Amortization of Intangibles, FA Step Up and Other Costs	1.0	0.3
Tax on Non GAAP Adjustments	0.8	-
Non-GAAP Net Income/(Loss)	16.7	(7.5)

Q1'21 Balance Sheet

(\$ Millions)	Q4'19	Q1'20	Q2'20	Q3'20	Q4'20	Q1'21
Cash & Equivalents	\$89	\$109	\$113	\$123	\$123	\$111
Working Capital	122	133	144	149	147	140
Total Assets	\$335	\$342	\$349	\$346	\$324	\$295
Total Debt	42	41	36	35	34	32
Total Liabilities	174	175	170	165	143	125
Shareholders' Equity	160	168	179	181	181	170



Thank you

NeoPhotonics