



Ciena Corporation

Earnings Presentation

Winter 2021 / 2022

Forward-looking statements and non-GAAP measures

Information in this presentation and related comments of presenters contain a number of forward-looking statements. These statements are based on current expectations, forecasts, assumptions and other information available to the Company as of the date hereof. Forward-looking statements include Ciena's prospective financial results, return of capital plans, business strategies, expectations about its addressable markets and market share, and business outlook for future periods, as well as statements regarding Ciena's expectations, beliefs, intentions or strategies regarding the future. Often, these can be identified by forward-looking words such as "target," "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "should," "will," "plan," "predict," "potential," "project," "continue," and "would" or similar words.

Ciena's actual results, performance or events may differ materially from these forward-looking statements made or implied due to a number of risks and uncertainties relating to Ciena's business, including: the effect of broader economic and market conditions on our customers and their business; our ability to execute our business and growth strategies; the duration and severity of the COVID-19 pandemic and the impact of countermeasures taken to mitigate its spread on macroeconomic conditions, economic activity, demand for our technology solutions, short- and long-term changes in customer or end user needs, continuity of supply chain, our business operations, liquidity and financial results; changes in network spending or network strategy by our customers; seasonality and the timing and size of customer orders, including our ability to recognize revenue relating to such sales; the level of competitive pressure we encounter; the product, customer and geographic mix of sales within the period; supply chain disruptions and the level of success relating to efforts to optimize Ciena's operations; changes in foreign currency exchange rates affecting revenue and operating expense; factors beyond our control such as natural disasters, climate change, acts of war or terrorism, and public health emergencies, including the COVID-19 pandemic; the impact of the Tax Cuts and Jobs Act; changes in tax or trade regulations, including the imposition of tariffs, duties or efforts to withdraw from or materially modify international trade agreements; and the other risk factors disclosed in Ciena's periodic reports filed with the Securities and Exchange Commission (SEC) including Ciena's Annual Report on Form 10-K filed with the SEC on December 17, 2021.

All information, statements, and projections in this presentation and the related earnings call speak only as of the date of this presentation and related earnings call. Ciena assumes no obligation to update any forward-looking or other information included in this presentation or related earnings calls, whether as a result of new information, future events or otherwise.

In addition, this presentation includes historical, and may include prospective, non-GAAP measures of Ciena's gross margin, operating expense, operating profit, EBITDA, net income, and net income per share. These measures are not intended to be a substitute for financial information presented in accordance with GAAP. A reconciliation of non-GAAP measures used in this presentation to Ciena's GAAP results for the relevant period can be found in the Appendix to this presentation. Additional information can also be found in our press release filed this morning and in our reports on Form 10-Q filed with the Securities and Exchange Commission.

With respect to Ciena's expectations under "Business Outlook", Ciena is not able to provide a quantitative reconciliation of the adjusted (non-GAAP) gross margin, operating expense, operating margin and earnings per share guidance measures to the corresponding gross profit and gross profit percentage, and operating expense GAAP measures without unreasonable efforts. Ciena cannot provide meaningful estimates of the non-recurring charges and credits excluded from these non-GAAP measures due to the forward-looking nature of these estimates and their inherent variability and uncertainty. For the same reasons, Ciena is unable to address the probable significance of the unavailable information.

Our Pedigree

Our portfolio

Enabling the Adaptive Network™



SOFTWARE CONTROL AND AUTOMATION

Blue Planet® multi-domain orchestration, federated inventory, and service order management solutions support the broadest range of closed-loop automation use cases across multi-layer, multi-vendor networks.

Ciena's Manage, Control and Plan (MCP) domain controller provides intelligent, data-driven software-defined programmability to lifecycle operations of Ciena networks.



ANALYTICS AND INTELLIGENCE

Ciena and Blue Planet® Unified Assurance and Analytics: Open suite of software products that unifies multi-layer, multi-domain assurance, with AI-powered analytics to provide strategic insights to transform and simplify business, IT, and network operations.

MCP Advanced Apps: Applications designed to enhance operations and simplify user experience for optimization of multi-layer network performance, featuring Liquid Spectrum™ for increased optical network capacity and service availability, and Adaptive IP™ Apps for advanced real-time visualization and analysis of IP networks.



PROGRAMMABLE INFRASTRUCTURE

Converged Packet-Optical Networking: Software-programmable platforms, featuring Ciena's award-winning WaveLogic™ Photonics with optional agnostic packet/OTN switching, designed to maximize scale, flexibility, and open networking. Optimizes network performance across applications from metro to submarine, and is the dominant portfolio used globally for Data Center Interconnect.

Routing and Switching: Purpose-built routing, switching, and x86 VNF hosting platforms—using a common Service-Aware Operating System (SAOS)—provide the building blocks for low-touch, high-velocity IP, Segment Routing, Ethernet, MPLS, and 10G PON in access to metro networks.

CIENA SERVICES

A consultative approach to build, operate, and continually improve customers' networks to accelerate their unique journey to the Adaptive Network.

We bring experienced technical personnel, best practices, and processes—along with the most effective tools for handling network complexities to work alongside customers every step of the way.

Our foundational strengths and execution set us apart from the competition



We own the key enabling technologies for our solutions and use an unmatched investment capacity to force the pace of invention in our industry



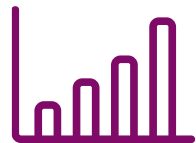
We have a broad-based business that spans key customer segments, a wide range of solutions and applications, and multiple geographies



We have a critical mass of engineering, sales and customer support experts and our reach extends to every region around the world

Our approach

Strong execution of our strategy: innovation leadership, diversification, and scale...



Lead

Our Core Business

- Maintain innovation leadership
- Grow our optical infrastructure business by addressing fast-growing opportunities
- Pluggables as a new consumption model
- Increase international business



Access, Disrupt & Expand

Routing and Switching | Software & Services Portfolio



- Expand use cases and addressable markets
- Innovate and diversify across our portfolio to address the emerging Next Gen Metro & Edge for 5G and cloud applications
- Drive digital transformation
- Software automation of network operator environments using Adaptive IP, Blue Planet, and MCP
- Execute services-led GTM model

...drives our differentiated ability to create and seize opportunities

We are an industry-leading, global networking systems, services, and software company



\$3.6B

Annual Revenue



7%

5YR CAGR



\$1.7B

Cash Position



#1 or #2¹

Market Position



35+

Countries



7,200+

Employees



1,700+

Customers



Strong²

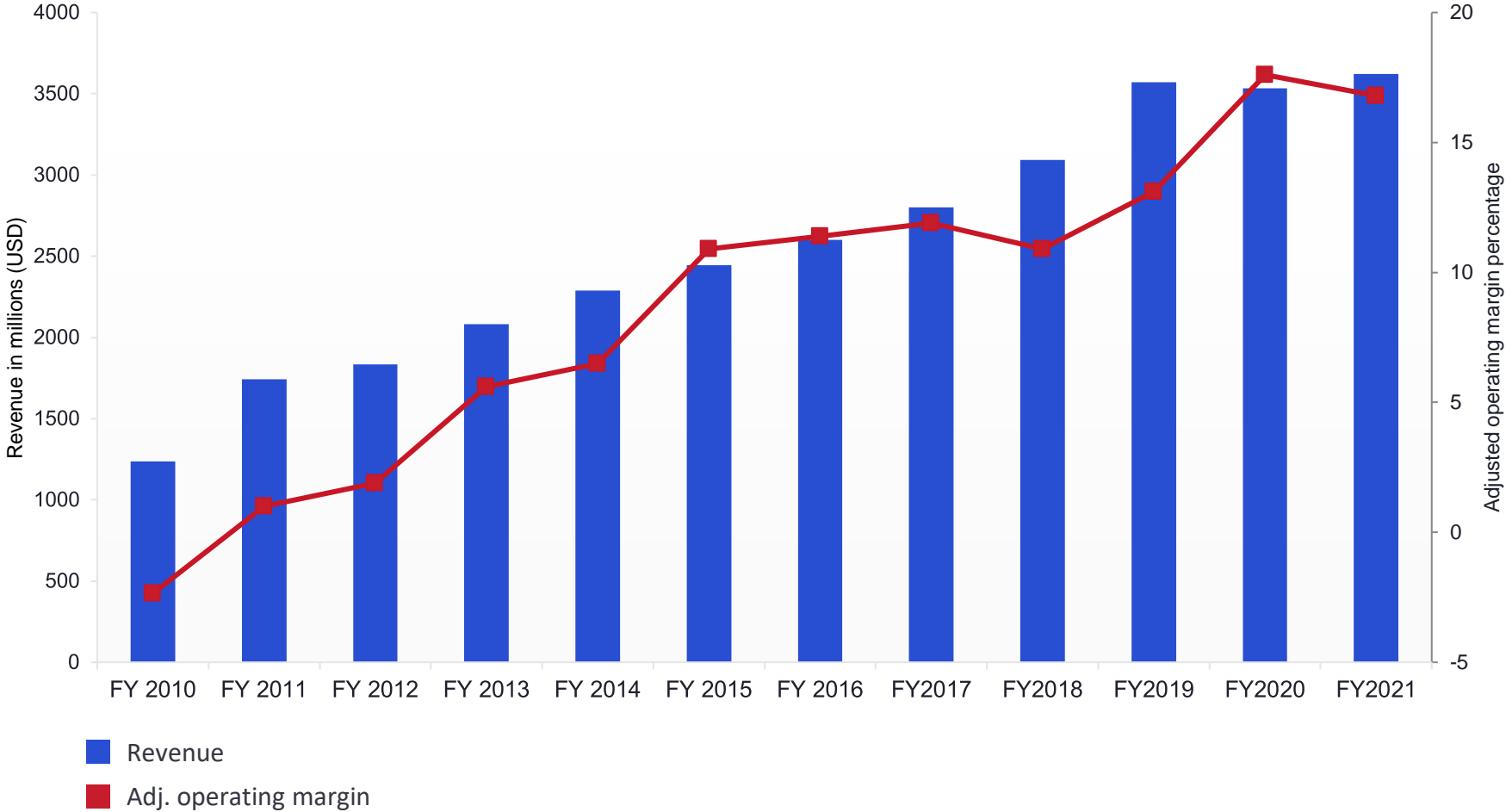
Governance Practices

Note: As of FYE or for FY 2021.

¹ As cited by Omdia, Dell'Oro Group and Cignal AI for different markets. See Market leadership slide.

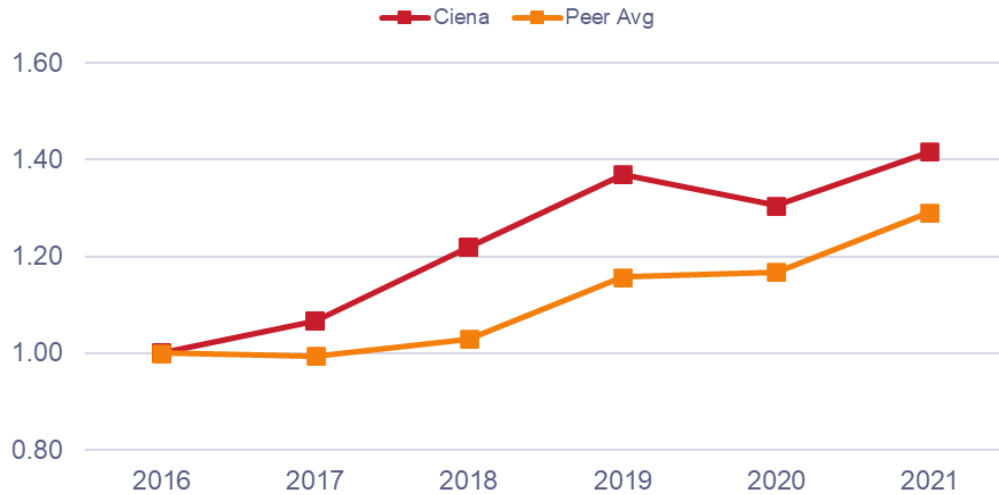
² ISS QualityScore of 1 (out of 10) - Bloomberg

Strong momentum in performance & growth

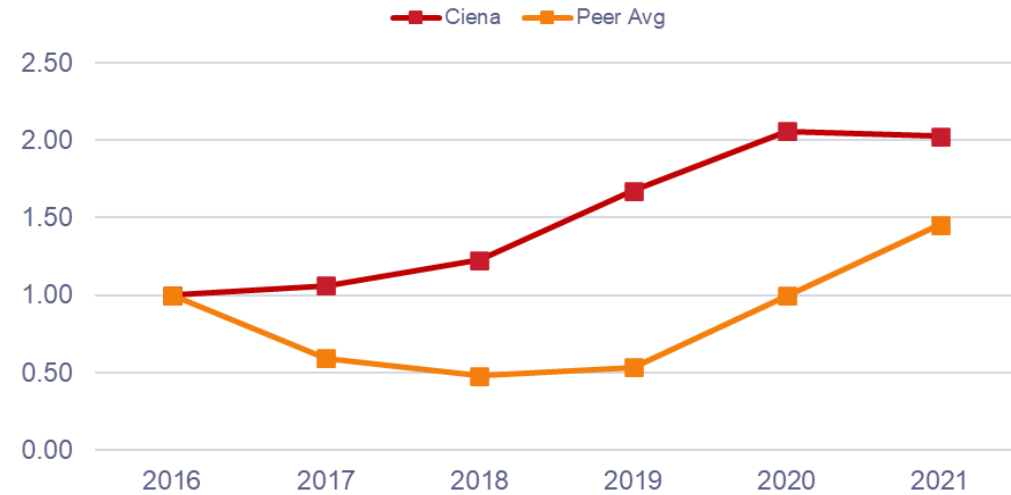


Delivering resilient financial performance

Normalized Revenue



Normalized Adjusted OM



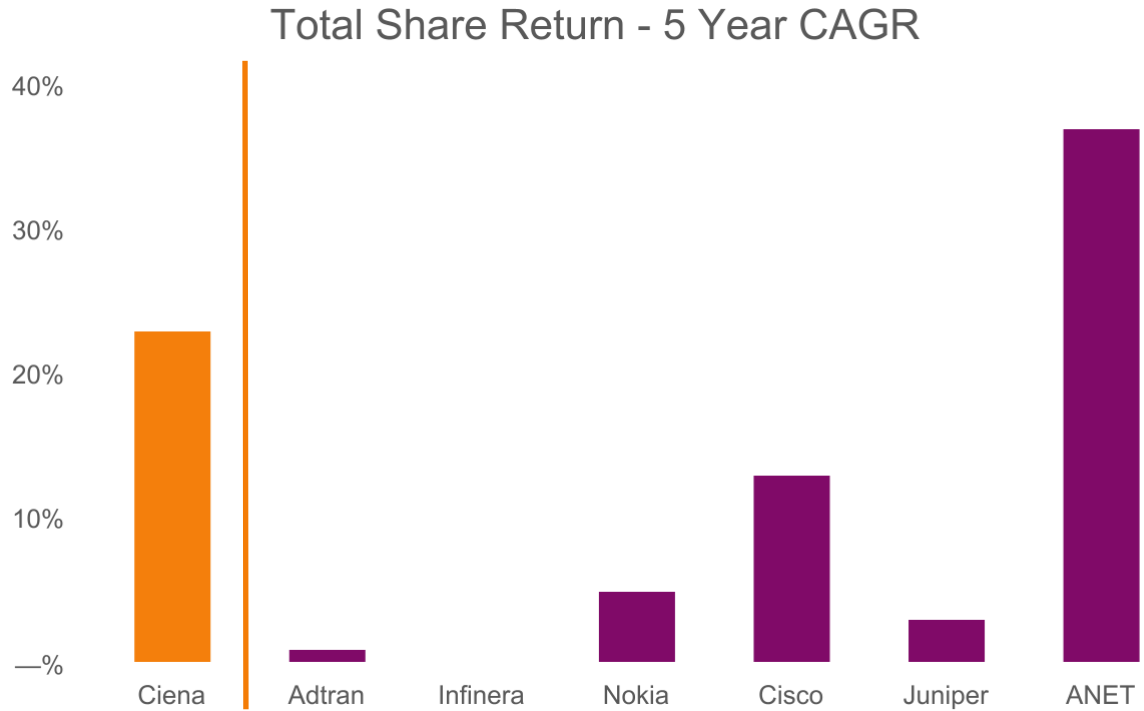
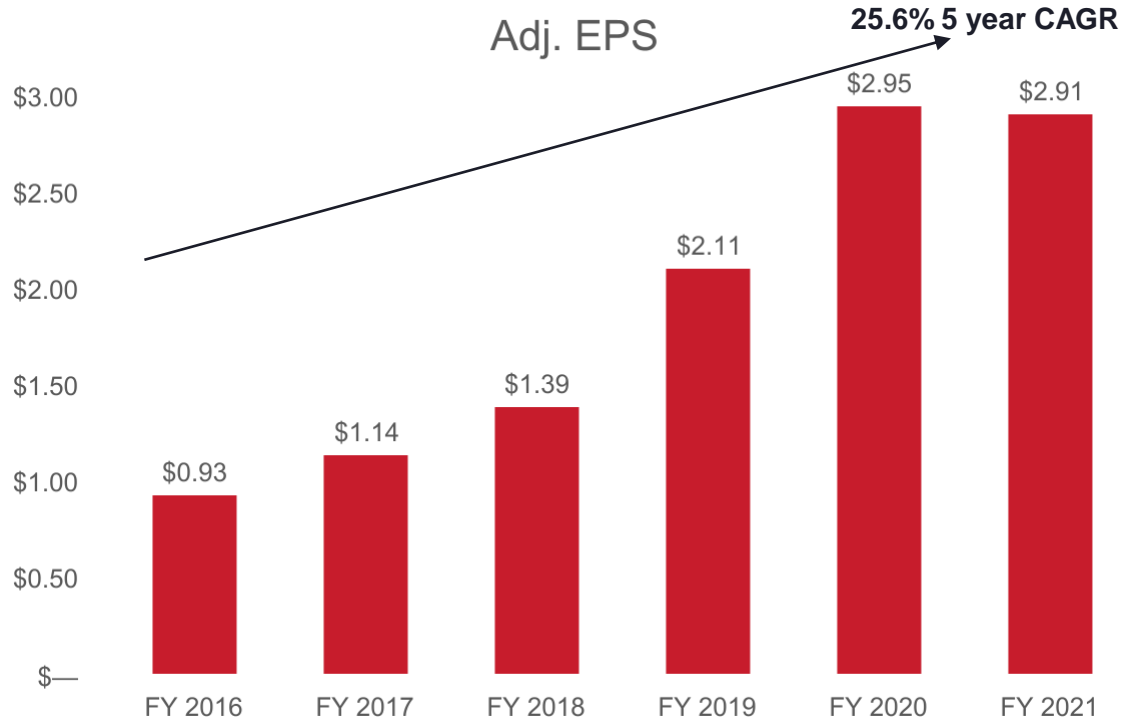
Source: Company filings

Peer Average: ACIA¹, ADTN, ADVA, ANET, CSCO, INFN², JNPR and NOKIA Infrastructure segment

*FY 2021 includes Q4 consensus for industry average and midpoint of Ciena's Q1 FY22 guide

1. ACIA has been removed from the list since 2021 after acquisition
2. INFN represents INFN+Coriant from the time the acquisition closed

Delivering profitability and total shareholder return



Source: company disclosures and S&P Capital IQ
 *Represents 11/1/2016-10/30/2021

Market context



Six mega trends driving network investment

Cloud & Edge



Data Center



IoT & Connected Objects



Digital Transformation



Mobility & 5G

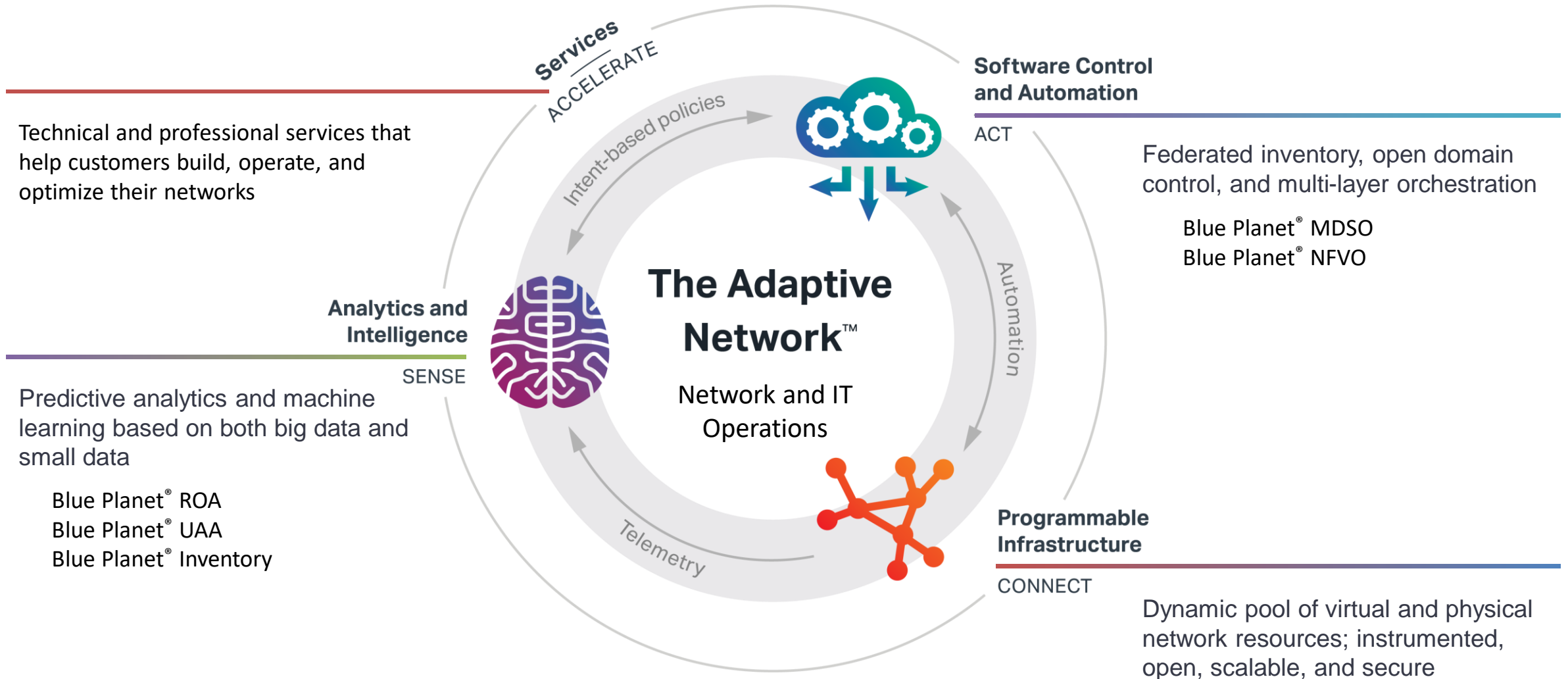


Virtual & Hybrid Lifestyles



Our vision for a new network end-state

Closing the Loop – to deliver the Adaptive Network



Market leadership



#1 GLOBALLY

- DATA CENTER INTERCONNECT
- DATA CENTER INTERCONNECT FOR ICP/CNPs
- PURPOSE-BUILT/COMPACT MODULAR DCI
- OPTICAL NETWORKING FOR ICP/CNPs
- OPTICAL NETWORK HARDWARE VENDOR SCORECARD
- OPTICAL EQUIPMENT VENDOR LEADERSHIP SP SURVEY
- SLTE WDM
- ACCESS SWITCHING

#1 N. AMERICA

- TOTAL OPTICAL NETWORKING
- DATA CENTER INTERCONNECT
- TOTAL WDM
- LH WDM
- METRO WDM
- SLTE WDM
- ACCESS SWITCHING

#2 GLOBALLY

- TOTAL OPTICAL NETWORKING
- TOTAL WDM
- LH WDM
- METRO WDM

Optical Networking Report, 3Q21
Data Center Interconnect Market Share Report, 3Q21
Optical Network HW Vendor Scorecard, Jun 2020
Optical Equipment Vendor Leadership Global Service Provider Survey, Dec 2019
Service Provider Switching & Routing Report, 3Q21

#1 GLOBALLY

- PURPOSE-BUILT/COMPACT MODULAR DCI
- OPTICAL FOR CLOUD & COLO
- SLTE WDM
- PACKET ACCESS

#1 N. AMERICA

- TOTAL OPTICAL NETWORKING
- PURPOSE-BUILT/COMPACT MODULAR DCI
- OPTICAL FOR CLOUD & COLO
- TOTAL WDM
- LH WDM
- METRO WDM
- SLTE WDM
- PACKET ACCESS

#2 GLOBALLY

- TOTAL OPTICAL NETWORKING
- TOTAL WDM
- LH WDM
- METRO WDM

Transport Hardware Report, 3Q21
Transport Customer Markets Report, 2Q21
Transport Applications Report, 2Q21

#1 GLOBALLY

- DATA CENTER INTERCONNECT
- PURPOSE-BUILT/COMPACT MODULAR DCI
- INTERNET CONTENT PROVIDER CUSTOMERS
- CABLE MSO CUSTOMERS
- LH WDM

#1 N. AMERICA

- DATA CENTER INTERCONNECT
- TOTAL OPTICAL NETWORKING
- OPTICAL PACKET
- TOTAL WDM
- LH WDM
- METRO WDM

#2 GLOBALLY

- TOTAL OPTICAL NETWORKING
- OPTICAL PACKET
- TOTAL WDM
- METRO WDM

Optical Transport Report, 3Q21

Recent Financials

FY 2021 key achievements

We are driving the pace of innovation

- WL5 Extreme (WL5e) total number of customers of 140 including 75 in 2021
- 41 wins in our Routing and Switching portfolio and expanded our portfolio of offerings
- Blue Planet revenue grew 23% YoY
- Commercially shipped our first 400 ZR pluggables, WL5 Nano

We have a durable business and financial model

- Despite headwinds from COVID-19 our profitability and cash metrics remained strong
- Adj. operating margin* was 16.8%
- Our balance sheet represents a competitive advantage
 - Ended the year with approx. \$1.7B in cash and investments
 - Leverage remains below our target level

We are committed to our people and communities

- Published an updated Sustainability Report highlighting programs that create a more sustainable and connected future
- Launched Digital Inclusion Commitment initiative with a goal to provide opportunities for 100,000 underserved students in our global communities
- Surpassed FY21 corporate goal of 20,000 volunteer hours in the communities where our employees live and work

As COVID-19 challenges vary around the world, we remain vigilant and committed to our customers and employees

* A reconciliation of these non-GAAP measures to our GAAP results is included in the press release for the relative period.

FY 2021 comparative financial highlights

	FY 2021	FY 2020
Revenue	\$3.62B	\$3.53B
Adjusted Gross Margin*	47.9%	47.4%
Adjusted Operating Expense*	\$1.13B	\$1.06B
Adjusted Operating Margin*	16.8%	17.6%
Adjusted EBITDA*	\$703M	\$714M
Adjusted EPS*	\$2.91	\$2.95

* A reconciliation of these non-GAAP measures to our GAAP results is included in the press release for the relative period.

FY 2021 comparative operating metrics

	FY 2021	FY 2020
Cash and investments	\$1.67B	\$1.32B
Cash from operations	\$542M	\$494M
DSO	98	82
Inventory Turns	4.1	4.6

Q4 Fiscal 2021 results

Q4 FY 2021 key highlights

Achieving balanced growth

- Non-telco represented 39% of total revenue
- Direct web-scale contributed 18% of total revenue
- APAC contributed 12% of total revenue
- Blue Planet was up 19% QoQ

Driving the pace of innovation

- R&D investment was \$147M or 14% of revenue
- 15 new wins on WaveLogic Ai and 34 new wins on WaveLogic 5e in Q4
- Shipped our first 400 ZR pluggables, WL5 Nano

Delivering shareholder value

- YTD¹ total stockholder return of 14%
- Adjusted EPS* growth of 42% YoY
- Adjusted operating margin* improved by 100bps YoY
- Balance sheet strength:
 - FCF was \$243M
 - Cashflow from operations was \$255M

¹ Source: Capital IQ 12/31/20-11/30/21

* A reconciliation of these non-GAAP measures to our GAAP results is included in the appendix to this presentation.

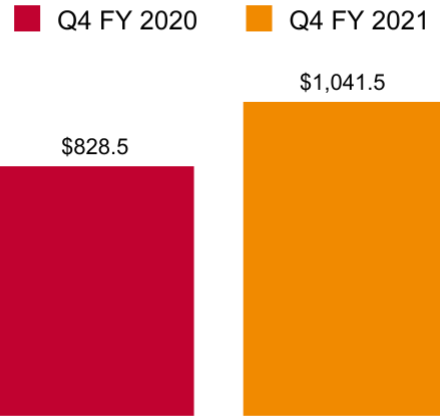
Q4 FY 2021 financial highlights*

	Q4 FY 2021	Q4 FY 2020
Revenue	\$1,041M	\$828M
Adjusted Gross Margin*	46.3%	49.5%
Adjusted Operating Expense*	\$307M	\$279M
Adjusted Operating Margin*	16.8%	15.8%
Adjusted EBITDA*	\$199M	\$155M
Adjusted EPS*	\$0.85	\$0.60

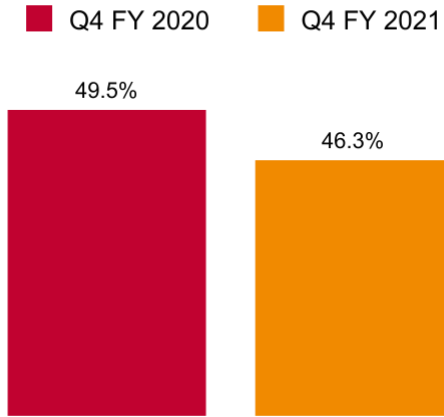
* A reconciliation of these non-GAAP measures to our GAAP results is included in the appendix to this presentation.

Q4 FY 2021 comparisons (year-over-year)

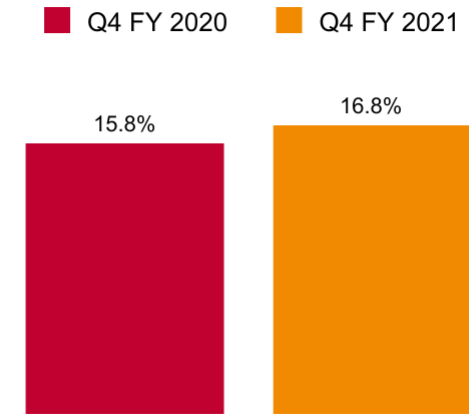
Revenue (in millions)



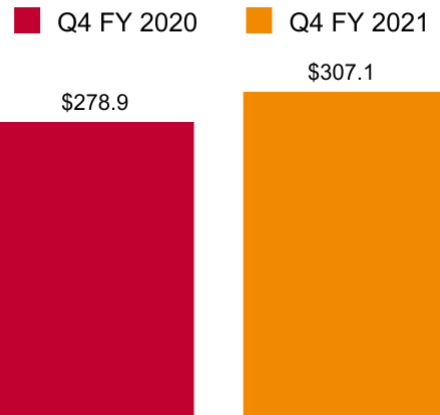
Adj. Gross Margin*



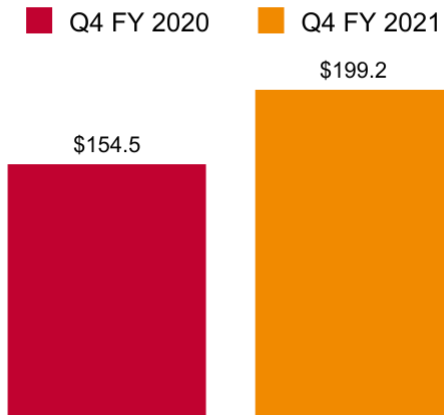
Adj. Operating Margin*



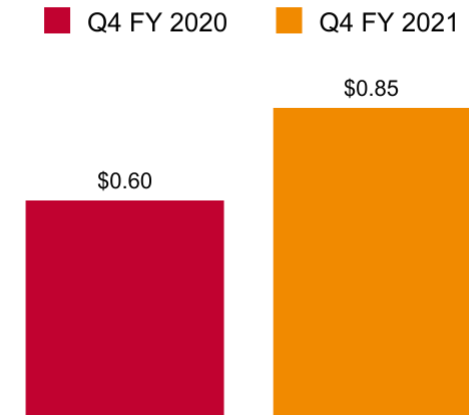
Adj. OpEx* (in millions)



Adj. EBITDA* (in millions)

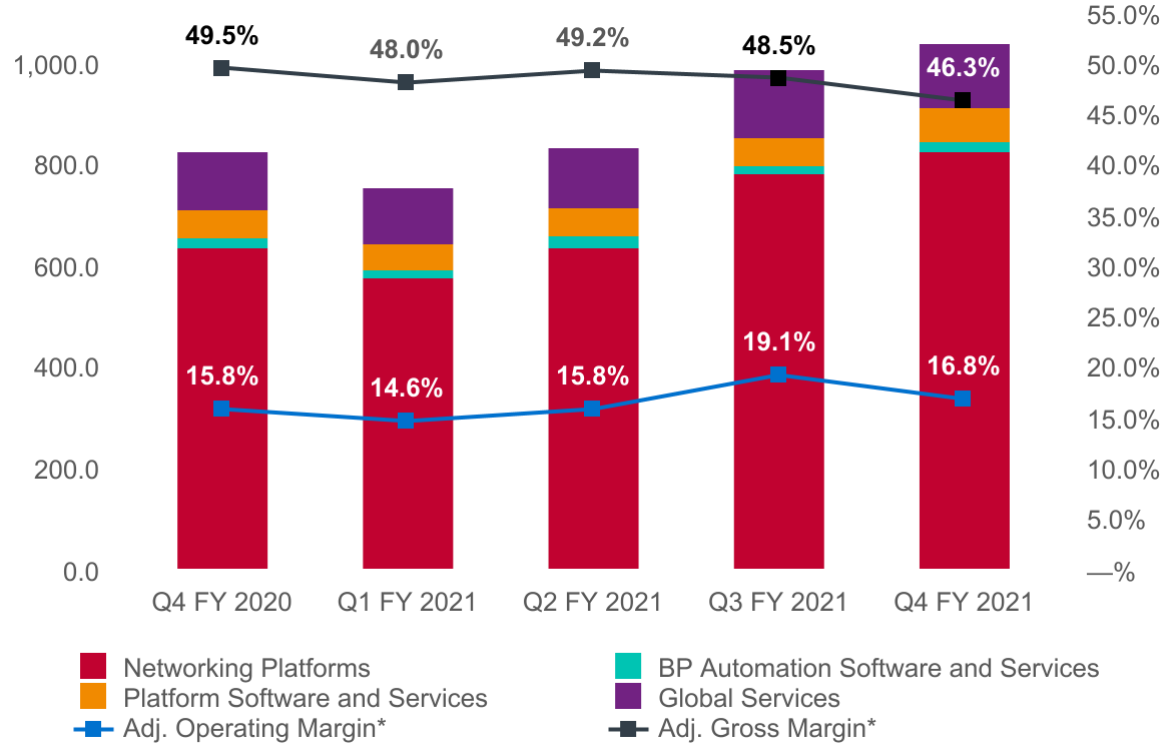


Adj. EPS*



Revenue by segment

(Amounts in millions)



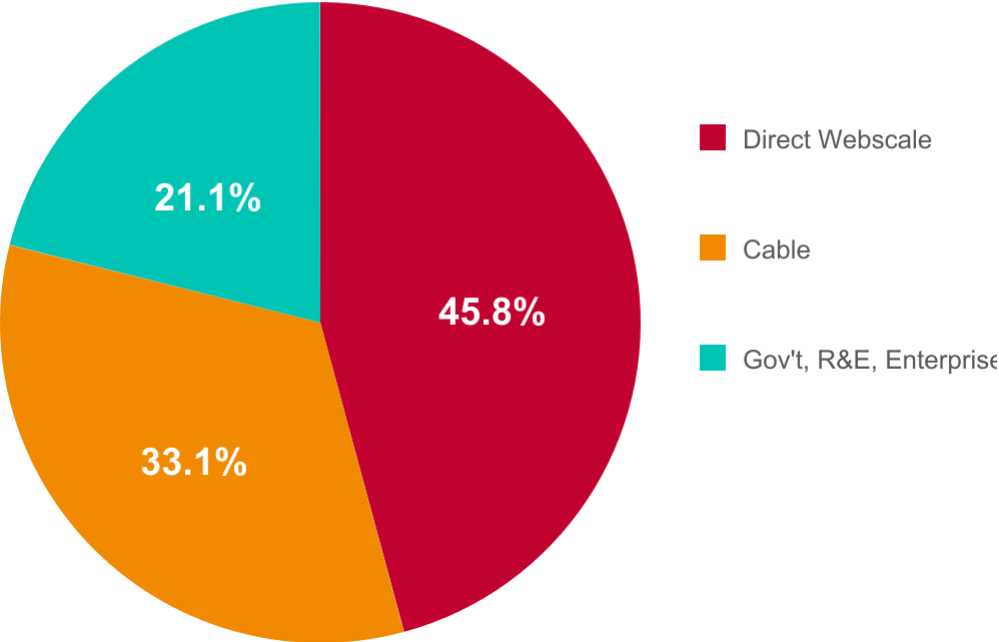
	Q4 FY 2021		Q4 FY 2020	
	Revenue	%**	Revenue	%**
Networking Platforms				
Converged Packet Optical	754.6	72.5	579.3	69.9
Routing and Switching	74.2	7.1	56.0	6.8
Total Networking Platforms	828.8	79.6	635.3	76.7
Platform Software and Services	66.1	6.3	54.5	6.6
Blue Planet Automation Software and Services	19.8	1.9	20.9	2.5
Global Services				
Maintenance Support and Training	71.3	6.9	67.0	8.1
Installation and Deployment	47.2	4.5	43.0	5.2
Consulting and Network Design	8.3	0.8	7.8	0.9
Total Global Services	126.8	12.2	117.8	14.2
Total	\$1,041.5	100.0 %	\$828.5	100.0 %

* A reconciliation of these non-GAAP measures to our GAAP results is included in the appendix to this presentation.

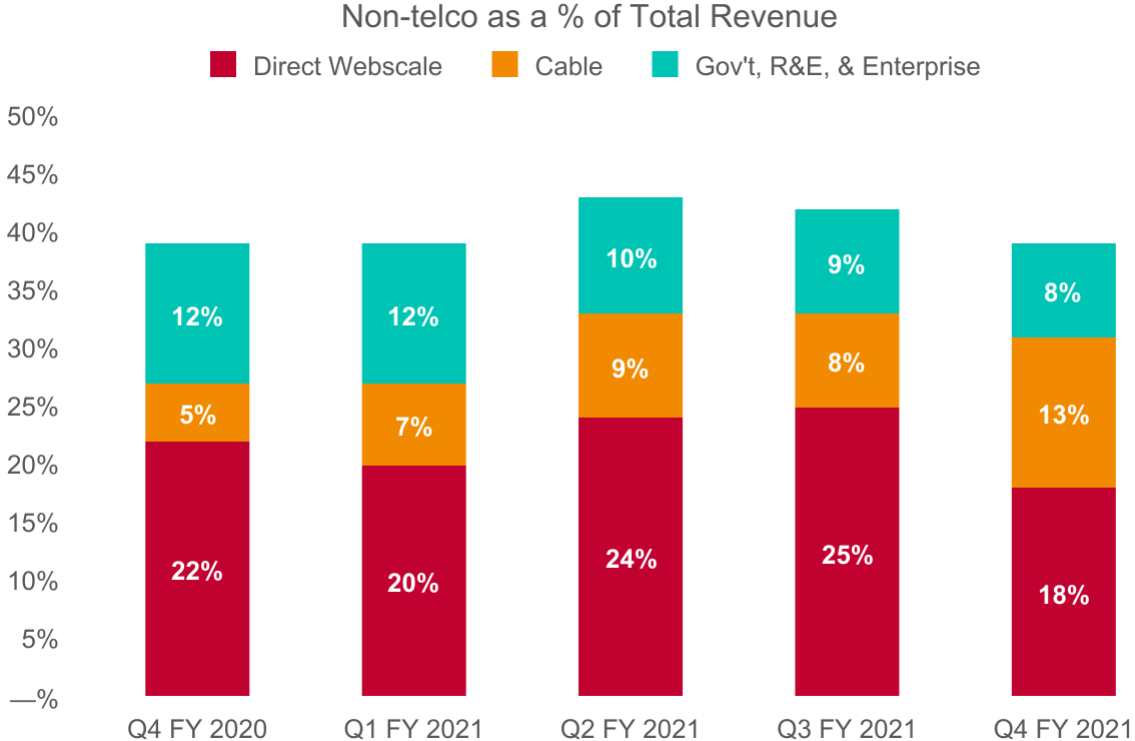
** Denotes % of total revenue

Continued strength derived from non-telco revenue

Q4 FY 2021
Non-telco revenue *

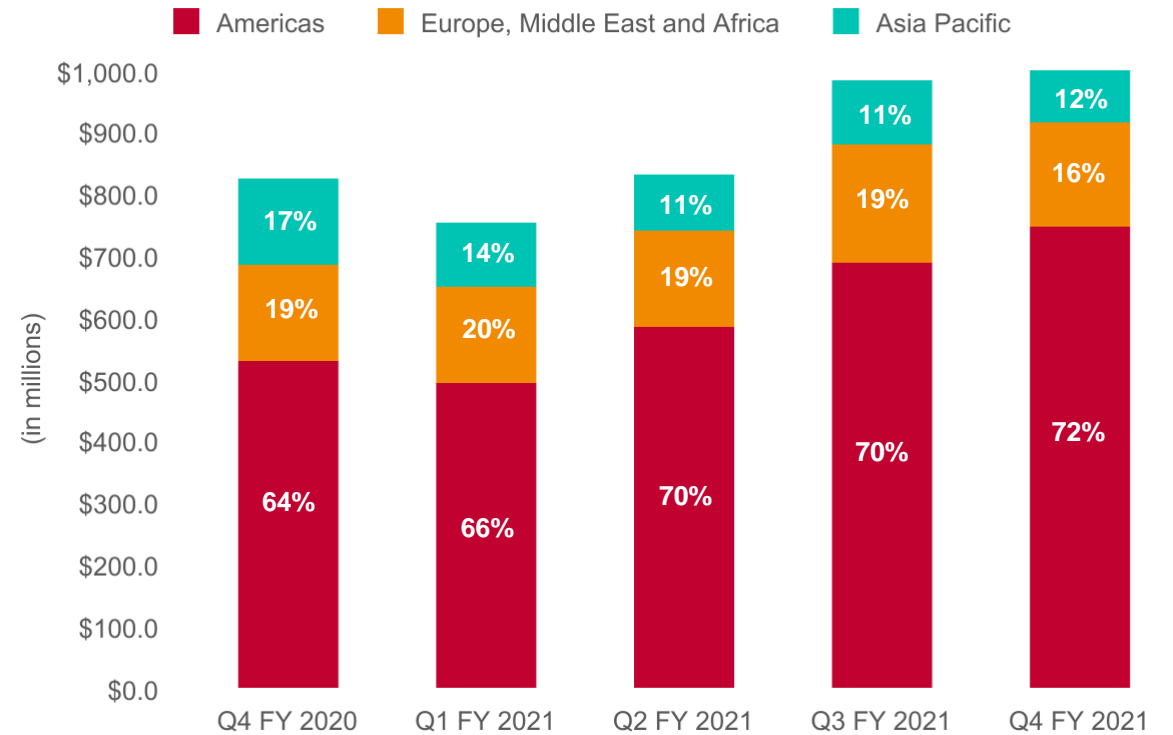
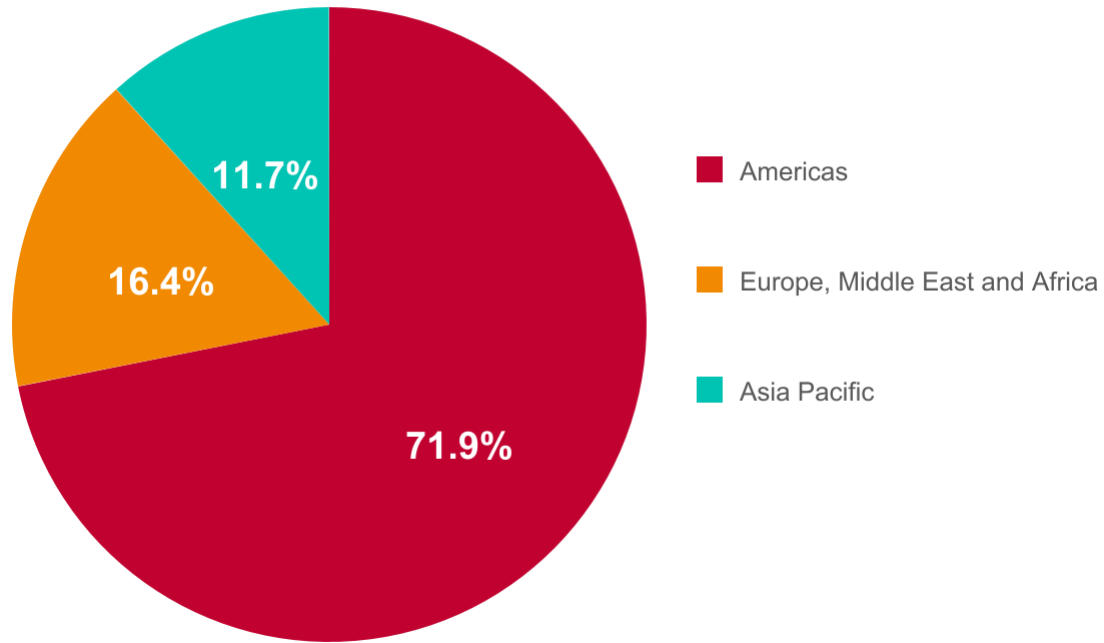


*represents 39% of total revenue in Q4 FY 2021



Revenue by geographic region

Q4 FY 2021



Q4 FY 2021 balance sheet and operating metrics

Cash and Investments	\$1.67B
Cash Flow from Operations	\$255M
Free Cash Flow	\$243M
Inventory Turns	5.0
Gross Leverage	1.1x
Net Cash	\$927M

Business outlook



Business Outlook¹

Q1' 22

Revenue \$870M to \$910M

Adjusted Gross Margin 43% to 46%

Adjusted Operating Expense Approximately \$290M

FY 2022

Revenue Growth 11% to 13%

Adjusted Gross Margin 43% to 46%

Adjusted Operating Expense \$300M average per quarter

Adjusted Operating Margin 15%-16%

¹ Projections or outlook with respect to future operating results are only as of December 9, 2021, the date presented on the related earnings call. Actual results may differ materially from these forward-looking statements. Ciena assumes no obligation to update this information, whether as a result of new information, future events or otherwise.

Long-term Business Outlook¹

Revenue	Adj. Operating Margin	Free Cash Flow	Adj. EPS
Approximately 6% to 8% annual growth beginning in FY 2023	Targeting 17% to 18% for FY 2024	Approximately 75% to 85% of adjusted operating income beginning in FY 2024	Approximately 10% annual growth over the next three years

¹ Projections or outlook with respect to future operating results are only as of December 9, 2021, the date presented on the related earnings call. Actual results may differ materially from these forward-looking statements. Ciena assumes no obligation to update this information, whether as a result of new information, future events or otherwise.

Considerations in our outlook

Revenue Assumptions

- Economic conditions remain strong
- Industry growth rates return to historical levels of low to mid single digits
- Customers prioritize new architecture deployments, which enable us increasingly to monetize our wins
- We continue to manage supply chain issues well and there is some improvement in supply lead times

Profitability Assumptions

- Supply chain constraints and inflationary pressures impacting gross margin
- As conditions improve and revenue reflects a more typical mix of existing and new business, gross margin moderates
- Strategic investments in our people and portfolio, and operating expense returns to pre-pandemic levels

Business Assumptions

- Because of our distinct competitive advantages, we expect to benefit from strong demand dynamics in our industry
- Despite unprecedented supply chain challenges, we continue to drive profitability and have capacity for continued innovation investment
- Longer-term fundamental demand drivers – including increasing network traffic, demand for bandwidth and adoption of cloud architectures – remain strong
- COVID-19 headwinds do not worsen

Q4 Fiscal 2021 appendix

Gross Profit Reconciliation (Amounts in thousands)

	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021	Q1 FY 2021	Q4 FY 2020
GAAP gross profit	\$477,119	\$474,550	\$412,419	\$357,891	\$404,349
Share-based compensation-products	920	1,037	498	953	724
Share-based compensation-services	1,240	1,315	1,421	1,205	968
Canadian Emergency Wage Subsidy-products	—	(94)	(4,189)	—	—
Canadian Emergency Wage Subsidy-services	—	(47)	(2,620)	—	—
Amortization of intangible assets	2,856	2,857	2,856	3,732	3,732
Total adjustments related to gross profit	5,016	5,068	(2,034)	5,890	5,424
Adjusted (non-GAAP) gross profit	\$482,135	\$479,618	\$410,385	\$363,781	\$409,773
Adjusted (non-GAAP) gross profit percentage	46.3 %	48.5 %	49.2 %	48.0 %	49.5 %

Operating Expense Reconciliation (Amounts in thousands)

	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021	Q1 FY 2021	Q4 FY 2020
GAAP operating expense	\$339,710	\$326,027	\$278,790	\$282,096	\$310,866
Share-based compensation-research and development	5,684	5,541	5,844	4,794	4,030
Share-based compensation-sales and marketing	6,192	6,534	6,610	5,816	5,137
Share-based compensation-general and administrative	7,466	8,237	6,743	6,358	5,982
Canadian Emergency Wage Subsidy-research and development	—	(596)	(28,923)	—	—
Canadian Emergency Wage Subsidy-sales and marketing	—	(53)	(2,551)	—	—
Canadian Emergency Wage Subsidy-general and administrative	—	(46)	(2,161)	—	—
Significant asset impairments and restructuring costs	5,700	9,789	8,209	5,867	7,854
Amortization of intangible assets	5,836	5,967	6,019	5,910	5,851
Acquisition and integration costs	1,712	259	294	307	3,127
Total adjustments related to operating expense	32,590	35,632	84	29,052	31,981
Adjusted (non-GAAP) operating expense	\$307,120	\$290,395	\$278,706	\$253,044	\$278,885

Income from Operations Reconciliation (Amounts in thousands)

	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021	Q1 FY 2021	Q4 FY 2020
GAAP income from operations	\$137,409	\$148,523	\$133,629	\$75,795	\$93,483
Total adjustments related to gross profit	5,016	5,068	(2,034)	5,890	5,424
Total adjustments related to operating expense	32,590	35,632	84	29,052	31,981
Total adjustments related to income from operations	37,606	40,700	(1,950)	34,942	37,405
Adjusted (non-GAAP) income from operations	\$175,015	\$189,223	\$131,679	\$110,737	\$130,888
Adjusted (non-GAAP) operating margin percentage	16.8 %	19.1 %	15.8 %	14.6 %	15.8 %

Net Income Reconciliation (Amounts in thousands)

	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021	Q1 FY 2021	Q4 FY 2020
GAAP net income	\$103,499	\$238,232	\$103,117	\$55,348	\$65,041
Exclude GAAP provision (benefit) for income taxes	25,826	(96,690)	21,453	11,966	20,798
Income before income taxes	129,325	141,542	124,570	67,314	85,839
Total adjustments related to income from operations	37,606	40,700	(1,950)	34,942	37,405
Unrealized (gain) loss on equity investment	—	—	165	—	(2,681)
Adjusted income before income taxes	166,931	182,242	122,785	102,256	120,563
Non-GAAP tax provision on adjusted income before income taxes	34,221	37,360	25,171	20,962	26,042
Adjusted (non-GAAP) net income	\$132,710	\$144,882	\$97,614	\$81,294	\$94,521
Weighted average basic common shares outstanding	155,232	155,271	155,331	155,174	154,706
Weighted average diluted potential common shares outstanding ⁽¹⁾	156,689	156,744	156,876	156,583	156,563

Net Income per Common Share

	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021	Q1 FY 2021	Q4 FY 2020
GAAP diluted net income per potential common share	\$ 0.66	\$ 1.52	\$ 0.66	\$ 0.35	\$ 0.42
Adjusted (non-GAAP) diluted net income per potential common share	\$ 0.85	\$ 0.92	\$ 0.62	\$ 0.52	\$ 0.60

1. Weighted average diluted potential common shares outstanding used in calculating Adjusted (non-GAAP) diluted net income per potential common share for the fourth quarter of fiscal 2021 includes 1.5 million shares underlying certain stock option and stock unit awards.

Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA) (Amounts in thousands)

Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA)	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021	Q1 FY 2021	Q4 FY 2020
Net income (GAAP)	\$103,499	\$238,232	\$103,117	\$55,348	\$65,041
Add: Interest expense	7,916	7,776	7,785	7,360	7,395
Less: Interest and other income (loss), net	(168)	795	(1,274)	(1,121)	(249)
Add: Provision (benefit) for income taxes	25,826	(96,690)	21,453	11,966	20,798
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	24,315	24,623	24,107	23,188	23,538
Add: Amortization of intangible assets	8,692	8,824	8,875	9,642	9,584
EBITDA	\$170,416	\$181,970	\$166,611	\$108,625	\$126,605
Less: Canadian Emergency Wage Subsidy	—	836	40,444	—	—
Add: Share-based compensation cost	21,366	22,471	21,535	18,964	16,920
Add: Significant asset impairments and restructuring costs	5,700	9,789	8,209	5,867	7,854
Add: Acquisition and integration costs	1,712	259	294	307	3,127
Adjusted EBITDA	\$199,194	\$213,653	\$156,205	\$133,763	\$154,506



Thank You