



Ciena Corporation

Investor Presentation

Summer 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 impact of supply chain constraints or disruptions; 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; changes in foreign currency exchange rates; factors beyond our control such as natural disasters, climate change, acts of war or terrorism, geopolitical events, including but not limited to the ongoing conflict between Ukraine and Russia, and public health emergencies; 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 and Ciena's Quarterly Report on Form 10-Q for the second quarter of fiscal 2022.

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



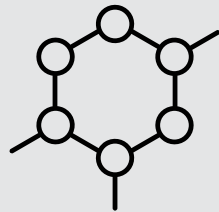
Overview

Ciena is an industry-leading global networking systems, services, and software company with a strong track record of creating shareholder value



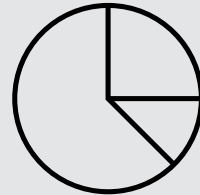
Leading technology and innovation

- R&D spend ~15% of total revenue
- ~2,700 R&D specialists
- DWDM pioneer and first to market with 40G, 100G, 400G and 800G technology
- ~2,000 issued patents and 500 pending patents



Diversification and scale

- 41% of FY21 revenue from non-telco customers
- 1,700+ customers
- Operations in 35+ countries
- Top 10 customers included four web-scalers, three US service providers, two international service providers and one cable operator



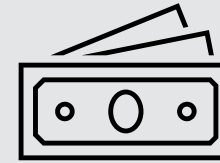
Market leadership

- Recognized as the market leader in our space
- #1 or #2 market share across our Optical markets¹
- Ex-China, quarterly market share has grown from ~12% in 2011 to ~25% in 2020¹



Demonstrated track record of performance

- 7% 5-year revenue CAGR
- Adjusted operating margin has grown by more than 580 basis points since 2018
- 17% 5-year total shareholder return CAGR²



Strong balance sheet

- Our balance sheet represents a competitive advantage
- \$1.7B+ in cash and investments at FYE21
- \$1.0B share repurchase program including a \$250M accelerated share repurchase (ASR) announced in December 2021



Strong ESG progress

- ISS Governance Score 1 of 5
- Ecovadis Platinum Medal (Top 1%)
- Great Place To Work (US, Canada, India)
- 2022 Institutional Investor Magazine, Best ESG Communications for our sector

¹ As cited by Omdia, Dell'Oro Group and Signal AI for different markets

² Based on closing share price between 5/19/2017 and 5/18/2022

Our portfolio

Enabling the Adaptive Network™



SOFTWARE CONTROL AND AUTOMATION

Blue Planet® multi-domain orchestration, federated inventory, and service order management solutions support service lifecycle automation across multi-layer, multi-vendor networks.

Ciena's Manage, Control and Plan (MCP) domain controller provides intelligent, data-driven, software-defined programmability to lifecycle network operations across multi-layer Ciena-based infrastructure.



ANALYTICS AND INTELLIGENCE

Blue Planet® Unified Assurance and Analytics and Route Optimization and Analysis software unify multi-layer, multi-domain assurance, with AI-powered analytics to provide strategic insights that transform and streamline business, IT, and network operations.

MCP Advanced Apps 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 multi-vendor IP networks.



PROGRAMMABLE INFRASTRUCTURE

Converged Packet Optical Networking: Full suite of compact modular and converged software-programmable platforms, featuring Ciena's award-winning WaveLogic™ Coherent Optics, fully instrumented, reconfigurable line systems and agnostic packet/OTN switching, designed to maximize scale, flexibility, and open networking. Delivers optimal network performance across applications from metro to submarine, and is the dominant platform used globally for Data Center Interconnect.

Routing and Switching: Purpose-built routing, switching, and x86 VNF hosting platforms—leveraging a common Service-Aware Operating System (SAOS) and WaveLogic Coherent Optics—provide the building blocks for low-touch, high-velocity IP, Segment Routing, Ethernet, MPLS, and pluggable PON for access, aggregation, and metro networks.

CIENA SERVICES

Enables customers to deliver the exceptional experiences their end users expect. Ciena regional teams partner with customers to build, operate, improve, and transform their network.

Ciena leverages a robust set of services, proven processes, and tools to enable customer success and accelerate their journey to the Adaptive Network.

Our corporate strategy



Lead

Our Core Business

- Strengthen optical innovation leadership
- Grow optical market share by addressing fast-growing opportunities
- Pursue coherent pluggables as new consumption model
- Increase international business and grow attached services



Invest

Next Generation Metro and Edge

- Expand use cases for Routing & Switching portfolio and addressable market opportunity
- Innovate and diversify solutions portfolio with enhanced IP/Ethernet capabilities
- Address expanding 5G, edge cloud, packet routing and edge computing applications



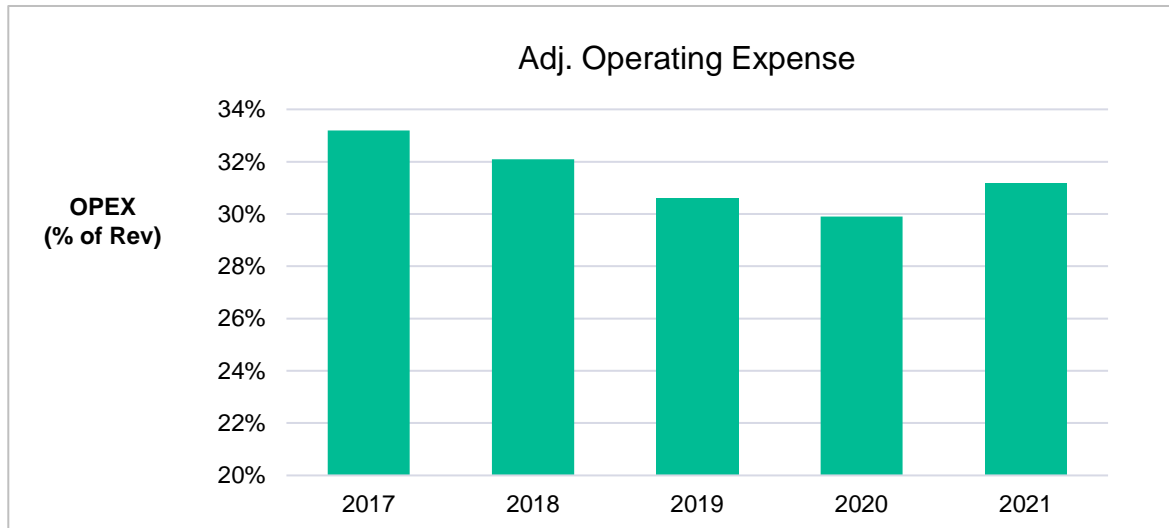
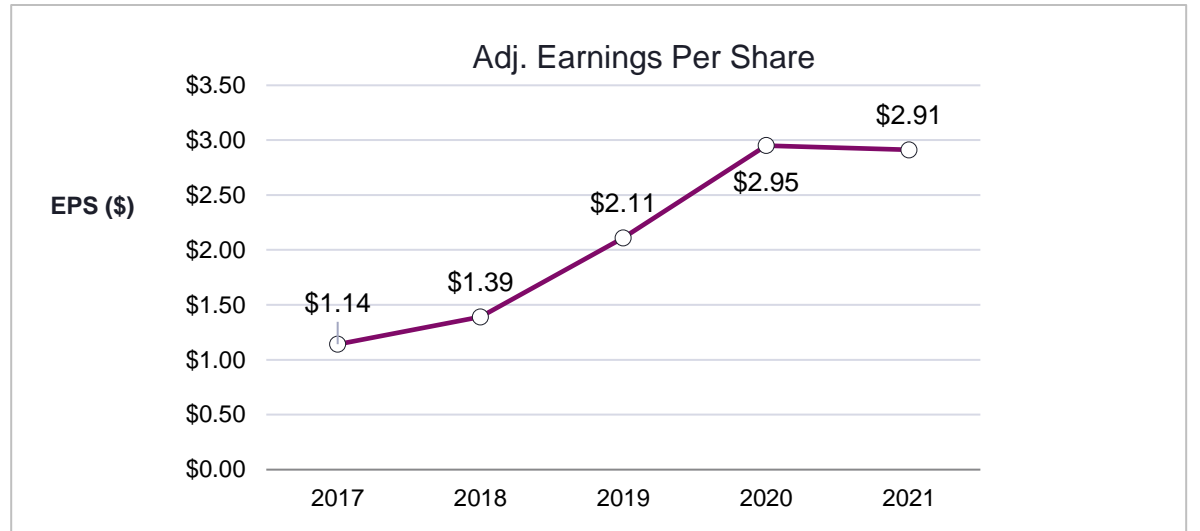
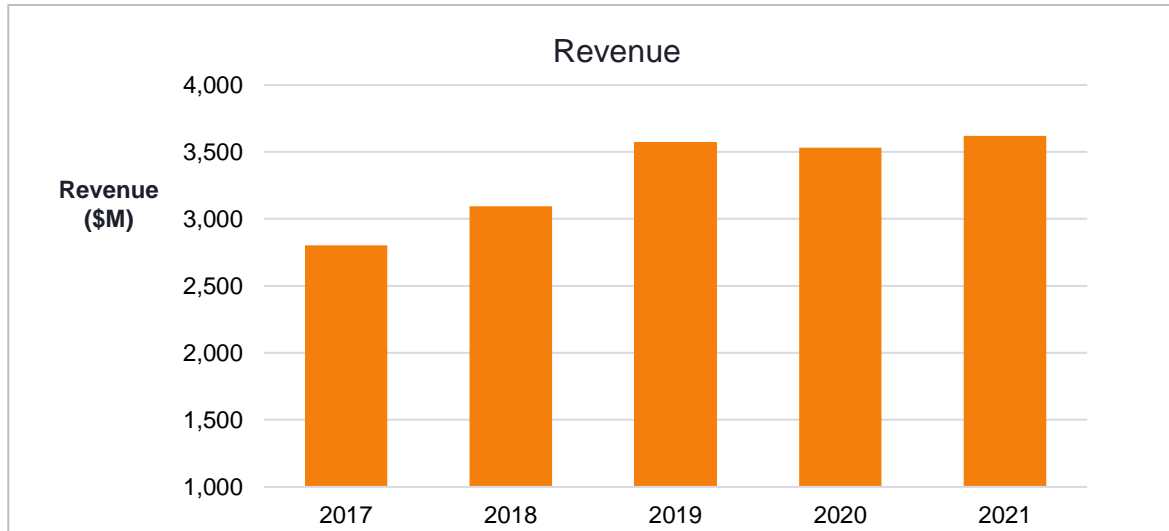
Expand

Software Led Transformation

- Drive digital transformation and network automation with Blue Planet
- Grow software business and gain customer adoption of recurring, subscription models
- Pursue advanced services led transformation with network migration, optimization, and multi-vendor capabilities

... has enhanced our ability to create and seize opportunities in our markets and has yielded consistent, differentiated performance

FY 2021 and historical performance



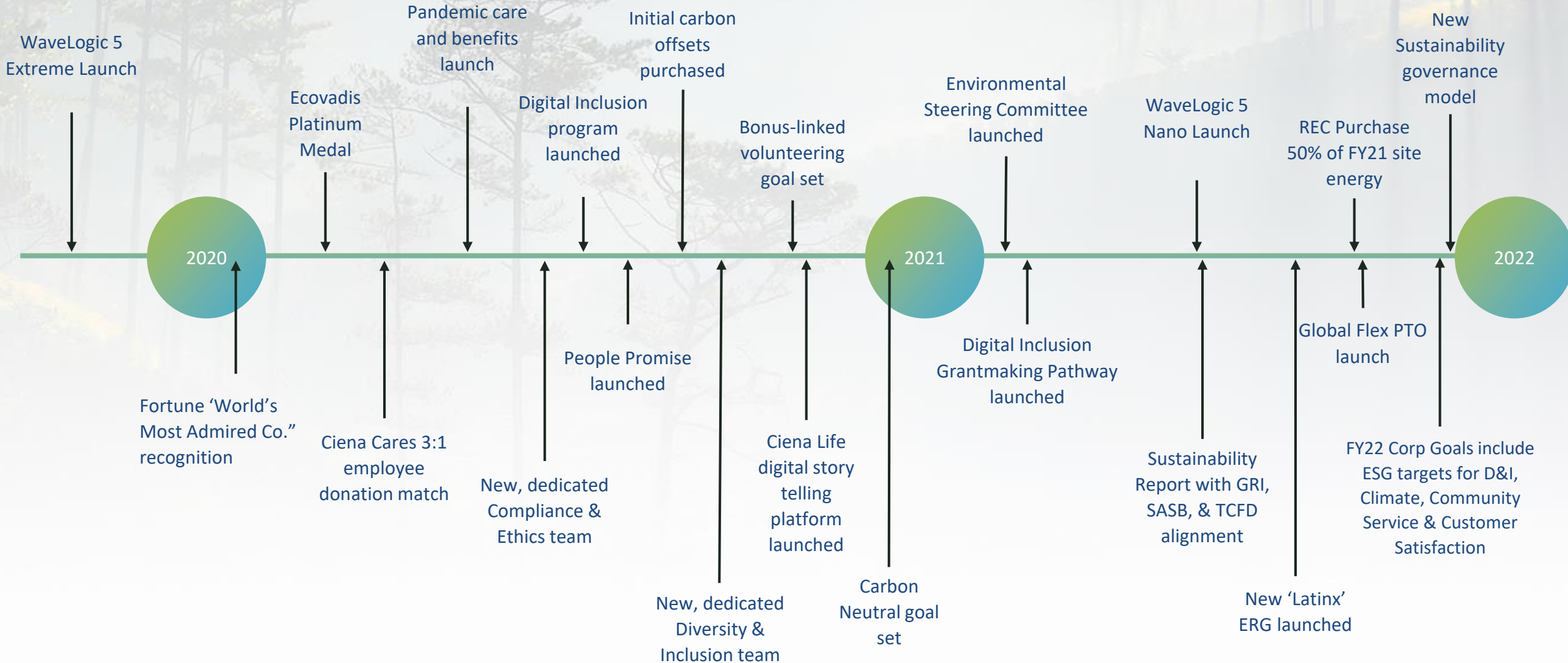
* A reconciliation of these non-GAAP measures to our GAAP results is included in the press release for the relative period.

Our ESG journey

(see more ESG information on our website)



Sustainability Achievements 2020-22



Innovation to drive sustainable outcomes

Research and development focuses on environmental responsibility

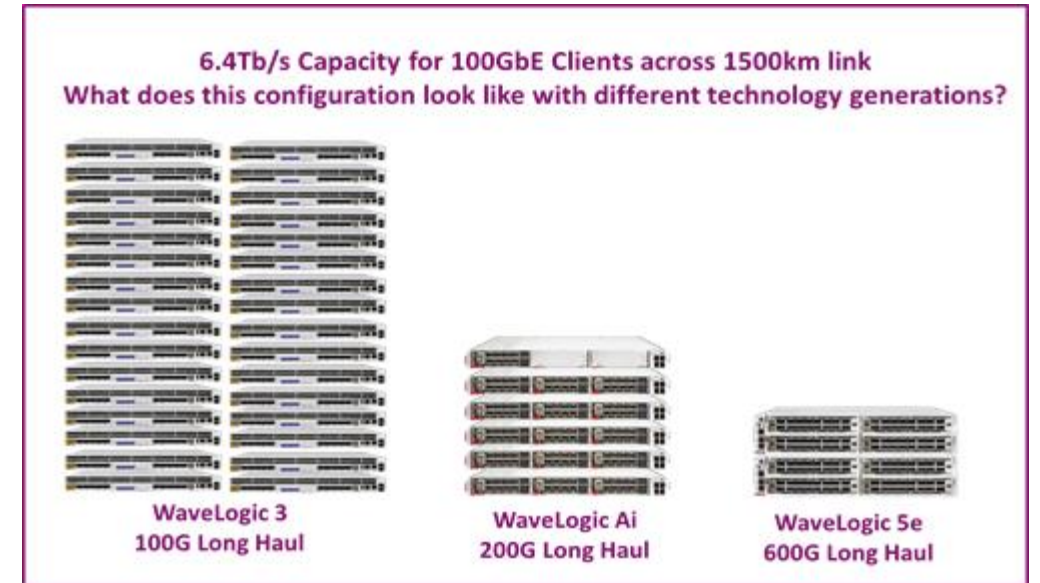
Our WaveLogic innovations address massive bandwidth demand while using less energy.

From 2009 to 2019, WaveLogic helped avoid 3M MTCO₂e into our atmosphere.

WaveLogic 5e vs 3 yields a 3x increase in fiber capacity, 80% reduction in power/bit, and an 85% reduction in footprint.

Our coherent innovation—delivering an 80x increase in data throughput (10→ 800Gb/s)—has enabled immense benefits for network operators.

We're introducing power efficient pluggable forms for data center applications.



Reduction of our environmental footprint

Commitment to achieve carbon neutrality for our operations by 2024



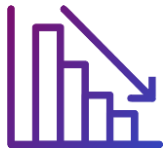
Managing our impact

Our Environmental Steering Committee oversees our environmental initiatives.



Investing in renewable energy

In 2022, we are purchasing wind, solar, and biomass credits to aim for 75% renewable energy at our offices.



Reporting our emissions

We measure our emissions in accordance with the Greenhouse Gas Protocol with annual participation in the Carbon Disclosure Project with a score of “B”.



Offsetting our emissions

We offset 43% of our 2019 and 71% of our 2020 reported emissions. We are targeting 75% for 2022.



Energy efficient offices and labs

We retrofit certain sites to increase LED lighting, enhance our building controls and systems, and expand our on-site solar photovoltaic (PV) plant.



Reducing air travel emissions

Our company goal is to reduce business air travel emissions by 50% from our pre-Covid 2019 levels.

Our People Promise

A key element of our strategy is fostering a workplace environment where employees are empowered, feel included and have an opportunity to make a difference through their work.



MAKE A DIFFERENCE

- Community Impact Programs
- Ciena Cares
- Digital Inclusion
- Volunteering Time Off
- Service Initiatives



BE EMPOWERED

- Flexible Working
- Competitive Compensation and Benefits
- Employee Recognition
- Growth and Development



FEEL INCLUDED

- Employee Wellbeing
- Diversity, Inclusion & Belonging
- Employee Engagement
- Pay Equity and Fairness

Market context



Six mega trends and the innovations that will enable them

Cloud



Data Center



IoT & Connected Objects



Fiber Deep
(Cable/MSO)



Mobility & 5G

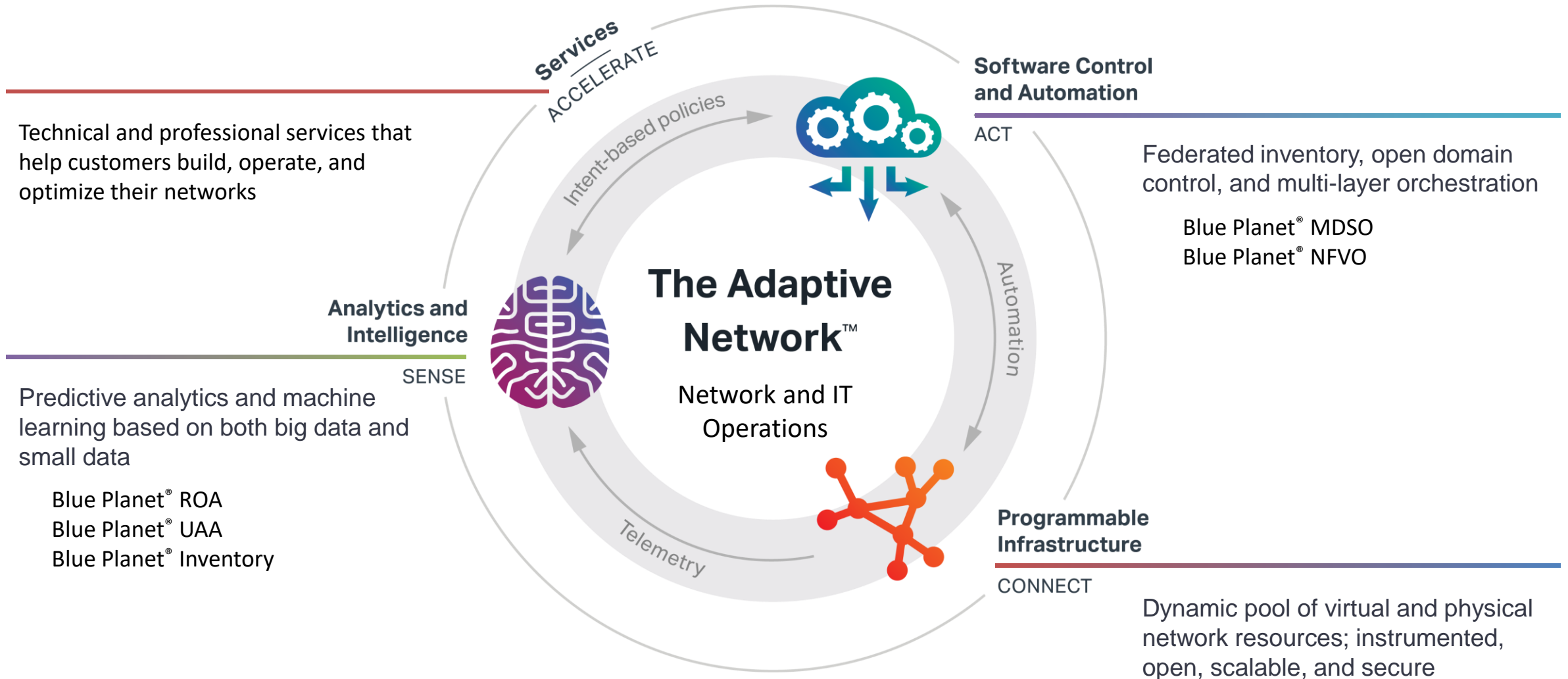


Living a Hybrid Life



Our vision for a new network end-state

Closing the Loop – to deliver the Adaptive Network



Next-Gen Metro & Edge is a key growth segment in the networking industry

Core Transport

\$6B → \$7B

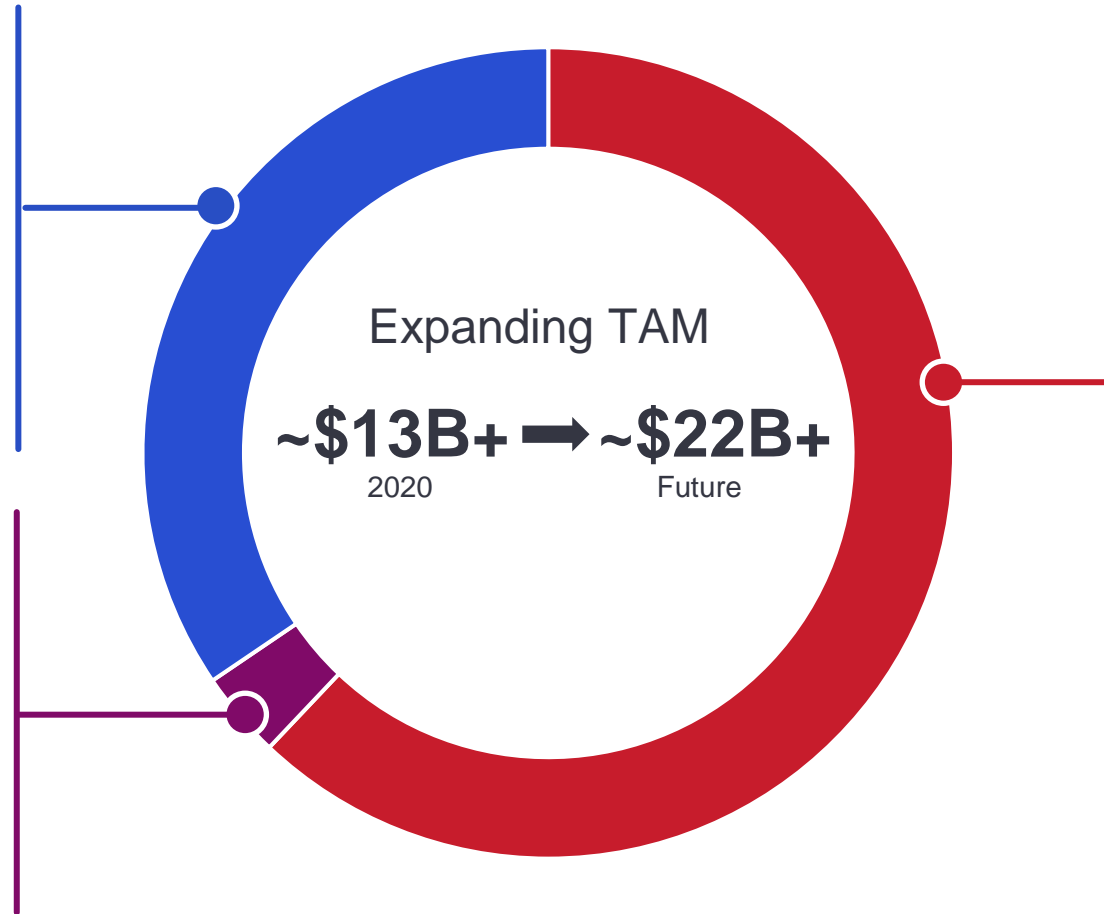
2020 Future

- High Capacity Converged Packet Optical Transport
 - Data Center Interconnect
 - Long Haul
 - Submarine

Software

\$1B+

- Intelligent Automation
 - Orchestration: MDSO & NFV
 - Order Management
 - Inventory
 - Assurance and Analytics



Next-Gen Metro & Edge

~\$6B → ~\$14B

2020 Future

- Cloud Services
- xHaul Applications
- Ethernet Data Services
- Residential / Enterprise

*Market data excludes China, and is based on Omdia, Dell'Oro, Signal AI, and Ciena analysis

Copyright © Ciena Corporation 2022. All rights reserved. Proprietary information.

Q2 Fiscal 2022 results



Q2 FY 2022 key highlights

Achieving balanced growth

- Non-telco represented 44% of total revenue
 - Direct web-scale increased 7% YoY and represents 22% of total revenue
 - MSO increased 13% YoY and represents 9% of total revenue
- Routing and Switching revenue increased 72% YoY, reflecting strong contribution from the recently added Vyatta platform
- Platform Software and Services increased 22% YoY, representing 7% of total revenue

Driving the pace of innovation

- GAAP R&D investment was approximately 17% of total revenue
- 737 100G+ total customers, which includes 17 new wins on WaveLogic Ai and 16 new wins on WaveLogic 5 Extreme
- Gaining business momentum with our Universal Aggregation and XGS-PON solution for residential and business services
- In our Routing and Switching Portfolio, we expanded our coherent routing capabilities with the introduction of the 8114 Coherent Aggregation Router

Prioritizing long term shareholder value

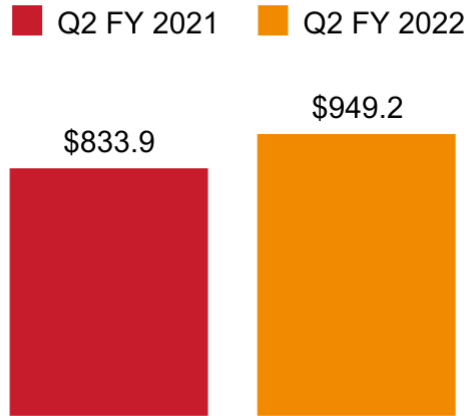
- Total shareholder return five year CAGR of 17%¹
- As part of our \$1 billion stock repurchase program, we repurchased approximately 1.5 million shares² during the quarter for \$87 million

¹ Based on closing share price between 5/19/2017 to 5/18/2022

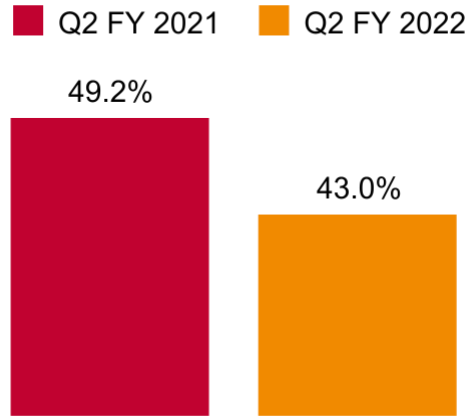
² Excludes the additional 0.9M shares of common stock in settlement of the ASR Agreement delivered on February 15, 2022

Q2 FY 2022 comparisons (year-over-year)

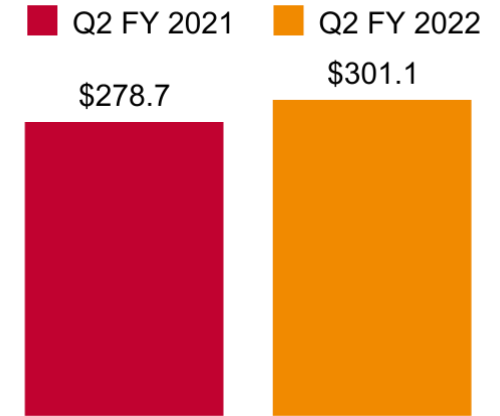
Revenue (in millions)



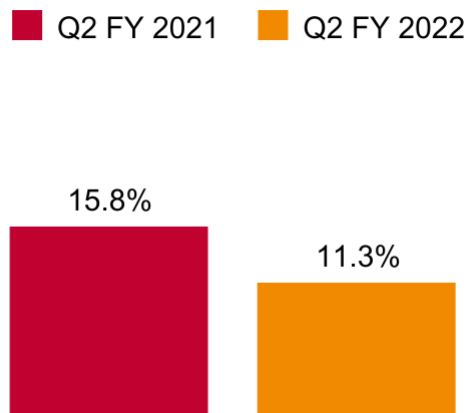
Adj. Gross Margin*



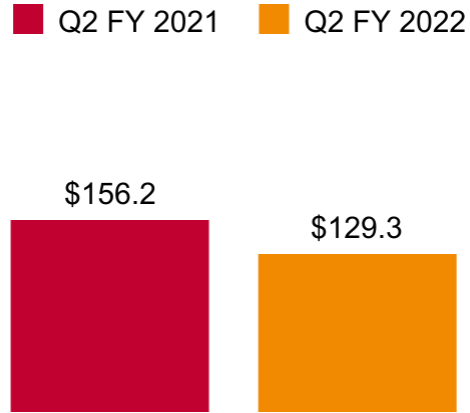
Adj. OpEx* (in millions)



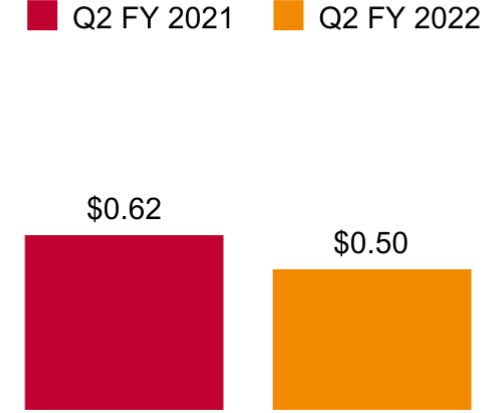
Adj. Operating Margin*



Adj. EBITDA* (in millions)

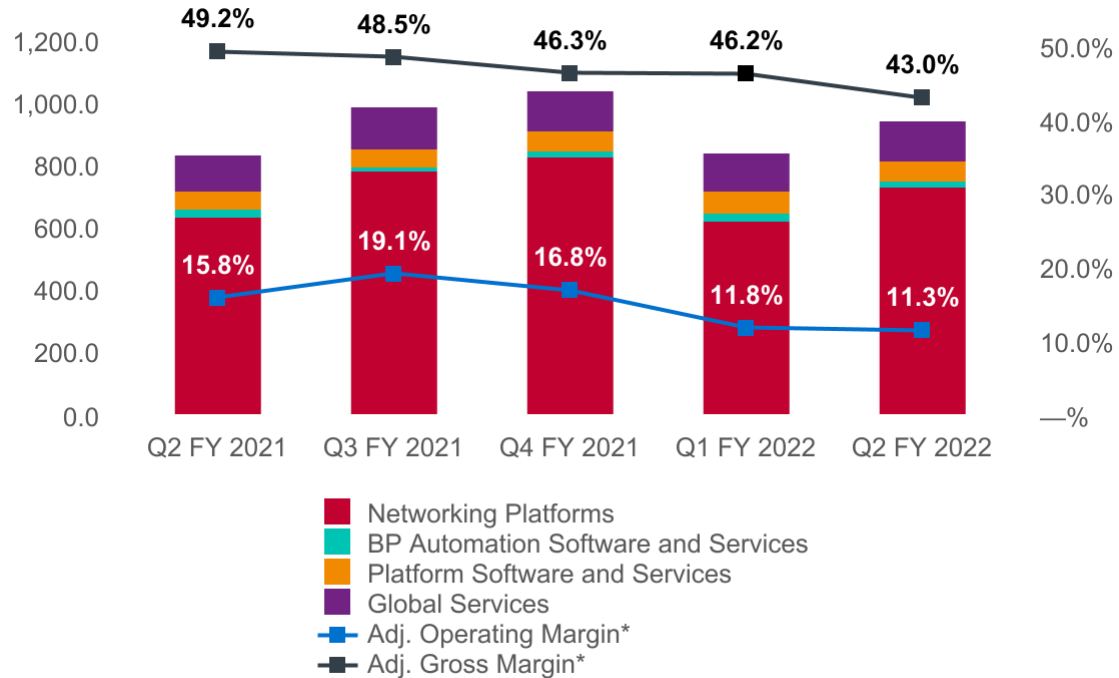


Adj. EPS*



Revenue by segment

(Amounts in millions)



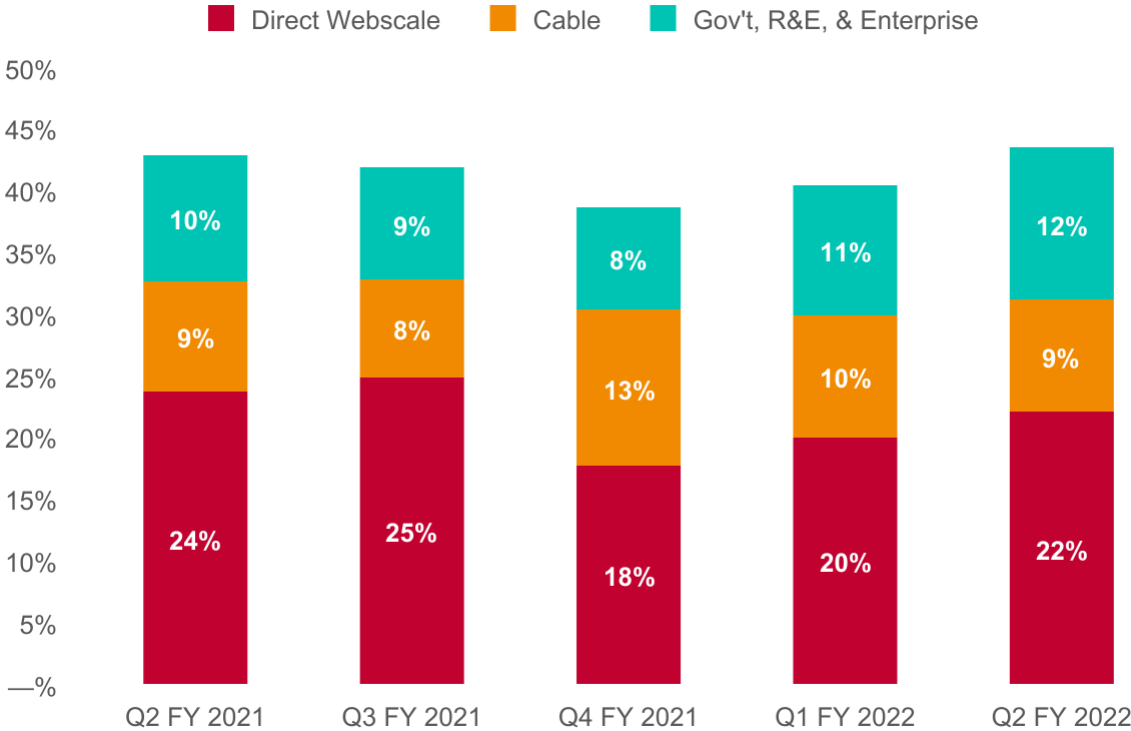
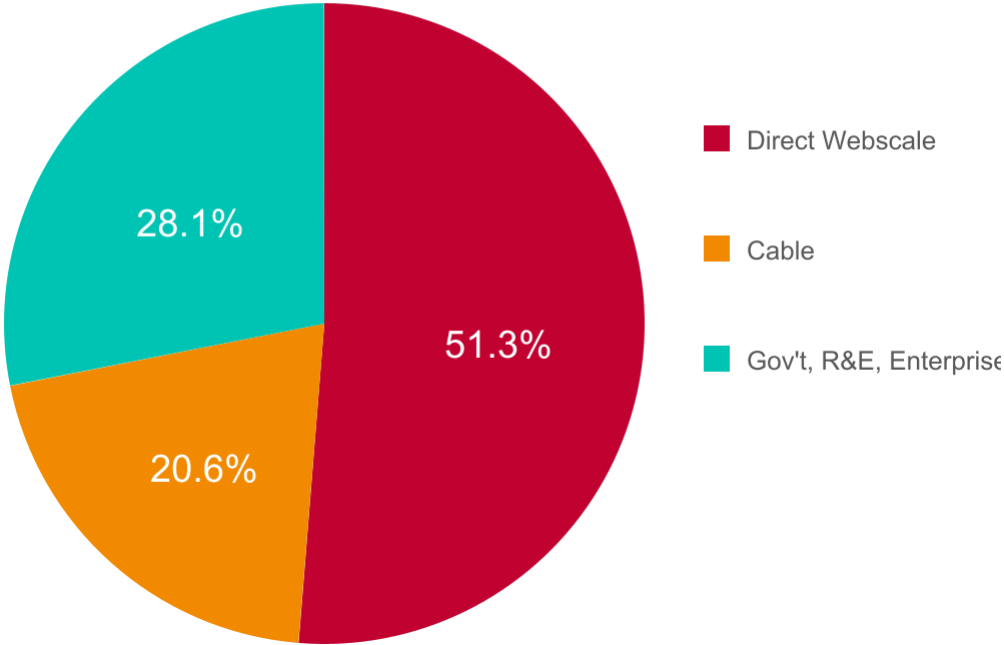
	Q2 FY 2022		Q2 FY 2021	
	Revenue	%**	Revenue	%**
Networking Platforms				
Converged Packet Optical	\$625.3	65.8	\$573.7	68.8
Routing and Switching	109.2	11.5	63.6	7.6
Total Networking Platforms	734.5	77.3	637.3	76.4
Platform Software and Services	69.1	7.3	56.7	6.8
Blue Planet Automation Software and Services	16.9	1.8	23.9	2.9
Global Services				
Maintenance Support and Training	74.0	7.8	70.4	8.4
Installation and Deployment	41.4	4.4	38.0	4.6
Consulting and Network Design	13.3	1.4	7.6	0.9
Total Global Services	128.7	13.6	116.0	13.9
Total	\$949.2	100.0 %	\$833.9	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

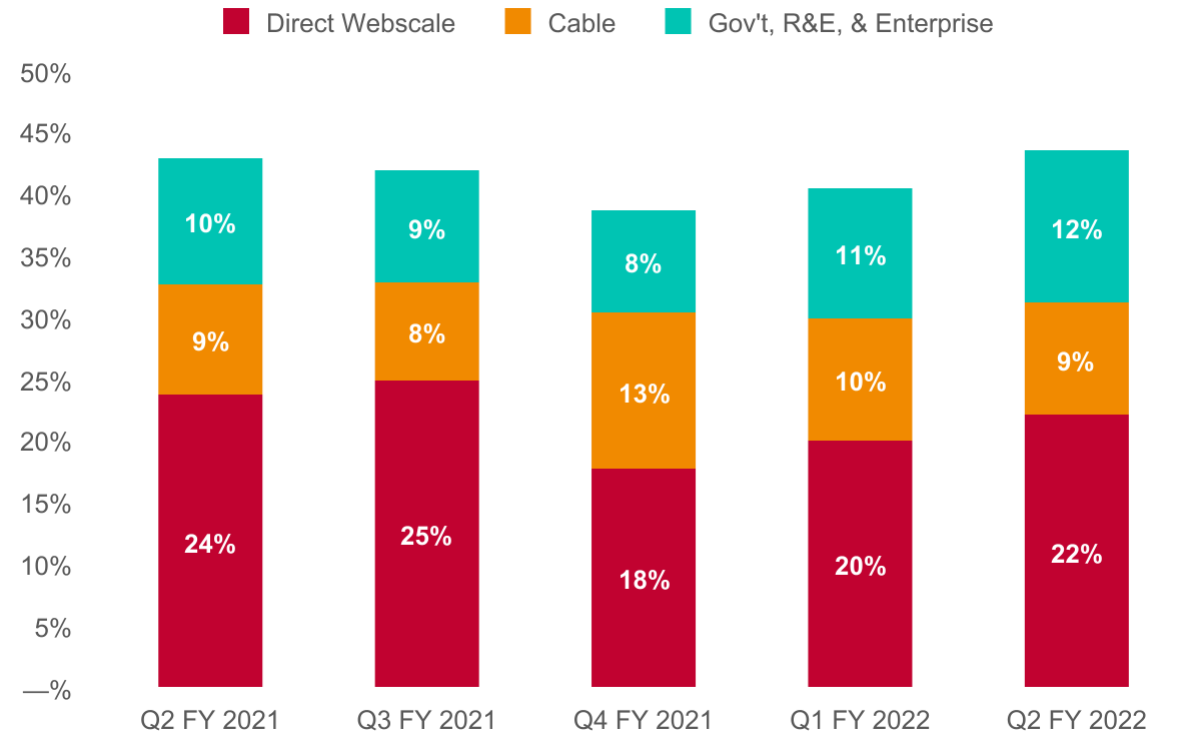
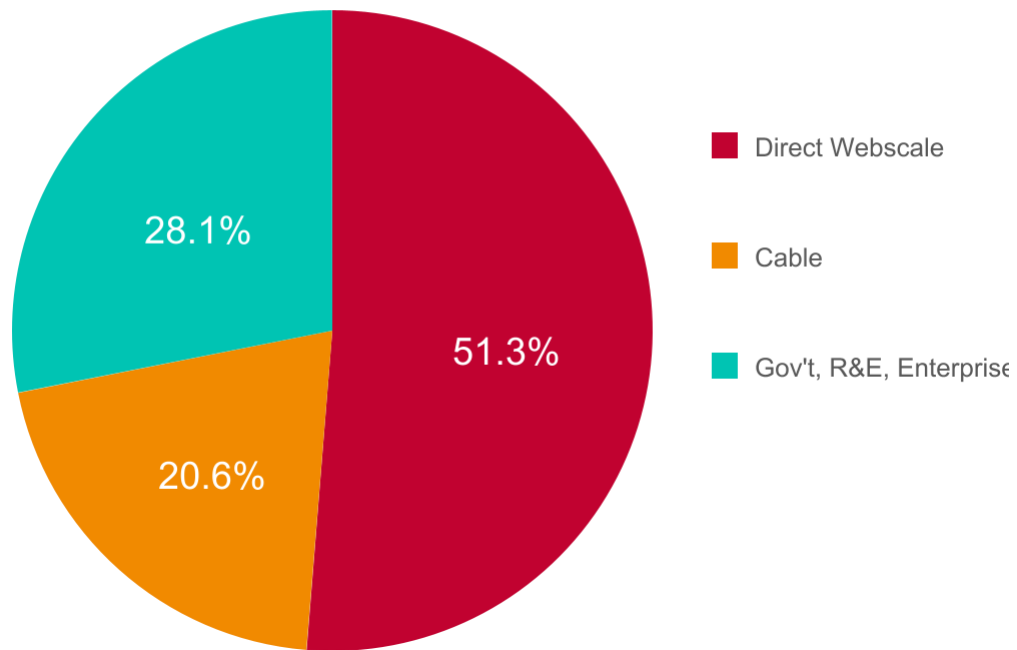
Continued strength derived from non-telco revenue

Q2 FY 2022
Approx. 44% of total revenue



Revenue by geographic region

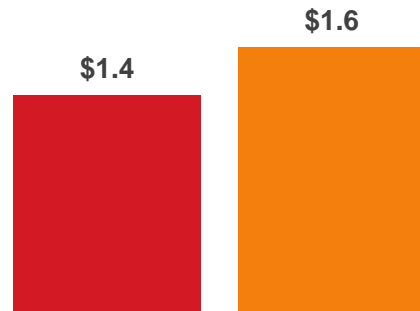
Q2 FY 2022
Approx. 44% of total revenue



Q2 FY 2022 comparative operating metrics

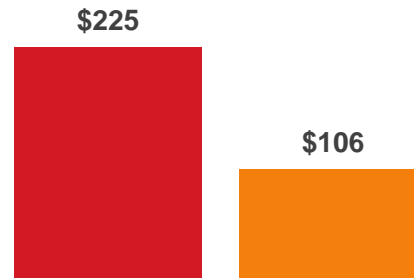
Cash and investments (in billions)

■ Q2 FY 2021 ■ Q2 FY 2022



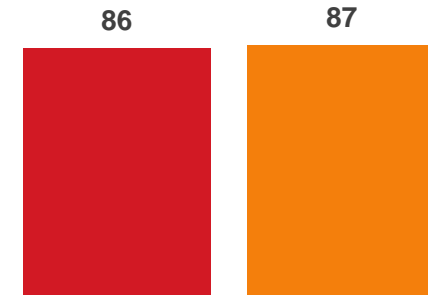
Cash flow from operations (in millions)

■ Q2 FY 2021 ■ Q2 FY 2022



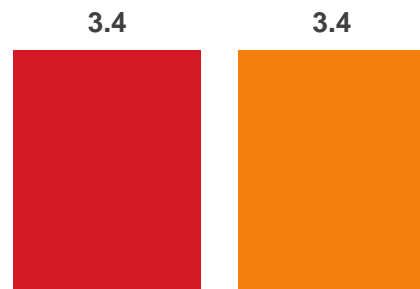
Days sales outstanding

■ Q2 FY 2021 ■ Q2 FY 2022



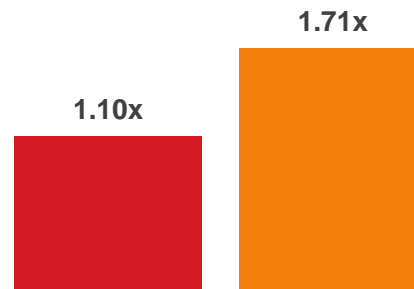
Inventory Turns

■ Q2 FY 2021 ■ Q2 FY 2022



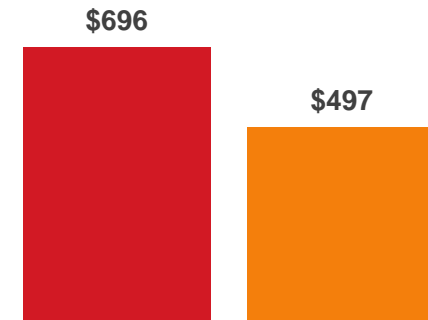
Gross leverage

■ Q2 FY 2021 ■ Q2 FY 2022



Net Cash (in millions)

■ Q2 FY 2021 ■ Q2 FY 2022



Business outlook



Economic considerations and assumptions in our 2022 outlook

Revenue Assumptions

- The length and severity of current supply conditions will negatively impact both overall industry growth rates and our revenue growth
- Component suppliers deliver on their supply commitments and we do not encounter any substantial new decommits that we cannot successfully mitigate
- Covid-related lockdowns in China do not continue to exacerbate an already challenging supply environment

Profitability Assumptions

- Gross margin moderates from recent levels
- Supply chain constraints, increased component costs, expedite fees and logistics costs will adversely impact gross margin
- As new wins are monetized, we expect our revenue mix to include a larger proportion of lower-margin common equipment
- Operating expense increases to fund strategic investments in our people and portfolio

Business Assumptions

- Economic conditions do not worsen and adverse effects to our business from geopolitical events remain immaterial
- Supply chain and COVID-19 headwinds do not worsen
- Longer-term fundamental demand drivers – including increasing demand for bandwidth, adoption of cloud architectures and network automation requirements – remain strong
- We continue to benefit from strong demand dynamics in our industry given our distinct competitive advantage

Business Outlook¹

Q3 FY 2022

Revenue	\$870M to \$930M
Adjusted Gross Margin	Low 40's%
Adjusted Operating Expense	\$305M to \$310M

Updated Full Year FY 2022

Revenue Growth	Mid-single digits
Adjusted Gross Margin	Low 40's%
Adjusted Operating Expense	\$300M average per quarter
Adjusted Operating Margin	Low double-digits

¹ Projections or outlook with respect to future operating results are only as of June 2, 2022, 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.

Q2 Fiscal 2022 appendix

Gross Profit Reconciliation (Amounts in thousands)

	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021
GAAP gross profit	\$401,781	\$384,187	\$477,119	\$474,550	\$412,419
Share-based compensation-products	1,058	900	920	1,037	498
Share-based compensation-services	1,943	1,584	1,240	1,315	1,421
Canadian Emergency Wage Subsidy - products	—	—	—	(94)	(4,189)
Canadian Emergency Wage Subsidy - services	—	—	—	(47)	(2,620)
Amortization of intangible assets	3,313	3,312	2,856	2,857	2,856
Total adjustments related to gross profit	6,314	5,796	5,016	5,068	(2,034)
Adjusted (non-GAAP) gross profit	\$408,095	\$389,983	\$482,135	\$479,618	\$410,385
Adjusted (non-GAAP) gross profit percentage	43.0 %	46.2 %	46.3 %	48.5 %	49.2 %

Operating Expense Reconciliation (Amounts in thousands)

	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021
GAAP operating expense	\$343,352	\$324,183	\$339,710	\$326,027	\$278,790
Share-based compensation-research and development	8,309	6,830	5,684	5,541	5,844
Share-based compensation-sales and marketing	8,061	7,060	6,192	6,534	6,610
Share-based compensation-general and administrative	7,334	7,912	7,466	8,237	6,743
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	9,102	3,409	5,700	9,789	8,209
Amortization of intangible assets	8,920	8,918	5,836	5,967	6,019
Acquisition and integration costs	495	68	1,712	259	294
Total adjustments related to operating expense	42,221	34,197	32,590	35,632	84
Adjusted (non-GAAP) operating expense	\$301,131	\$289,986	\$307,120	\$290,395	\$278,706

Income from Operations Reconciliation (Amounts in thousands)

	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021
GAAP income from operations	\$58,429	\$60,004	\$137,409	\$148,523	\$133,629
Total adjustments related to gross profit	6,314	5,796	5,016	5,068	(2,034)
Total adjustments related to operating expense	42,221	34,197	32,590	35,632	84
Total adjustments related to income from operations	48,535	39,993	37,606	40,700	(1,950)
Adjusted (non-GAAP) income from operations	\$106,964	\$99,997	\$175,015	\$189,223	\$131,679
Adjusted (non-GAAP) operating margin percentage	11.3 %	11.8 %	16.8 %	19.1 %	15.8 %

Net Income Reconciliation (Amounts in thousands)

	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021
GAAP net income	\$38,922	\$45,823	\$103,499	\$238,232	\$103,117
Exclude GAAP provision (benefit) for income taxes	8,330	9,219	25,826	(96,690)	21,453
Income before income taxes	47,252	55,042	129,325	141,542	124,570
Total adjustments related to income from operations	48,535	39,993	37,606	40,700	(1,950)
Unrealized (gain) loss on cost method equity investment	—	(4,120)	—	—	165
Adjusted income before income taxes	95,787	90,915	166,931	182,242	122,785
Non-GAAP tax provision on adjusted income before income taxes	19,349	18,365	34,221	37,360	25,171
Adjusted (non-GAAP) net income	\$76,438	\$72,550	\$132,710	\$144,882	\$97,614
Weighted average basic common shares outstanding	152,197	154,151	155,232	155,271	155,331
Weighted average diluted potential common shares outstanding ⁽¹⁾	153,344	155,807	156,689	156,744	156,876

Net Income per Common Share

	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021
GAAP diluted net income per potential common share	\$ 0.25	\$ 0.29	\$ 0.66	\$ 1.52	\$ 0.66
Adjusted (non-GAAP) diluted net income per potential common share	\$ 0.50	\$ 0.47	\$ 0.85	\$ 0.92	\$ 0.62

1. Weighted average dilutive potential common shares outstanding used in calculating Adjusted (non-GAAP) diluted net income per potential common share for the second quarter of fiscal 2022 includes 1.1 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)	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021	Q2 FY 2021
Net income (GAAP)	\$38,922	\$45,823	\$103,499	\$238,232	\$103,117
Add: Interest expense	11,985	8,648	7,916	7,776	7,785
Less: Interest and other income (loss), net	808	3,686	(168)	795	(1,274)
Add: Provision (benefit) for income taxes	8,330	9,219	25,826	(96,690)	21,453
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	22,377	23,653	24,315	24,623	24,107
Add: Amortization of intangible assets	12,233	12,230	8,692	8,824	8,875
EBITDA	\$93,039	\$95,887	\$170,416	\$181,970	\$166,611
Less: Canadian Emergency Wage Subsidy	—	—	—	836	40,444
Add: Share-based compensation cost	26,673	24,297	21,366	22,471	21,535
Add: Significant asset impairments and restructuring costs	9,102	3,409	5,700	9,789	8,209
Add: Acquisition and integration costs	495	68	1,712	259	294
Adjusted EBITDA	\$129,309	\$123,661	\$199,194	\$213,653	\$156,205



Thank You