

Ciena Corporation

Summer 2020

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 long-term financial targets, 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," "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, 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 20, 2019 and Ciena's Quarterly Report on Form 10-Q to be filed with the SEC.

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" and "Long Term financial Targets", 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.



COVID-19 response

Safety and community

- Prioritizing health of employees and following CDC guidance for employers
- Approximately 96% of our employees working remotely
- Instituted pandemic employee benefits
- Tripled our corporate charitable matching program for employee donations and volunteering

Result: Our employees have excelled through their continued focus, strength and kindness

Business continuity

- Supply chain design and business continuity planning has allowed us to continue to support customers and minimize disruption
- Significant IT investment in digital platforms and virtual collaboration tools has enabled a seamless transition to remote working

Result: We are well positioned to manage through the current set of challenges presented by COVID-19

Financial strength

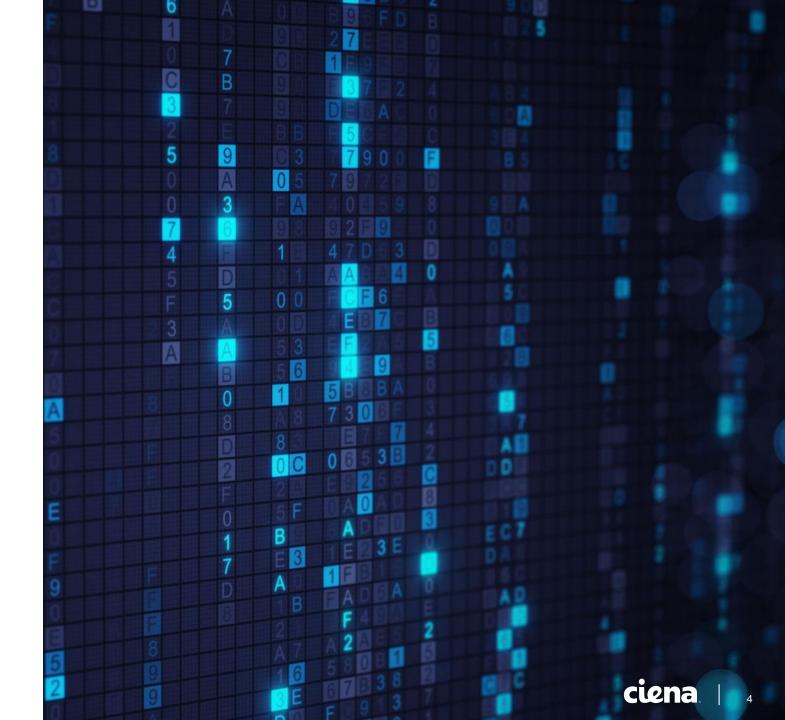
- We have a strong balance sheet and solid cash flow generation
- In light of current market conditions, we have suspended our share repurchase program and are exercising prudent operating expense management

Result: Our financial strength provides long-term resiliency and differentiated flexibility to support our business



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

Our Pedigree



Our portfolio

Enabling the Adaptive Network™



SOFTWARE CONTROL AND AUTOMATION

Open software that includes Blue Planet® multi-domain orchestration, inventory, and route optimization to support the broadest range of closed-loop automation use cases across multi-layer, multi-vendor networks, as well as Ciena's Manage, Control and Plan (MCP) domain controller for bringing software-defined programmability to next-gen Ciena networks.



ANALYTICS AND INTELLIGENCE

Blue Planet Unified Assurance and Analytics: An open suite of software products that unifies multi-layer, multi-domain assurance with Al-powered analytics to provide unprecedented insights that help transform and simplify business operations for network providers.



PROGRAMMABLE INFRASTRUCTURE

Converged Packet-Optical Networking: Software-defined platforms, featuring Ciena's award-winning WaveLogic™ Photonics and agnostic packet/OTN switching, designed to maximize scale, flexibility and openness. Optimizes network performance from the access edge, along the backbone, and across ocean floors.

Packet Networking: Purpose-built platforms hosting a common Service-Aware Operating System that are the building blocks for low-touch, high-velocity Ethernet/MPLS/IP access to metro networks.

CIENA SERVICES

Designed to be as adaptive as the networks we build, our services help you maximize your investment throughout the network lifecycle. We offer a team of experts with specialized services that optimize efficiencies, intelligence and performance.

FY 2019 key achievements

We are taking market share and outperforming the competition

- Annual revenue growth significantly greater than the market at 15%
- Adjusted EPS growth of over 50%
- Expect to have gained approximately 3% of global market share
- Top 10 customers include service providers, cable and web-scale spanning across three different regions

Our balance sheet is strong

- Free cash flow resulted in \$351M or 75% of adjusted operating income
- Ended the year with over \$1B in cash and investments
- Significant return of capital to shareholders with \$150M used to repurchase shares during the year
- Ratings agency upgrades from Moody's and S&P

We are forcing the pace of innovation with the Adaptive Network

- WaveLogicTM roadmap extends beyond 400G and with multiple form factors
- Adaptive IPTM capabilities for Packet Networking to address fiber densification (5G & Fiber Deep)
- Blue Planet[®] Intelligent Automation Portfolio and closed-loop automation capability strengthened with recent acquisition of Centina



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

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



\$3.6B
Annual Revenue



15%Y/Y Growth¹



\$1BCash Position





80+
Countries



6,500+ Employees



1,500+ Customers





Our foundational strengths 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

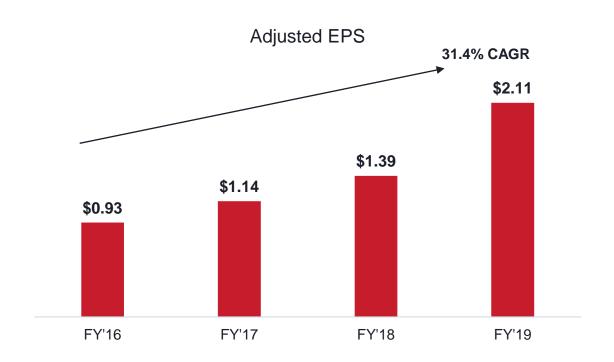




We have a critical mass of engineering, sales and customer support experts and our reach extends to every region around the world



Delivering profitability and total shareholder return

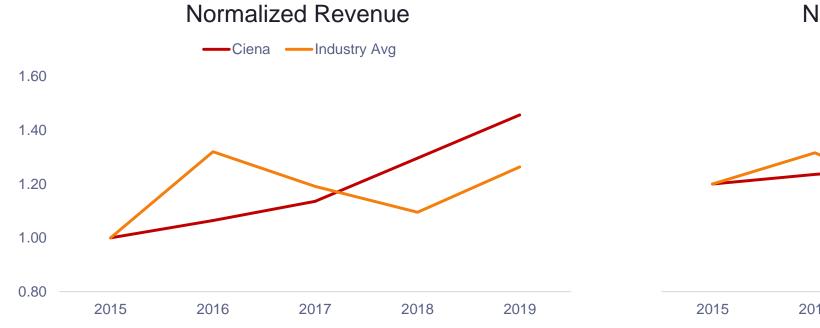


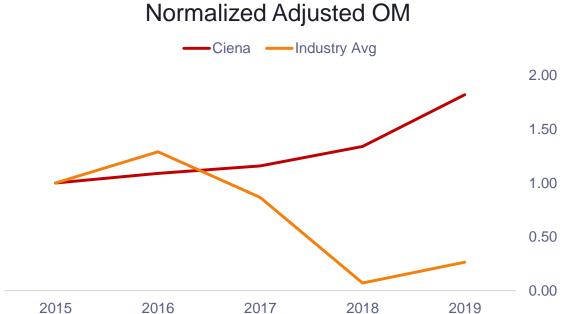


Source: company disclosures and S&P Capital IQ *YTD represents 12/31/19-5/22/20



Delivering consistent and differentiated financial performance





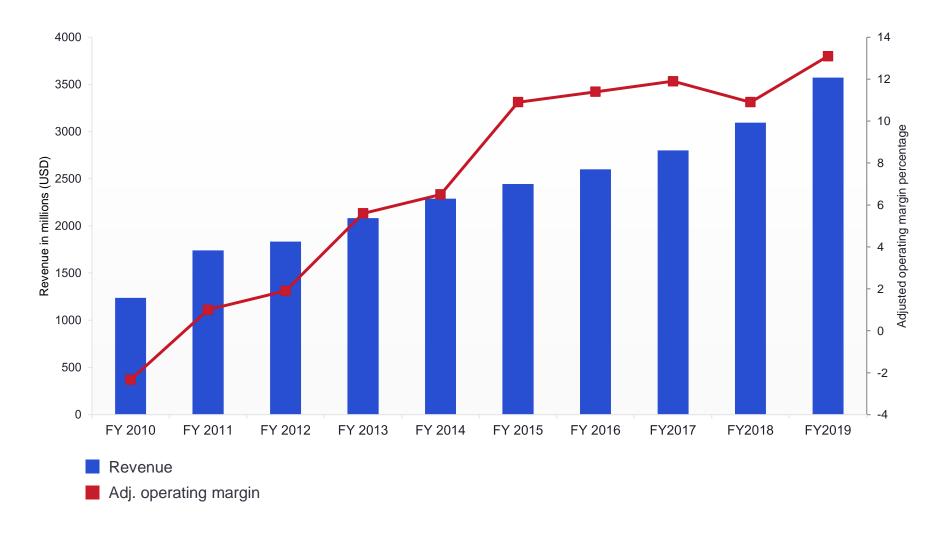
Source: Company filings

Industry Average: ACIA, ADTN, ADVA, CSCO, INFN1, JNPR and NOKIA Networks segment

1. INFN represents INFN+Coriant from the time the acquisition closed

Strong momentum in performance & growth

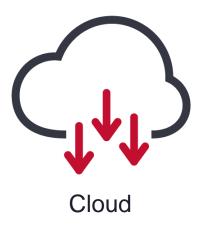
Revenue and adjusted operating margin



Market Context



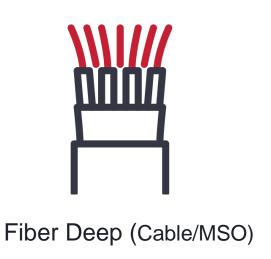
Several mega trends and the innovations that will enable them







Data Center





Mobility & 5G

Our vision for a new network end-state

Closing the Loop – to deliver the Adaptive Network

Software Control and Automation Technical and professional services **ACT** Federated inventory, open domain that help customers build, operate, control, and multi-layer orchestration and optimize their networks Blue Planet® MDSO Blue Planet® NFVO Automation The Adaptive **Analytics and** Network™ Intelligence SENSE Network and IT Predictive analytics and machine learning based on both big data and **Operations** small data Blue Planet® ROA **Programmable** Blue Planet® UAA Telemetry Infrastructure Blue Planet® Inventory CONNECT Dynamic pool of virtual and physical network resources; instrumented,



open, scalable, and secure

Market share growth

Ciena has consistently increased market share in times of market growth and decline



Source: IHS Optical Network Hardware Market Tracker, 4Q19



Market leadership





AICMO







#1 GLOBALLY

- DATA CENTER INTERCONNECT
- DATA CENTER INTERCONNECT FOR ICPs
- PURPOSE-BUILT/COMPACT MODULAR DCI
- SLTE WDM MARKET

#1 N. AMERICA

- TOTAL OPTICAL NETWORKING
- LH WDM
- METRO WDM

#2 GLOBALLY

- TOTAL OPTICAL NETWORKING
- LH WDM
- METRO WDM

#1 GLOBALLY

- OPTICAL EQUIPMENT VENDOR LEADERSHIP SP SURVEY
- OPTICAL NETWORK HARDWARE VENDOR SCORECARD
- CARRIER ETHERNET ACCESS DEVICES
- DATA CENTER INTERCONNECT
- PURPOSE-BUILT/COMPACT MODULAR DCI
- SLTE WDM MARKET

#1 N. AMERICA

- TOTAL OPTICAL NETWORKING
- CARRIER ETHERNET ACCESS DEVICES
- LH WDM
- METRO WDM

#2 GLOBALLY

- TOTAL OPTICAL NETWORKING
- LH WDM

#1 GLOBALLY

- PURPOSE-BUILT/COMPACT MODULAR DCI
- CLOUD & COLO MARKET
- SLTE WDM MARKET

#1 N. AMERICA

- TOTAL OPTICAL NETWORKING
- LH WDM
- METRO WDM

#2 GLOBALLY

- TOTAL OPTICAL NETWORKING
- LH WDM
- METRO WDM

#1 GLOBALLY

- DATA CENTER INTERCONNECT
- DATA CENTER INTERCONNECT FOR ICPs
- PURPOSE-BUILT/COMPACT MODULAR DCI

#1 N. AMERICA

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

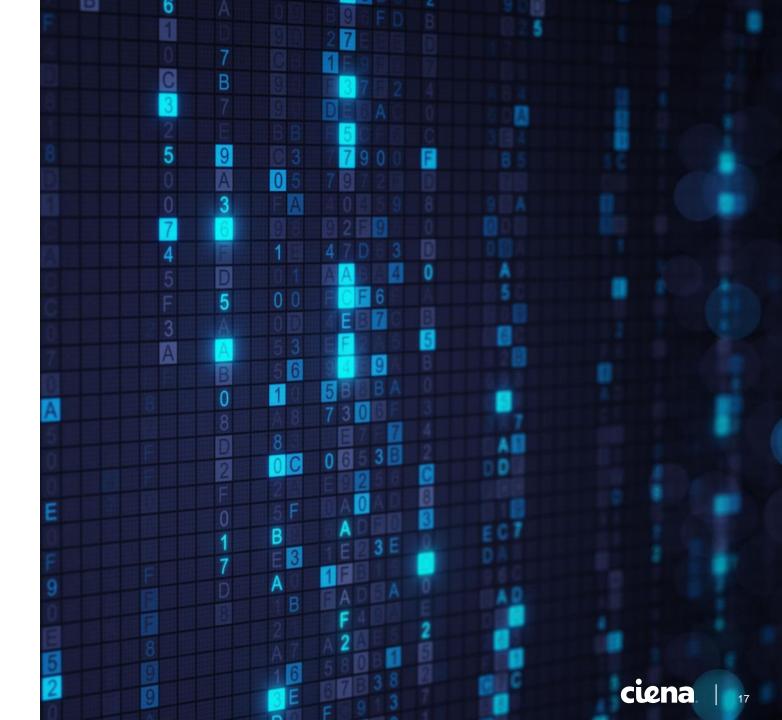
#2 GLOBALLY

- TOTAL OPTICAL NETWORKING
- NEXT-GEN OPTICAL
- PACKET OPTICAL
- LH WDM

Optical Networks Report, 3Q19 Data Center Interconnect Market Share Report, 3Q19 Optical Networks Report, 4Q19 DCI Market Tracker, September 2019 Ethernet Access Devices Tracker, September 2019 Optical Network HW Vendor Scorecard, June 2019 Optical Equipment Vendor Leadership Global Service Provider Survey, December 2019 Optical Hardware Report, 3Q19 Optical Customer Markets Report, 2Q19 Optical Hardware Applications Report, 2Q19 Optical Networks Report, 4Q19



Financials



Q2 FY 2020 key highlights

Achieving balanced growth

- Non-telco represented 42% of total revenue
- Direct web-scale contributed 24% of total revenue
- MSO contributed 10% of total revenue
- Americas revenue up 6% YoY

Driving the pace of innovation

- TTM Adjusted R&D* investment was \$528M
- WaveLogic Ai & WaveLogic 5 has 200 total customers with 21 new wins in Q2
- Shipped WL 5 Extreme to over a dozen customers, and the technology is operational and proven

Delivering shareholder value

- Repurchased approximately 0.6 million shares of common stock for an aggregate price of \$23.8 million
- Revenue growth of 3.4% YoY
- Adjusted EPS* growth of 58% YoY
- FCF was \$72.5M



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

Q2 FY 2020 financial highlights

Revenue	\$894M
Adjusted Gross Margin*	46.9%
Adjusted Operating Margin*	17.9%
Adjusted Operating Expense*	\$259M
Adjusted EBITDA*	\$183M
Adjusted EPS*	\$0.76



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

Q2 FY 2020 comparisons (year-over-year)

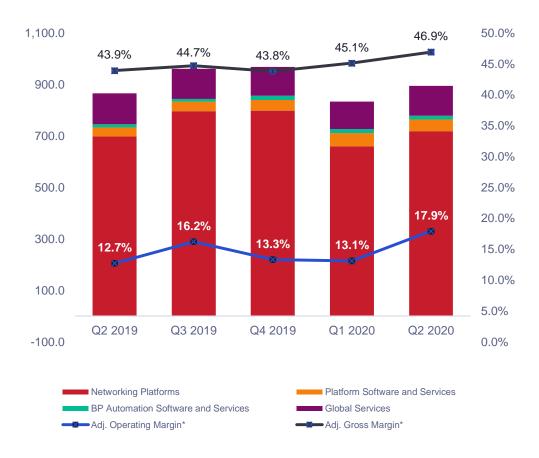








Revenue by segment (Amounts in millions)



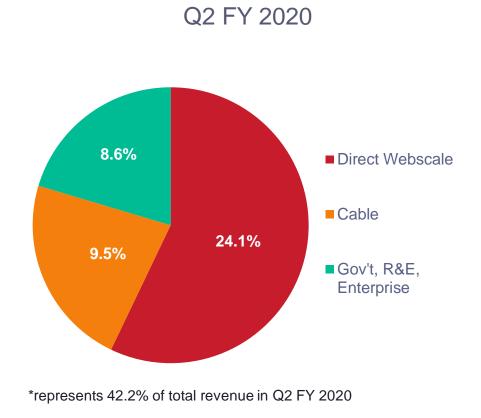
	Q2 FY	2020	Q2 FY 2019		
	Revenue	%**	Revenue	%**	
Networking Platforms	Revenue	70	revenue	70	
Converged Packet Optical	\$654.3	73.2	\$623.9	72.1	
Packet Networking	64.2	7.2	73.1	8.5	
Total Networking Platforms	718.5	80.4	697.0	80.6	
Platform Software and Services	45.0	5.0	35.2	4.0	
Blue Planet Automation Software and Services	15.0	1.7	12.5	1.4	
Global Services					
Maintenance Support and Training	71.5	8.0	68.8	8.0	
Installation and Deployment	34.2	3.8	41.3	4.8	
Consulting and Network Design	9.9	1.1	10.2	1.2	
Total Global Services	115.6	12.9	120.3	14.0	
Total	\$894.1	100.0%	\$865.0	100.0%	

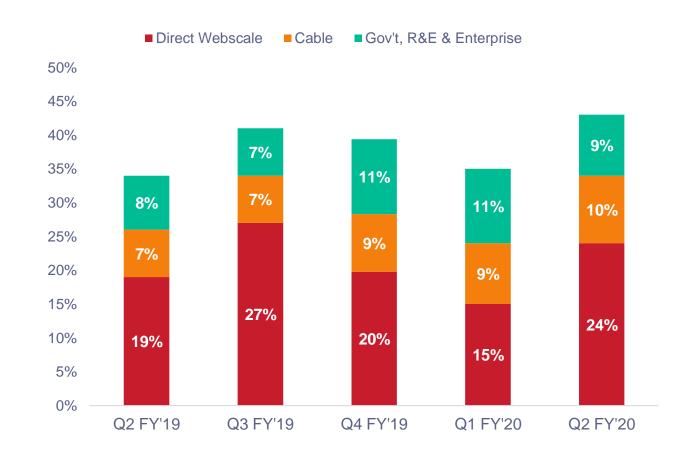


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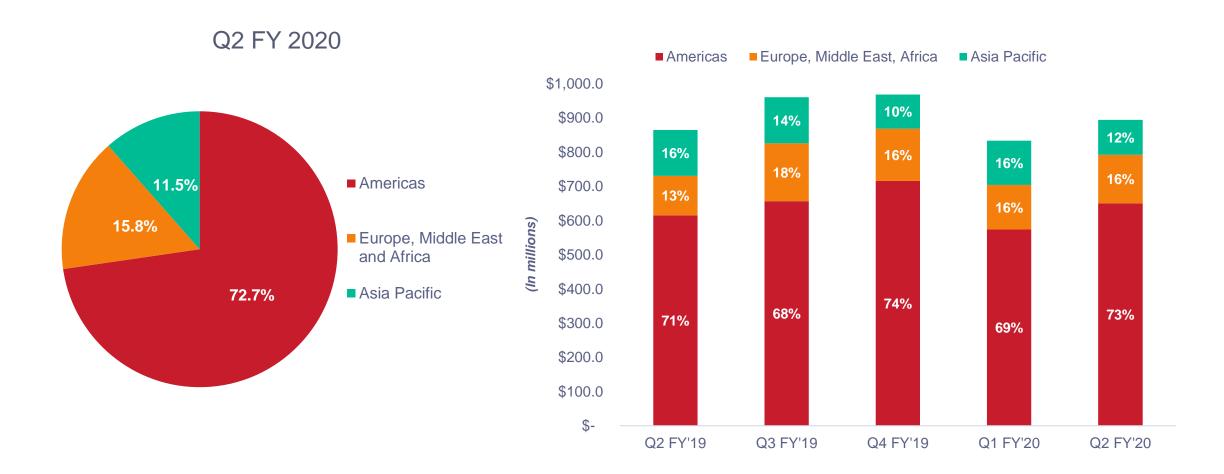
^{**} Denotes % of total revenue

Continued strength derived from non-telco revenue*





Revenue by geographic region

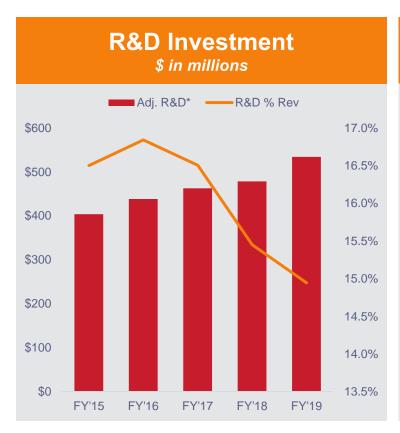




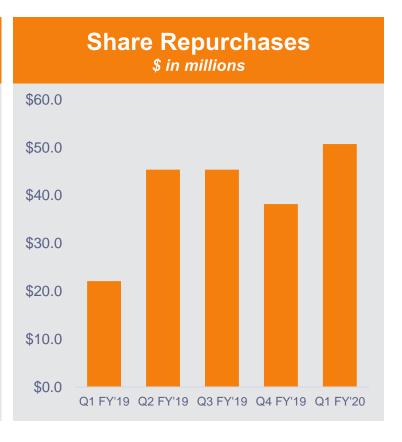
Q2 FY 2020 balance sheet and operating metrics

Cash and Investments	\$989M
Cash Flow From Operations	\$91M
Free Cash Flow	\$73M
Inventory Turns	5.0
Leverage	1.4x
Net Debt	(\$235M)

Returning value to shareholders through strong capital allocation priorities









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Business outlook and long-term targets



COVID-19 considerations in our outlook

Revenue Assumptions

- Operating conditions have complicated and extended the time required to deploy and activate new equipment and services with many of our large and long-standing international customers
- Conditions have made it more challenging to ramp up and operationalize some of our newer international deals and customer wins on their original timelines

Profitability Assumptions

- Continued cost reductions, vertical integration and operating efficiencies have yielded a 100bps increase in our baseline gross margin range (now 43-45%)
- COVID-19 related impacts on engaging new customers and ramping new business are having an additional short-term positive effect on gross margin
- Our gross margins are currently not being negatively impacted – as much as they have been in previous periods – by the cost of early-in-life projects

Business Assumptions

- In the face of a pandemic whose duration and effects remain uncertain, we are a resilient business with distinct competitive advantages
- Despite COVID-19, 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



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

^{**} TTM includes Q3 19 - Q2 20

Business Outlook

Q3 FY 2020 ¹					
Revenue	\$955M to \$985M				
Adjusted Gross Margin	44% to 46%				
Adjusted Operating Expense	~\$265-\$270M				

FY 2020 ²					
Revenue	2% to 4% annual growth rate				
Adjusted Gross Margin	44% to 46%				
Adjusted Operating Margin	16%				
Adjusted Operating Expense	\$265M to \$270M average range per quarter				

^{1.} Projections or outlook with respect to future operating results are only as of June 4, 2020, 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.



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Q2 fiscal 2020 appendix



Gross Profit Reconciliation (Amounts in thousands)

	Q2 FY 2020	Q1 FY 2020 Q4 FY 2019		Q3 FY 2019	Q2 FY 2019
GAAP gross profit	\$413,326	\$370,535	\$419,696	\$424,352	\$374,677
Share-based compensation-products	827	671	748	781	702
Share-based compensation-services	1,036	842	715	783	907
Amortization of intangible assets	3,835	3,834	3,303	3,303	3,303
Total adjustments related to gross profit	5,698	5,347	4,766	4,867	4,912
Adjusted (non-GAAP) gross profit	\$419,024	\$375,882	\$424,462	\$429,219	\$379,589
Adjusted (non-GAAP) gross margin	46.9%	45.1%	43.8%	44.7%	43.9%

Operating Expense Reconciliation (Amounts in thousands)

	Q2 FY 2020	Q1 FY 2020	Q4 FY 2019	Q3 FY 2019	Q2 FY 2019
GAAP operating expense	\$285,838	\$292,578	\$326,494	\$299,051	\$294,357
Share-based compensation-research and development	4,822	3,849	3,287	3,560	4,083
Share-based compensation-sales and marketing	5,264	4,613	4,151	4,192	4,346
Share-based compensation-general and administrative	5,975	5,527	6,425	5,813	5,491
Amortization of intangible assets	5,839	5,853	5,222	5,529	5,529
Significant asset impairments and restructuring costs	3,811	4,472	12,842	5,355	4,068
Acquisition and integration costs, excluding share-based compensation	1,414	1,819	(735)	1,362	1,135
Total adjustments related to operating expense	\$27,125	26,133	\$31,192	\$25,811	\$24,652
Adjusted (non-GAAP) operating expense	\$258,713	\$266,445	\$295,302	\$273,240	\$269,705

Income from Operations Reconciliation (Amounts in thousands)

	Q2 FY 2020	Q1 FY 2020	Q4 FY 2019	Q3 FY 2019	Q2 FY 2019
GAAP income from operations	\$127,488	\$77,957	\$93,202	\$125,301	\$80,320
Total adjustments related to gross profit	5,698	5,347	4,766	4,867	4,912
Total adjustments related to operating expense	27,125	26,133	31,192	25,811	24,652
Total adjustments related to income from operations	32,823	31,480	35,958	30,678	29,564
Adjusted (non-GAAP) income from operations	\$160,311	\$109,437	\$129,160	\$155,979	\$109,884
Adjusted (non-GAAP) operating margin	17.9%	13.1%	13.3%	16.2%	12.7%

Net Income Reconciliation (Amounts in thousands)

	Q2 FY 2020	Q1 FY 2020	Q4 FY 2019	Q3 FY 2019	Q2 FY 2019
GAAP net income	\$91,655	\$62,328	\$80,331	\$86,749	\$52,738
Exclude GAAP provision for income taxes	25,308	9,814	2,552	30,198	17,867
Income before income taxes	116,963	72,142	82,883	116,947	70,605
Total adjustments related to income from operations	32,823	31,480	35,958	30,678	29,564
Loss on extinguishment and modification of debt	-	646	-	-	
Adjusted income before income taxes	149,786	104,268	118,841	147,625	100,169
Non-GAAP tax provision on adjusted income before income taxes	32,354	22,522	28,403	35,282	23,940
Adjusted (non-GAAP) net income	\$117,432	\$81,746	\$90,438	\$112,343	\$76,229
Weighted average basic common shares outstanding	153,858	154,334	154,852	155,488	156,170
Weighted average dilutive potential common shares outstanding ¹	155,141	155,738	156,612	157,455	158,289

Net Income per Common Share

	Q2 FY 2020		Q1 FY 2020		Q4 FY 2019		Q3 FY 2019		Q2 FY 2019	
GAAP diluted net income per common share	\$	0.59	\$	0.40	\$	0.51	\$	0.55	\$	0.33
Adjusted (Non-GAAP) diluted net income per common share	\$	0.76	\$	0.52	\$	0.58	\$	0.71	\$	0.48

1. Weighted average dilutive potential common shares outstanding used in calculating adjusted (non-GAAP) diluted net income per common share for the second quarter of fiscal 2020 includes 1.3 million shares underlying certain stock options 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 2020		Q1 FY 2020		Q4 FY 2019		Q3	Q3 FY 2019		FY 2019
Net income (GAAP)	\$	91,655	\$	62,328	\$	80,331	\$	86,749	\$	52,738
Add: Interest expense		7,860		8,815		9,136		9,404		9,471
Less: Interest and other income (loss), net		(2,665)		3,646		(1,183)		1,050		(244)
Add: Loss on extinguishment and modification of debt		-		646		-		-		-
Add: Provision for income taxes		25,308		9,814		2,552		30,198		17,867
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements		22,599		25,782		22,505		22,076		21,482
Add: Amortization of intangible assets		9,674		9,687		8,525		8,832		8,832
EBITDA	\$	159,761	\$	113,426	\$	124,232	\$	156,209	\$	110,634
Add: Share-based compensation cost		17,977		15,602		15,290		15,084		15,607
Add: Significant asset impairments and restructuring costs		3,811		4,472		12,842		5,355		4,068
Add: Acquisition and integration costs		1,414		1,819		(735)		1,362		1,135
Adjusted EBITDA	\$	182,963	\$	135,319	\$	151,629	\$	178,010	\$	131,444



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

Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA)	Q1 FY 2020	Q4 FY 2019	Q3 FY 2019	Q2 FY 2019	Q1 FY 2019	
Net income (GAAP)	\$ 62,328	\$ 80,331	\$ 86,749	\$ 52,738	\$ 33,616	
Add: Interest expense	8,815	9,136	9,404	9,471	9,441	
Less: Interest and other income (loss), net	3,646	(1,183)	1,050	(244)	4,253	
Add: Loss on extinguishment and modification of debt	646	-	-	-	-	
Add: Provision for income taxes	9,814	2,552	30,198	17,867	9,139	
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	25,782	22,505	22,076	21,482	21,513	
Add: Amortization of intangible assets	9,687	8,525	8,832	8,832	8,947	
EBITDA	\$ 113,426	\$ 124,232	\$ 156,209	\$ 110,634	\$ 78,403	
Add: Shared-based compensation cost	15,602	15,290	15,084	15,607	13,755	
Add: Significant asset impairments and restructuring costs	4,472	12,842	5,355	4,068	2,273	
Add: Acquisition and integration costs	1,819	(735)	1,362	1,135	1,608	
Add: Legal settlement	-	-	-	-	137	
Adjusted EBITDA	\$ 135,319	\$ 151,629	\$ 178,010	\$ 131,444	\$ 96,176	



Thank You