



Ciena Corporation

Q1 FY 2019 Investor Presentation

Quarterly Period ended January 31, 2019

March 5, 2019

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," "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; 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; the impact of the Tax Cuts and Jobs Act; and the other risk factors disclosed in Ciena's periodic reports filed with the Securities and Exchange Commission (SEC) including Ciena's Quarterly Report on Form 10-Q to be filed with the SEC and Ciena's Annual Report on Form 10-K filed with the SEC on December 21, 2018.

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 and adjusted (non-GAAP) operating expense 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.

Q1 Fiscal 2019 Key Highlights

1 Diversifying and growing through market share gains

- Non-telco represented over 35% of total revenue
- Direct webscale was a record 22% of total revenue; one >10% webscale customer
- EMEA up 32% YoY
- APAC up 20% YoY

2 Forcing the pace of innovation with next generation solutions

- Announced WaveLogic 5; expected to ship in systems end of 2019
- WaveLogic Ai: 88 total customers
 - 23 new wins in Q1
- Waveserver: 125 customers; added 8 in Q1

3 Delivering shareholder value

- Repurchased approximately 0.6 million shares of common stock for an aggregate price of \$21.2 million
- Q1'19 Total Shareholder Return of 22.7% versus peer¹ return of 3.7%

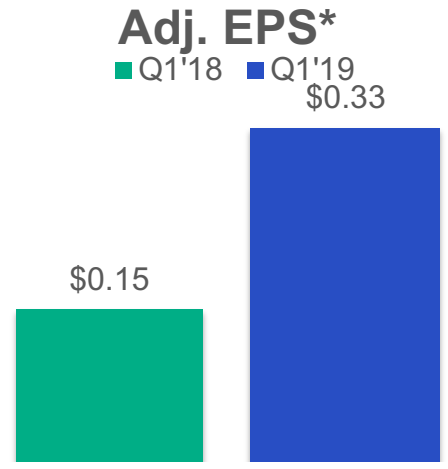
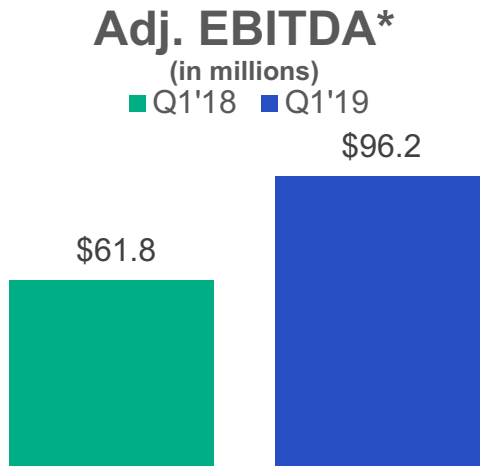
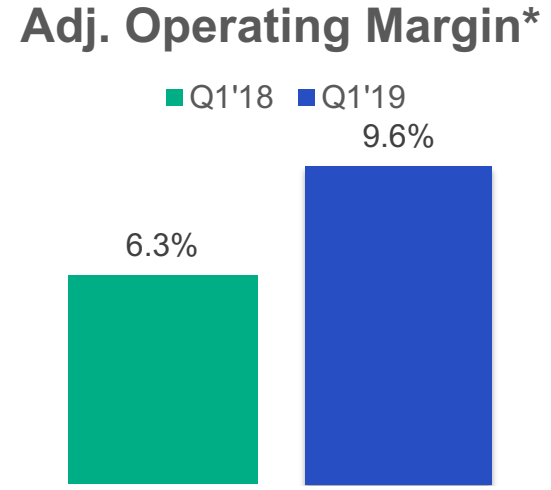
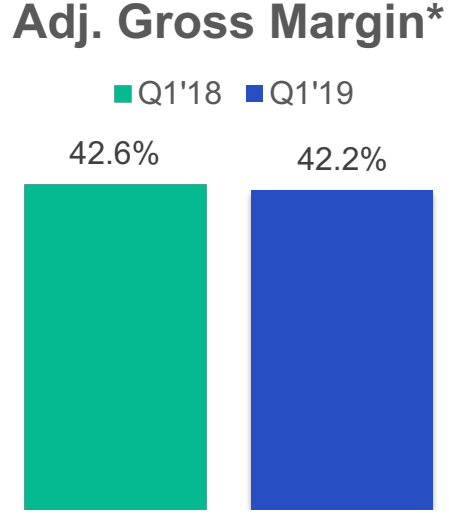
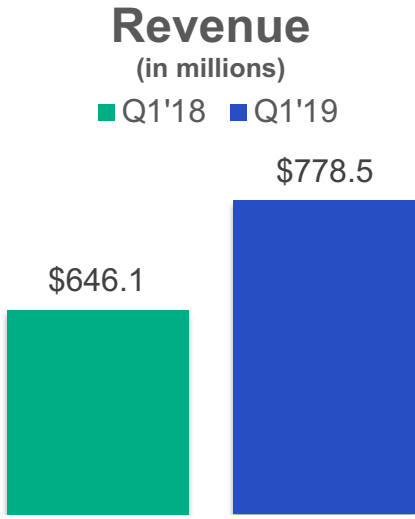
Q1 Fiscal 2019 Financial Highlights

Key Takeaways

- 1 Revenue of \$778.5 million
- 2 Adjusted Gross Margin of 42.2%*
- 3 Adjusted Operating Margin of 9.6%*
- 4 Adjusted EBITDA of \$96.2 million*
- 5 Adjusted EPS of \$0.33*

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

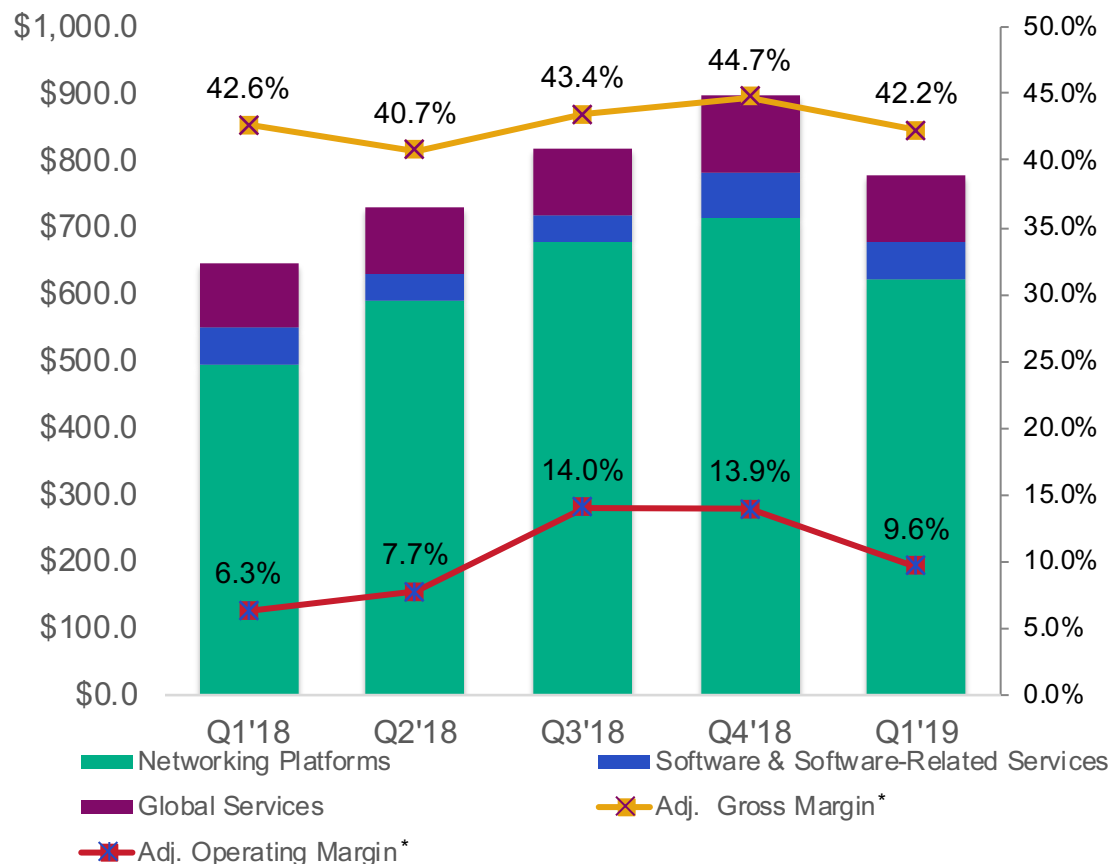
Q1 Fiscal 2019 Comparisons (Year-over-Year)



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Revenue by Segment

(Amounts in millions)



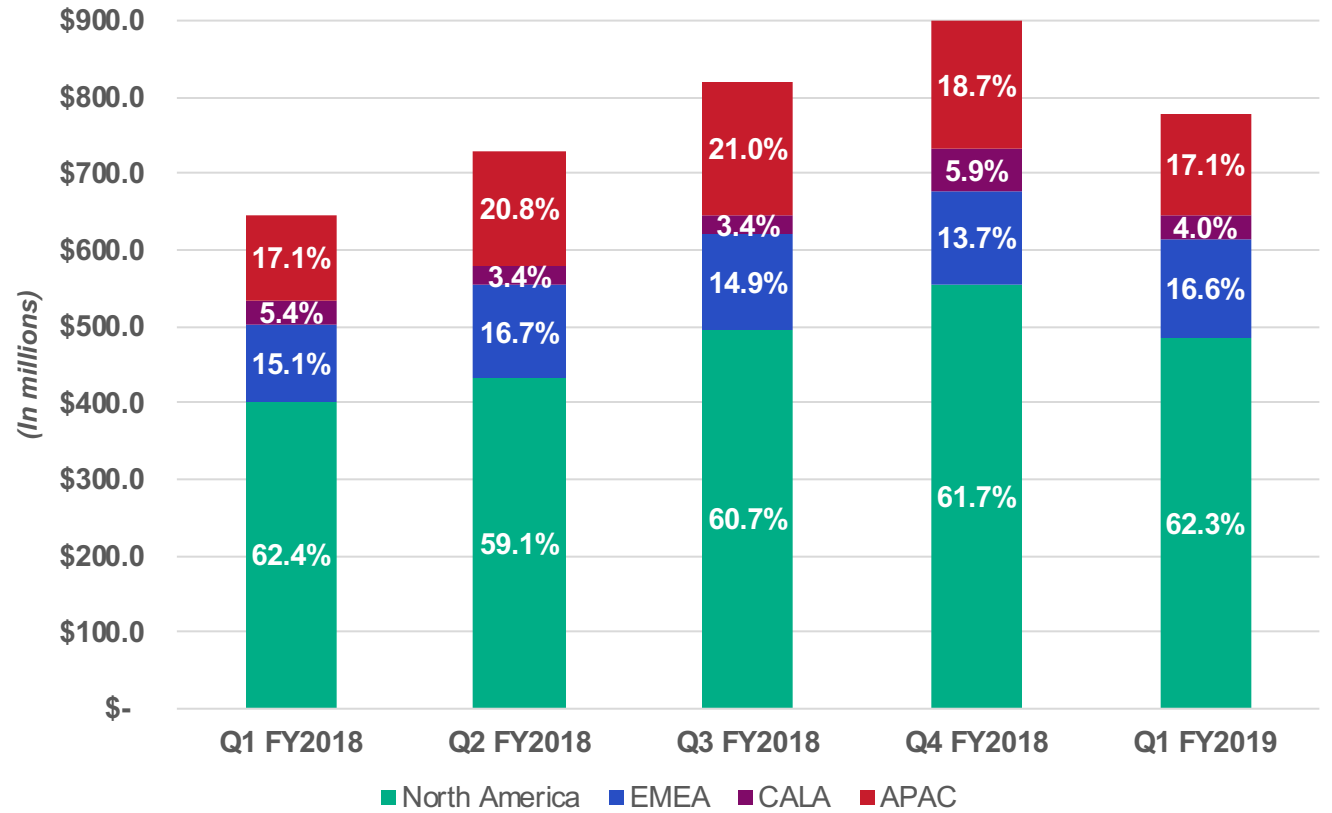
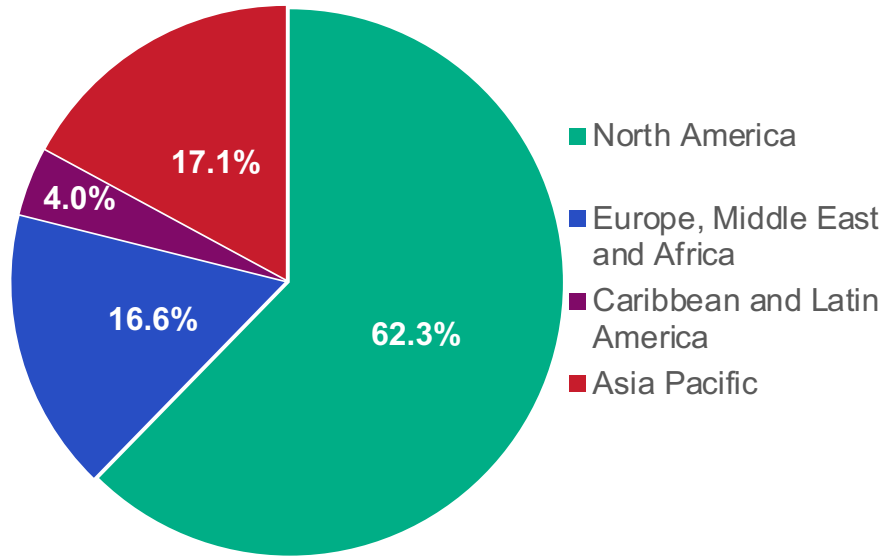
	Q1 FY 2019		Q1 FY 2018	
	Revenue	%**	Revenue	%**
Networking Platforms				
Converged Packet Optical	\$548.9	70.5	\$427.4	66.1
Packet Networking	71.6	9.2	68.6	10.6
Total Networking Platforms	620.5	79.7	496.0	76.7
Software & Software-Related Services				
Platform Software and Services	41.6	5.3	44.1	6.8
Blue Planet Automation Software and Services	15.0	1.9	9.4	1.5
Total Software & Software-Related Services	56.6	7.2	53.5	8.3
Global Services				
Maintenance Support and Training	61.3	8.0	56.0	8.7
Installation and Deployment	30.6	3.9	30.0	4.7
Consulting and Network Design	9.5	1.2	10.6	1.6
Total Global Services	101.4	13.1	96.6	15.0
Total	\$778.5	100.0%	\$646.1	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

Revenue by Geographic Region

Q1 2019

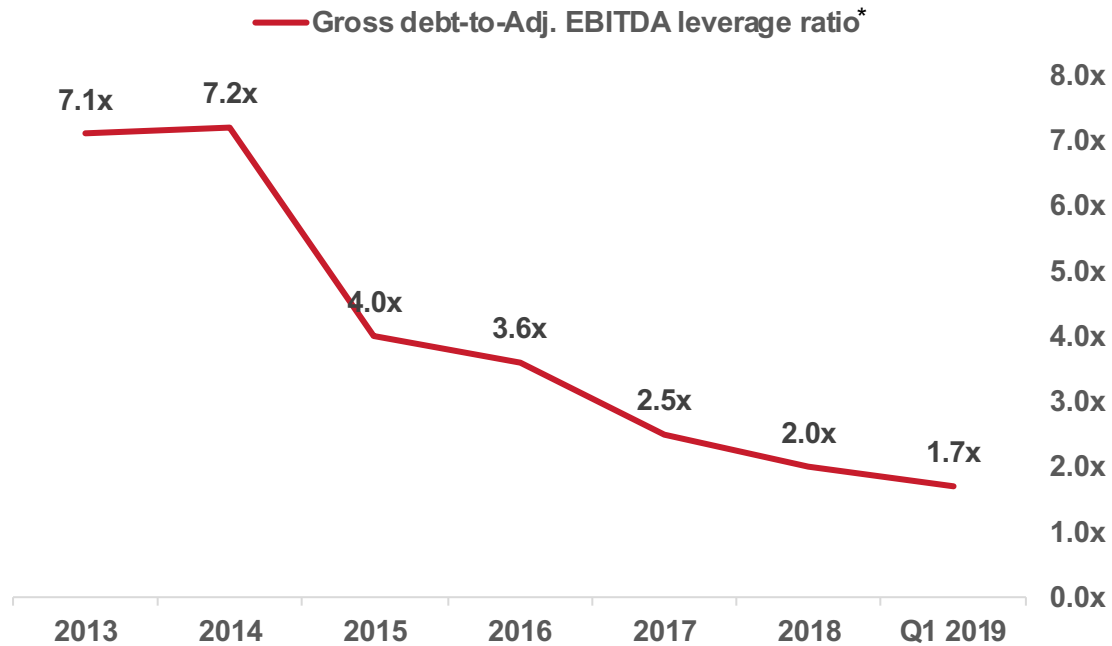


Q1 Fiscal 2019 Balance Sheet and Operating Metrics

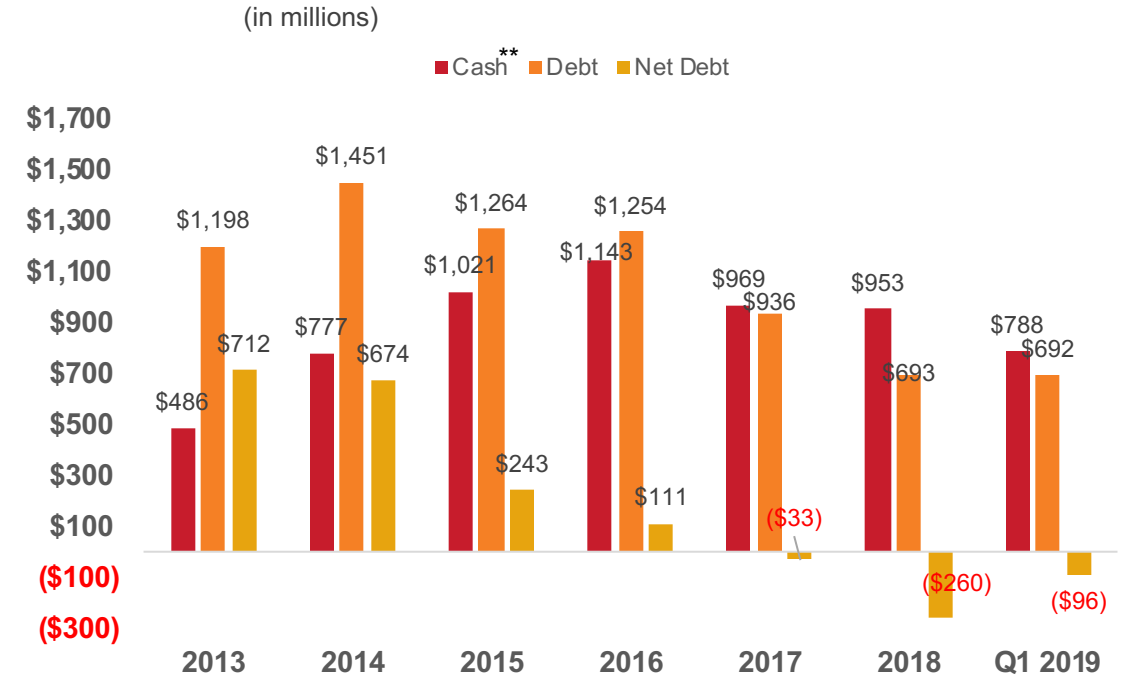
Cash and Investments	\$788.0 million
Cash Flow From Operations	(\$14.1) million
DSO	93 Days
Inventory Turns	4.7

Strengthening balance sheet

Leverage Trend



Net Debt (Cash) Position

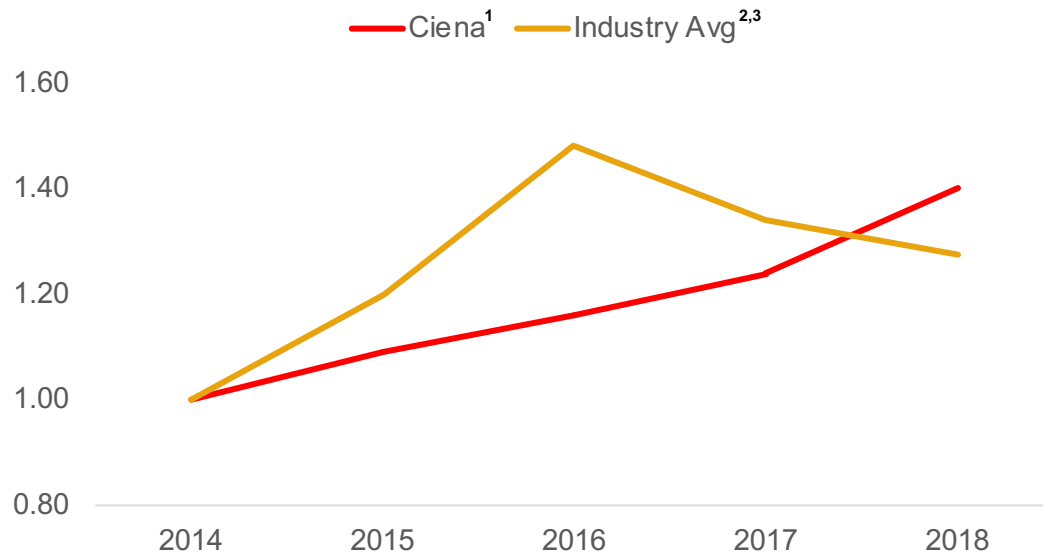


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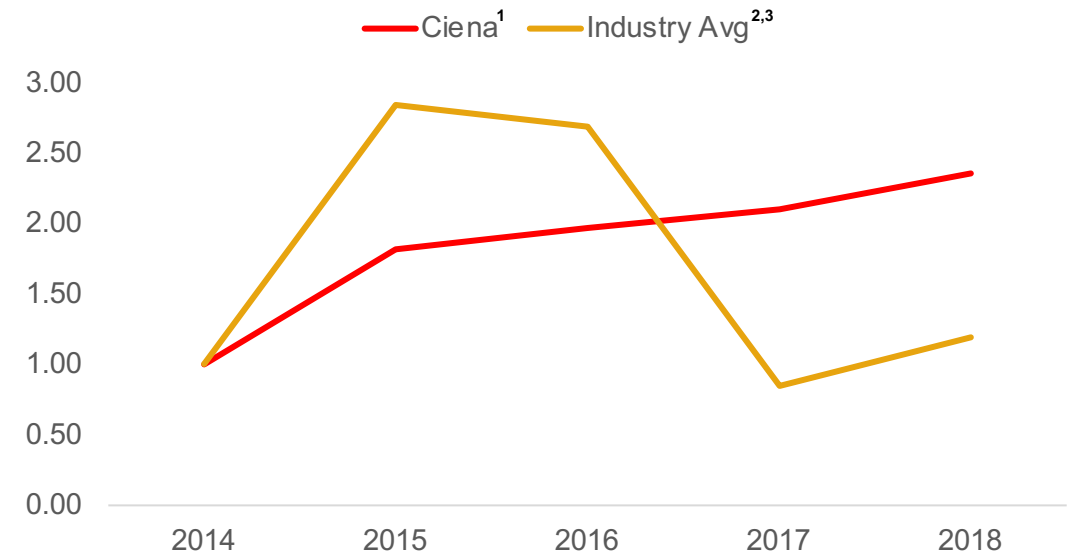
**Cash & cash equivalents

Delivering consistent and differentiated financial performance

Normalized Revenue



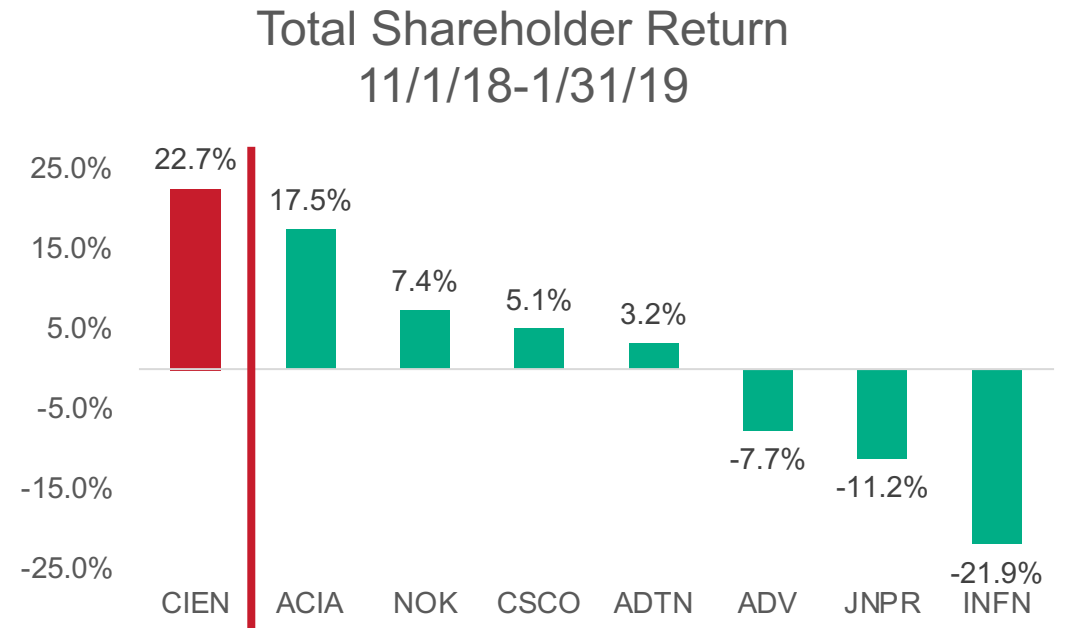
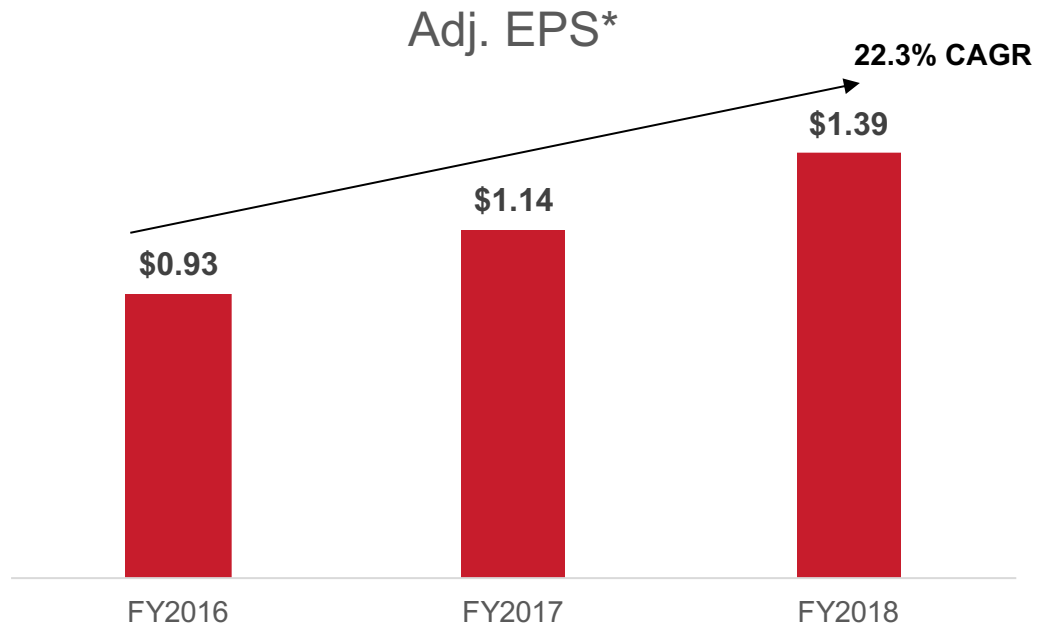
Normalized Adjusted OM



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

1. 2018 includes mid-point of Q1'19 guidance.
2. 2018 includes mid-point of Q4'18 guidance
3. INFN Q4 revenue is based on consensus as of 10/1/18 and excludes Coriant however adjusted OM is based on INFN's forecast and includes Coriant

Delivering profitability and stock outperformance



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

Business Outlook¹

Q2'19 ¹

Revenue	\$800M to \$830M
Adjusted Gross Margin	42%-43%
Adjusted Operating Expense	Approximately \$255-\$260M

FY'19 ²

Revenue	6%-8% Annual Growth
Adjusted Gross Margin	42%-43%
Adjusted Operating Expense	Approximately \$255M-\$260M per quarter
Shares Outstanding	Approximately 157M

¹ Projections or outlook with respect to future operating results are only as of March 5, 2019, 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.

² Projections or outlook with respect to future operating results are only as of December 13, 2018, 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 Targets

New long-term financial targets*

Execution of our strategy will drive top-line growth, profitability and cash generation

Revenue	Adj. operating margin	Adj. EPS	Free cash flow
Approximately 6% to 8% annual growth over the next three years	15% for fiscal 2020; expect to achieve at least 15% in fiscal 2021	Over 20% annual growth per year over the next three years	Approximately 60-70% of adjusted operating income in each of the next three years

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New long-term financial targets*

Three-year annual revenue growth targets

Optical Systems	Approximately 4-6%
Attached Services	Approximately 4-6%
Packet Networking	Approximately 8-10%
Blue Planet	Approximately \$100M-\$120M ¹

**Projections or outlook with respect to future operating results are only as of December 13, 2018, 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.*

¹Projection indicates annual target for Ciena's Blue Planet Automation software and services business in fiscal 2021

Q1 Fiscal 2019 Appendix



Gross Profit Reconciliation

(Amounts in thousands)

	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 2018	Q1 FY 2018
GAAP gross profit	\$323,341	\$398,075	\$351,543	\$293,307	\$271,765
Share-based compensation-products	637	705	783	824	672
Share-based compensation-services	770	651	618	722	625
Amortization of intangible assets	3,418	2,957	2,534	2,289	2,289
Total adjustments related to gross profit	4,825	4,313	3,935	3,835	3,586
Adjusted (non-GAAP) gross profit	\$328,166	\$402,388	\$355,478	\$297,142	\$275,351
Adjusted (non-GAAP) gross margin	42.2%	44.7%	43.4%	40.7%	42.6%

Operating Expense Reconciliation (Amounts in thousands)

	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 2018	Q1 FY 2018
GAAP operating expense	\$275,398	\$302,205	\$266,269	\$261,241	\$255,029
Share-based compensation-research and development	3,391	3,385	3,082	3,796	3,255
Share-based compensation-sales and marketing	3,785	3,741	3,417	3,760	3,328
Share-based compensation-general and administrative	5,112	5,588	4,538	5,109	4,474
Significant asset impairments and restructuring costs	2,273	1,460	6,359	4,359	5,961
Amortization of intangible assets	5,528	4,654	3,837	3,623	3,623
Acquisition and integration costs, excluding share-based compensation	1,608	3,778	1,333	-	-
Legal settlement	137	1,929	2,753	-	-
Total adjustments related to operating expense	\$21,834	\$24,535	\$25,319	\$20,647	\$20,641
Adjusted (non-GAAP) operating expense	\$253,564	\$277,670	\$240,950	\$240,594	\$234,388

Income from Operations Reconciliation (Amounts in thousands)

	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 2018	Q1 FY 2018
GAAP income from operations	\$47,943	\$95,870	\$85,274	\$32,066	\$16,736
Total adjustments related to gross profit	4,825	4,313	3,935	3,835	3,586
Total adjustments related to operating expense	21,834	24,535	25,319	20,647	20,641
Total adjustments related to income from operations	26,659	28,848	29,254	24,482	24,227
Adjusted (non-GAAP) income from operations	\$74,602	\$124,718	\$114,528	\$56,548	\$40,963
Adjusted (non-GAAP) operating margin	9.6%	13.9%	14.0%	7.7%	6.3%

Net Income (loss) Reconciliation (Amounts in thousands)

	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 2018	Q1 FY 2018
GAAP net income (loss)	\$33,616	\$63,977	\$50,840	\$13,856	(\$473,363)
Exclude GAAP provision (benefit) for income taxes	9,139	(10,224)	19,280	6,475	477,940
Income before income taxes	42,755	53,753	70,120	20,331	4,577
Total adjustments related to income from operations	26,659	28,848	29,254	24,482	24,227
Loss on extinguishment and modification of debt	-	13,887	-	-	-
Non-cash interest expense	-	727	793	759	749
Change in fair value of debt conversion liability	-	12,070	-	-	-
Adjusted income before income taxes	69,414	109,285	100,167	45,572	29,553
Non-GAAP tax provision on adjusted income before income taxes	16,590	28,272	25,913	11,789	7,645
Adjusted (non-GAAP) net income	\$52,824	\$81,013	\$74,254	\$33,783	\$21,908
Weighted average basic common shares outstanding	156,314	143,659	143,400	143,975	143,922
Weighted average dilutive potential common shares outstanding ¹	158,174	157,745	159,998	151,011	145,558

Net Income (loss) per Common Share

	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 2018	Q1 FY 2018
GAAP diluted net income (loss) per common share	\$ 0.21	\$ 0.34	\$ 0.34	\$ 0.09	\$ (3.29)
Adjusted (Non-GAAP) diluted net income per common share	\$ 0.33	\$ 0.53	\$ 0.48	\$ 0.23	\$ 0.15

1. Weighted average dilutive potential common shares outstanding used in calculating adjusted (non-GAAP) diluted net income per common share for the first quarter of fiscal 2019 includes 1.9 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)	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 2018	Q1 FY 2018
Net income (loss) (GAAP)	\$ 33,616	\$ 63,977	\$ 50,840	\$ 13,856	\$ (473,363)
Add: Interest expense	9,441	14,873	13,611	13,031	13,734
Less: Interest and other income (loss), net	4,253	(13,357)	(1,543)	1,296	1,575
Add: Loss on extinguishment and modification of debt	-	(13,887)	-	-	-
Add: Provision (benefit) for income taxes	9,139	(10,224)	19,280	6,475	477,940
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	21,513	21,110	21,704	20,567	20,833
Add: Amortization of intangible assets	8,947	7,611	6,371	5,912	5,912
EBITDA	\$ 78,403	\$ 124,591	\$ 113,349	\$ 58,545	\$ 43,481
Add: Shared-based compensation cost	13,755	14,076	12,337	14,166	12,393
Add: Significant asset impairments and restructuring costs	2,273	1,460	6,359	4,359	5,961
Add: Acquisition and integration costs	1,608	3,778	1,333	-	-
Add: Legal settlement	137	1,929	2,753	-	-
Adjusted EBITDA	\$ 96,176	\$ 145,834	\$ 136,131	\$ 77,070	\$ 61,835

Thank You

