UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): June 6, 2019

Ciena Corporation

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation)

001-36250

(Commission File Number)

23-2725311 (IRS Employer Identification No.)

7035 Ridge Road, Hanover, MD (Address of Principal Executive Offices)

21076 (Zip Code)

(410) 694-5700

(Registrant's Telephone Number, Including Area Code)

Not Applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 2.02 – RESULTS OF OPERATIONS AND FINANCIAL CONDITION

On June 6, 2019, Ciena Corporation ("Ciena") issued a press release announcing its financial results for its second fiscal quarter ended April 30, 2019. The text of the press release is furnished as Exhibit 99.1 to this Report. As discussed in this press release, Ciena will be hosting an investor call to discuss its results of operations for its second fiscal quarter ended April 30, 2019.

In conjunction with the issuance of this press release, Ciena posted to the quarterly results page of the Investors section of www.ciena.com an accompanying investor presentation. The investor presentation is furnished as Exhibit 99.2 to this Report.

The information in Exhibits 99.1 and 99.2, as well as Item 2.02 of this Report shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, and shall not be incorporated by reference into any registration statement pursuant to the Securities Act of 1933, as amended. Investors are encouraged to review the "Investors" page of our website at www.ciena.com because, as with the other disclosure channels that we use, from time to time we may post material information exclusively on that site.

ITEM 9.01 – FINANCIAL STATEMENTS AND EXHIBITS

(d) The following exhibits are being filed herewith:

<u>Exhibit Number</u> <u>Description of Document</u>

Exhibit 99.1 Text of Press Release dated June 6, 2019, issued by Ciena Corporation, reporting its results of operations for its second fiscal quarter ended April 30, 2019.

Exhibit 99.2 <u>Investor Presentation for Ciena Corporation's second fiscal quarter ended April 30, 2019.</u>

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Ciena Corporation

Date: June 6, 2019

By: /S/ David M. Rothenstein

David M. Rothenstein

Senior Vice President, General Counsel & Secretary

FOR IMMEDIATE RELEASE

Ciena Reports Fiscal Second Quarter 2019 Financial Results

HANOVER, Md. - June 6, 2019 - Ciena Corporation (NYSE: CIEN), a networking systems, services and software company, today announced unaudited financial results for its fiscal second quarter ended April 30, 2019.

- Q2 Revenue: \$865.0 million, increasing 18.5% year over year
- Q2 Net Income per Share: \$0.33 GAAP; \$0.48 adjusted (non-GAAP)
- · Share Repurchases: Repurchased approximately 1.2 million shares of common stock for an aggregate price of \$45.4 million during the quarter

"Today we reported very strong quarterly performance, including continued market share gains, driven by our technology leadership and diversified customer base in high growth markets," said Gary Smith, President and CEO, Ciena. "We are entering the second half with strong visibility and increased confidence for the full fiscal year supported by favorable industry dynamics and growing competitive advantage."

For the fiscal second quarter 2019, Ciena reported revenue of \$865.0 million as compared to \$730.0 million for the fiscal second quarter 2018.

Ciena's GAAP net income for the fiscal second quarter 2019 was \$52.7 million, or \$0.33 per diluted common share, which compares to a GAAP net income of \$13.9 million, or \$0.09 per diluted common share, for the fiscal second quarter 2018.

Ciena's adjusted (non-GAAP) net income for the fiscal second quarter 2019 was \$76.2 million, or \$0.48 per diluted common share, which compares to an adjusted (non-GAAP) net income of \$33.8 million, or \$0.23 per diluted common share, for the fiscal second quarter 2018.

Fiscal Second Quarter 2019 Performance Summary

The tables below (in millions, except percentage data) provide comparisons of certain quarterly results to the prior year. Appendix A and B set forth reconciliations between the GAAP and adjusted (non-GAAP) measures contained in this release.

		GAAP Results	
	 Q2	Q2	
	 FY 2019	FY 2018	Y-T-Y*
uue	\$ 865.0	\$ 730.0	18.5%
margin	43.3%	40.2%	3.1%
ating expense	\$ 294.4	\$ 261.2	12.7%
margin	9.3%	4.4%	4.9%

		N	on-GAAP Results	
	 Q2		Q2	<u> </u>
	 FY 2019		FY 2018	Y-T-Y*
Revenue	\$ 865.0	\$	730.0	18.5%
Adj. gross margin	43.9%		40.7%	3.2%
Adj. operating expense	\$ 269.7	\$	240.6	12.1%
Adj. operating margin	12.7%		7.7%	5.0%

 $[\]boldsymbol{*}$ Denotes % change, or in the case of margin, absolute change

		Revenue by Segment			
		Q2 FY	2019	Q2 1	FY 2018
	1	Revenue	%**	Revenue	%**
Networking Platforms					
Converged Packet Optical	\$	623.9	72.1	\$ 527.9	72.4
Packet Networking		73.1	8.5	63.8	8.7
Total Networking Platforms		697.0	80.6	591.7	81.1
Software and Software-Related Services					
Platform Software and Services		35.2	4.0	36.4	5.0
Blue Planet Automation Software and Services		12.5	1.4	2.3	0.3
Total Software and Software-Related Services		47.7	5.4	38.7	5.3
Global Services					
Maintenance Support and Training		68.8	8.0	60.9	8.3
Installation and Deployment		41.3	4.8	28.2	3.9
Consulting and Network Design		10.2	1.2	10.5	1.4
Total Global Services		120.3	14.0	99.6	13.6
Total	\$	865.0	100.0	\$ 730.0	100.0

	Revenue by Geographic Region				
	 Q2 F	Y 2019	Q2 FY 2018		
	 Revenue	% **	Revenue	% **	
North America	\$ 576.1	66.5	\$ 431.2	59.1	
Europe, Middle East and Africa	115.0	13.3	121.7	16.7	
Caribbean and Latin America	39.4	4.6	25.1	3.4	
Asia Pacific	 134.5	15.6	152.0	20.8	
Total	\$ 865.0	100.0	\$ 730.0	100.0	

^{**} Denotes % of total revenue

- Two 10%-plus customers represented a total of 25% of revenue
- Cash and investments totaled \$818.5 million
- Cash flow from operations totaled \$104.1 million
- Average days' sales outstanding (DSOs) were 86
- Accounts receivable balance was \$756.6 million
- Unbilled contract asset balance was \$74.4 million
- Inventories totaled \$359.4 million, including:
 - Raw materials: \$90.3 million
 - Work in process: \$12.0 million
 - Finished goods: \$205.4 million
 - · Deferred cost of sales: \$100.6 million
 - Reserve for excess and obsolescence: \$(48.9) million
- Product inventory turns were 4.6
- Headcount totaled 6,176

Supplemental Materials and Live Web Broadcast of Unaudited Fiscal Second Quarter 2019 Results

Today, Thursday, June 6, 2019, in conjunction with this announcement, Ciena has posted to the Quarterly Results page of the Investor Relations section of its website an accompanying investor presentation for its unaudited fiscal second quarter 2019 results.

Ciena's management will also host a discussion today with investors and financial analysts that will include the Company's outlook. The live audio web broadcast beginning at 8:30 a.m. Eastern will be accessible via www.ciena.com. An archived replay of the live broadcast will be available shortly following its conclusion on the Investor Relations page of Ciena's website.

Notes to Investors

Forward-Looking Statements. You are encouraged to review the Investors section of our website, where we routinely post press releases, SEC filings, recent news, financial results, supplemental financial information, and other announcements. From time to time we exclusively post material information to this website along with other disclosure channels that we use. This press release contains certain forward-looking statements that involve risks and uncertainties. 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 statements regarding Ciena's expectations, beliefs, intentions or strategies regarding the future and can be identified by forward-looking words such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "should," "will," and "would" or

similar words. Forward-looking statements in this release include: "Today we reported very strong quarterly performance, including continued market share gains, driven by our technology leadership and diversified customer base in high growth markets"; "We are entering the second half with strong visibility and increased confidence for the full fiscal year supported by favorable industry dynamics and growing competitive advantage."

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; changes in network spending or network strategy by 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; changes in tax or trade regulations, including the imposition of tariffs and duties; changes in estimates of prospective income tax rates and any adjustments to Ciena's provisional estimates whether related to further guidance, analysis or otherwise; and the other risk factors disclosed in Ciena's Quarterly Report on Form 10-Q filed with the SEC on March 11, 2019 and its Annual Report on Form 10-K filed with the SEC on December 21, 2018. Ciena assumes no obligation to update any forward-looking information included in this press release.

Non-GAAP Presentation of Quarterly and Annual Results. This release includes non-GAAP measures of Ciena's gross profit, operating expense, income from operations, earnings before interest, tax, depreciation and amortization (EBITDA), Adjusted EBITDA, and measures of net income and net income per share. In evaluating the operating performance of Ciena's business, management excludes certain charges and credits that are required by GAAP. These items share one or more of the following characteristics: they are unusual and Ciena does not expect them to recur in the ordinary course of its business; they do not involve the expenditure of cash; they are unrelated to the ongoing operation of the business in the ordinary course; or their magnitude and timing is largely outside of Ciena's control. Management believes that the non-GAAP measures below provide management and investors useful information and meaningful insight to the operating performance of the business. The presentation of these non-GAAP financial measures should be considered in addition to Ciena's GAAP results and these measures are not intended to be a substitute for the financial information prepared and presented in accordance with GAAP. Ciena's non-GAAP measures and the related adjustments may differ from non-GAAP measures used by other companies and should only be used to evaluate Ciena's results of operations in conjunction with our corresponding GAAP results. To the extent not previously disclosed in a prior Ciena financial results press release, Appendix A and B to this press release set forth a complete GAAP to non-GAAP reconciliation of the non-GAAP measures contained in this release.

About Ciena. Ciena (NYSE: CIEN) is a networking systems, services and software company. We provide solutions that help our clients create the Adaptive Network™ in response to the constantly changing demands of their users. By delivering best-in-class networking technology through high-touch consultative relationships, we build the world's most agile networks with automation, openness and scale. For updates on Ciena, follow us on Twitter @Ciena, LinkedIn, the Ciena Insights blog, or visit www.ciena.com.

CIENA CORPORATION CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except per share data) (unaudited)

	 Quarter Ended April 30,			Six Months Ended April 30,			
	 2019		2018		2019		2018
Revenue:							
Products	\$ 710,688	\$	604,226	\$	1,353,220	\$	1,129,835
Services	 154,323		125,752		290,318		246,278
Total revenue	865,011		729,978		1,643,538		1,376,113
Cost of goods sold:		, <u>, </u>					
Products	411,050		372,568		791,492		685,688
Services	79,284		64,103		154,028		125,353
Total cost of goods sold	490,334		436,671		945,520		811,041
Gross profit	374,677		293,307		698,018		565,072
Operating expenses:							
Research and development	137,969		116,924		266,602		235,448
Selling and marketing	103,502		97,359		201,615		185,874
General and administrative	42,154		38,976		81,397		77,382
Amortization of intangible assets	5,529		3,623		11,057		7,246
Significant asset impairments and restructuring costs	4,068		4,359		6,341		10,320
Acquisition and integration costs	1,135		_		2,743		_
Total operating expenses	294,357		261,241		569,755		516,270
Income from operations	 80,320		32,066		128,263		48,802
Interest and other income (loss), net	(244)		1,296		4,009		2,871
Interest expense	(9,471)		(13,031)		(18,912)		(26,765)
Income before income taxes	70,605		20,331		113,360		24,908
Provision for income taxes							
	 17,867		6,475		27,006		484,415
Net income (loss)	\$ 52,738	\$	13,856	\$	86,354	\$	(459,507)
Net Income (loss) per Common Share							
Basic net income (loss) per common share	\$ 0.34	\$	0.10	\$	0.55	\$	(3.19)
Diluted net income (loss) per potential common share	\$ 0.33	\$	0.09	\$	0.55	\$	(3.19)
Weighted average basic common shares outstanding	156,170		143,975		156,244		143,948
Weighted average dilutive potential common shares outstanding ¹	 158,289		147,973	_	158,211		143,948

^{1.} Weighted average dilutive potential common shares outstanding used in calculating GAAP diluted net income per common share for the second quarter of fiscal 2019 includes 2.1 million shares underlying certain stock options and stock unit avards

Weighted average dilutive potential common shares outstanding used in calculating GAAP diluted net income per common share for the first six months of fiscal 2019 includes 2.0 million shares underlying certain stock options and stock unit awards.

Weighted average dilutive potential common shares outstanding used in calculating GAAP diluted net income per common share for the second quarter of fiscal 2018 includes 1.3 million shares underlying certain stock options and stock unit awards and 2.7 million shares underlying Ciena's "New" 3.75% senior convertible notes, which were converted by holders thereof immediately prior to maturity during the fourth quarter of fiscal 2018.

CIENA CORPORATION CONDENSED CONSOLIDATED BALANCE SHEETS (in thousands, except share data) (unaudited)

	April 30, 2019		October 31, 2018	
ASSETS				
Current assets:				
Cash and cash equivalents	\$ 699,148	\$	745,423	
Short-term investments	119,327		148,981	
Accounts receivable, net	756,607		786,502	
Inventories	359,417		262,751	
Prepaid expenses and other	243,669		198,945	
Total current assets	2,178,168		2,142,602	
Long-term investments	_		58,970	
Equipment, building, furniture and fixtures, net	282,022		292,067	
Goodwill	297,711		297,968	
Other intangible assets, net	129,971		148,225	
Deferred tax asset, net	715,968		745,039	
Other long-term assets	82,938		71,652	
Total assets	\$ 3,686,778	\$	3,756,523	
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$ 366,932	\$	340,582	
Accrued liabilities and other short-term obligations	291,417		340,075	
Deferred revenue	104,030		111,134	
Current portion of long-term debt	7,000		7,000	
Debt conversion liability	_		164,212	
Total current liabilities	769,379		963,003	
Long-term deferred revenue	40,992		58,323	
Other long-term obligations	129,779		119,413	
Long-term debt, net	683,429		686,450	
Total liabilities	\$ 1,623,579	\$	1,827,189	
Stockholders' equity:				
Preferred stock – par value \$0.01; 20,000,000 shares authorized; zero shares issued and outstanding	_		_	
Common stock – par value \$0.01; 290,000,000 shares authorized; 155,566,701 and 154,318,531 shares issued and outstanding	1,556		1,543	
Additional paid-in capital	6,892,342		6,881,223	
Accumulated other comprehensive loss	(19,206		(5,780	
Accumulated deficit	(4,811,493		(4,947,652	
Total stockholders' equity	2,063,199		1,929,334	
Total liabilities and stockholders' equity	\$ 3,686,778	<u>s</u>	3,756,523	

CIENA CORPORATION CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands) (unaudited)

	Six Mor	Six Months Ended April 30,	
	2019		2018
Cash flows provided by operating activities:			
Net income (loss)	\$ 86,35	4 \$	(459,507)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	42,99	5	41,400
Share-based compensation costs	29,36	2	26,559
Amortization of intangible assets	17,77	3	11,824
Deferred taxes	18,29	3	481,401
Provision for inventory excess and obsolescence	10,24		14,977
Provision for warranty	9,27	5	10,565
Other	(2,25	9)	12,645
Changes in assets and liabilities:			
Accounts receivable	43,17	4	(28,055
Inventories	(109,55	4)	20,420
Prepaid expenses and other	(33,24	1)	2,623
Accounts payable, accruals and other obligations	(26,97	1)	(55,986
Deferred revenue	4,56	0	(5,736
Net cash provided by operating activities	90,01	2	73,130
Cash flows provided by (used in) investing activities:			
Payments for equipment, furniture, fixtures and intellectual property	(35,28	9)	(31,946
Restricted cash	-	-	54
Purchase of available for sale securities	(97,89	7)	(198,026
Proceeds from maturities of available for sale securities	90,00	0	200,000
Proceeds from sales of available for sale securities	98,26	3	_
Settlement of foreign currency forward contracts, net	(2,74	1)	132
Purchase of equity investment	(2,66	7)	(767
Net cash provided by (used in) investing activities	49,66	9	(30,553
Cash flows used in financing activities:			,
Payment of long term debt	(3,50	0)	(2,000
Payment of capital lease obligations	(1,67		(1,868
Payment for debt conversion liability	(111,26		_
Shares repurchased for tax withholdings on vesting of restricted stock units	(15,86		_
Repurchases of common stock - repurchase program	(65,10	-	(38,036
Proceeds from issuance of common stock	11,23		11,804
Net cash used in financing activities	(186,18		(30,100
Effect of exchange rate changes on cash and cash equivalents	22	_	(894
Net increase (decrease) in cash and cash equivalents	(46,27	_	11,583
Cash and cash equivalents at beginning of period	745,42	-	640,513
Cash and cash equivalents at end of period	\$ 699,14		652,096
		_ —	002,000
Supplemental disclosure of cash flow information	\$ 19.97	0 6	21.042
Cash paid during the period for interest	\$ 19,97 \$ 9,25		21,843
Cash paid during the period for income taxes, net Non-cash investing activities	3 9,25	. p	15,136
· · · · · · · · · · · · · · · · · · ·	\$ 2,79	2 ¢	3,226
Purchase of equipment in accounts payable	3 2,79	3 \$	3,226
Non-cash financing activities	\$ 1,44	1 \$	1,111
Repurchase of common stock in accrued liabilities from repurchase program Conversion of debt conversion liability into 1,585,140 shares of common stock	\$ 1,44 \$ 52,94		1,111

		Quarter Ended Apr	
C. D. G.D. W. S. (CAAD). CAAD		— —	2018
Gross Profit Reconciliation (GAAP/non-GAAP)	\$ 3	74,677 \$	293,307
GAAP gross profit	<u>\$ 3</u>	702	293,307
Share-based compensation-products		907	722
Share-based compensation-services Amortization of intangible assets		3,303	2,289
Total adjustments related to gross profit		4.912	3,835
	<u> </u>	79,589 \$	297,142
Adjusted (non-GAAP) gross profit	\$ 3		
Adjusted (non-GAAP) gross profit percentage		43.9%	40.7%
Operating Expense Reconciliation (GAAP/non-GAAP)			
GAAP operating expense	\$ 2	94,357 \$	261,241
Share-based compensation-research and development		4,083	3,796
Share-based compensation-sales and marketing		4,346	3,760
Share-based compensation-general and administrative		5,491	5,109
Amortization of intangible assets		5,529	3,623
Significant asset impairments and restructuring costs		4,068	4,359
Acquisition and integration costs		1,135	_
Total adjustments related to operating expense		24,652	20,647
Adjusted (non-GAAP) operating expense	\$ 2	69,705 \$	240,594
Income from Operations Reconciliation (GAAP/non-GAAP)			20.000
GAAP income from operations	<u>\$</u>	30,320 \$	32,066
Total adjustments related to gross profit		4,912	3,835
Total adjustments related to operating expense		24,652	20,647
Total adjustments related to income from operations		29,564	24,482
Adjusted (non-GAAP) income from operations	\$ 1	09,884 \$	56,548
Adjusted (non-GAAP) operating margin percentage		12.7%	7.7%
Net Income Reconciliation (GAAP/non-GAAP)			
GAAP net income	\$	52,738 \$	13,856
Exclude GAAP provision for income taxes		17,867	6,475
Income before income taxes		70,605	20,331
Total adjustments related to income from operations		29,564	24,482
Non-cash interest expense		_	759
Adjusted income before income taxes	1	00,169	45,572
Non-GAAP tax provision on adjusted income before income taxes		23,940	11,789
Adjusted (non-GAAP) net income	\$	76,229 \$	33,783
Weighted average basic common shares outstanding	1	56,170	143,975
Weighted average dilutive potential common shares outstanding $^{\mathrm{1}}$	1	58,289	151,011
Net Income per Common Share			
GAAP diluted net income per common share	\$	0.33 \$	0.09
Adjusted (non-GAAP) diluted net income per common share ²	\$ \$	0.48 \$	0.23

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 2019 includes 2.1 million shares underlying certain stock options and stock unit awards.

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 2018 includes 1.3 million shares underlying certain stock options and stock unit awards, 2.7 million shares underlying Ciena's "New" 3.75% convertible senior notes, which were converted by holders thereof immediately prior to maturity during the fourth quarter of fiscal 2018, and 3.0 million shares underlying Ciena's "Original" 3.75% convertible senior notes, which were converted by holders thereof immediately prior to maturity during the fourth quarter of fiscal 2018.

2.The calculation of Adjusted (non-GAAP) diluted net income per common share for the second quarter of fiscal 2018 requires adding back interest expense of approximately \$0.5 million associated with Ciena's "Original" 3.75% convertible senior notes, which were converted by holders thereof immediately prior to maturity during the fourth quarter of fiscal 2018, to the Adjusted (non-GAAP) net income in order to derive the numerator for the Adjusted earnings per common share calculation.

APPENDIX B - Calculation of EBITDA and Adjusted EBITDA (unaudited)

	Quarter Ended April 30,),
		2019		2018
Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA)				<u> </u>
Net income (GAAP)	\$	52,738	\$	13,856
Add: Interest expense		9,471		13,031
Less: Interest and other income (loss), net		(244)		1,296
Add: Provision for income taxes		17,867		6,475
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements		21,482		20,567
Add: Amortization of intangible assets		8,832		5,912
EBITDA	\$	110,634	\$	58,545
Add: Shared-based compensation cost		15,607		14,166
Add: Significant asset impairments and restructuring costs		4,068		4,359
Add: Acquisition and integration costs		1,135		_
Adjusted EBITDA	\$	131,444	\$	77,070

* * *

The adjusted (non-GAAP) measures above and their reconciliation to Ciena's GAAP results for the periods presented reflect adjustments relating to the following items:

- · Share-based compensation a non-cash expense incurred in accordance with share-based compensation accounting guidance.
- Amortization of intangible assets a non-cash expense arising from the acquisition of intangible assets, principally developed technologies and customer-related intangibles, that Ciena is required to amortize over its expected useful life.
- · Significant asset impairments and restructuring costs costs incurred as a result of restructuring activities taken to align resources with perceived market opportunities.
- Acquisition and integration costs consist of financial, legal and accounting advisors' costs and severance and other employment-related costs related to Ciena's acquisition of Packet Design and DonRiver, including costs associated with a three-year earn-out arrangement related to the DonRiver acquisition. Ciena does not believe that these costs are reflective of its ongoing operating expense following its completion of these integration activities.
- Non-cash interest expense a non-cash debt discount expense amortized as interest expense during the term of Ciena's 4.0% senior convertible notes, which were converted during the fourth quarter of 2018, relating to the required separate accounting of the equity component of these convertible notes.
- Non-GAAP tax provision consists of current and deferred income tax expense commensurate with the level of adjusted income before income taxes and utilizes a current, blended U.S. and foreign statutory annual tax rate of 23.9% for the second fiscal quarter of 2019, and 25.87% for the second fiscal quarter of 2018. This rate may be subject to change in the future, including as a result of changes in tax policy or tax strategy.



Ciena Corporation

Q2 fiscal 2019 Investor Presentation

Quarterly Period ended April 30, 2019

June 6, 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, forecast 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 reterring of capital plans, business strategies, expectations about its addressable markets and market share, and business outlook for future periods, as well as statements regarding 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 Cibusiness, 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 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 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 c Ciena's operations; changes in foreign currency exchange rates affecting revenue and operating expense; the impact of the Tax Cuts and Jobs Act; changes in tax or trade regulaincluding the imposition of tariffs and duties; and the other risk factors disclosed in Ciena's periodic reports filed with the Securities and Exchange Commission (SEC) including Cie 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 assume 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 otherwi

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 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 u 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 fil morning and in our reports on Form 10-Q filed with the Securities and Exchange Commission.



Q2 fiscal 2019 key highlights

Achieving balanced growth

- Non-telco represented ~34% of total revenue
- Direct web-scale contributed over 18% of total revenue
- APAC revenue of \$134.5M, driven by telco, on the strength of Japan
- NA revenue up 34% YoY, with telco and web-scale growth

Driving the pace of innovation

- TTM adjusted R&D investment was \$508.8 million
- Announced WaveLogic 5 which is expected to ship in systems at the end of 2019
- WaveLogic Ai has 112 total customers with 24 new wins in Q2
- Waveserver has 134 customers with 9 new wins in Q2

Delivering shareholder value

- Repurchased approximately 1.2 millio shares of common stock for an aggregate price of \$45.4 million
- Adjusted EPS* more than doubled Yo from \$0.23 to \$0.48



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

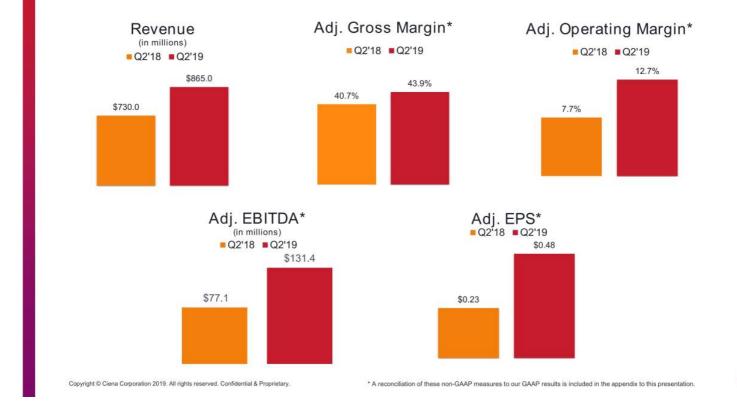
Q2 fiscal 2019 financial highlights

Revenue	\$865.0 million
Adjusted Gross Margin*	43.9%
Adjusted Operating Margin*	12.7%
Adjusted EBITDA*	\$131.4 million
Adjusted EPS*	\$0.48



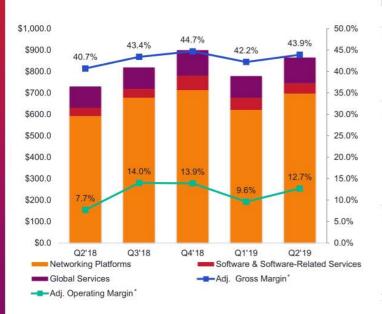
^{*} A reconciliation of these non-GAAP measures to our GAAP results is included in the appendix to this presentation.

Q2 fiscal 2019 comparisons (year-over-year)





Revenue by segment (Amounts in millions)



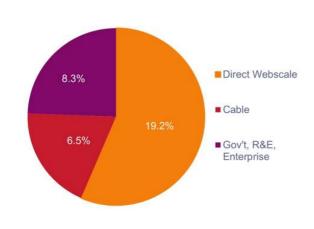
	Q2 FY 2019		Q2 FY	2018
	Revenue	%**	Revenue	%
Networking Platforms				
Converged Packet Optical	\$623.9	72.1	\$527.9	72
Packet Networking	73.1	8.5	63.8	8
Total Networking Platforms	697.0	80.6	591.7	81.
Software & Software-Related Services				
Platform Software and Services	35.2	4.0	36.4	5
Blue Planet Automation Software and Services	12.5	1.4	2.3	0
Total Software & Software-				
Related Services	47.7	5.4	38.7	5
Global Services				
Maintenance Support and Training	68.8	8.0	60.9	8.
Installation and Deployment	41.3	4.8	28.2	3.
Consulting and Network Design	10.2	1.2	10.5	1
Total Global Services	120.3	14.0	99.6	13.
Total	\$865.0	100.0%	\$730.0	100.0

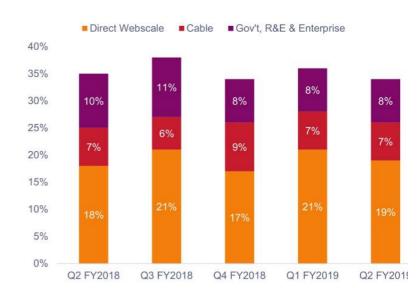
^{*} A reconciliation of these non-GAAP measures to our GAAP results is included in the appendix to this presentation. ** Denotes % of total revenue



Continued strength derived from non-telco revenue*







*represents 34% of total revenue



Revenue by geographic region



\$100.0

Q2 FY2018

Q3 FY2018

Q4 FY2018

Q1 FY2019



Q2 FY2019

Q2 fiscal 2019 balance sheet and operating metrics

Cash and Investments	\$818.5 million
Cash Flow From Operations	\$104.1million
DSO	86 Days
Inventory Turns	4.6
Leverage	1.5x
Net Cash	\$128.0



Returning value to shareholders through strong capital allocation prioritie









Delivering consistent and differentiated financial performance



2016

Normalized Adjusted OM



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

. INFN Q4 2018 revenue and adjusted OM exclude Coriant; Coriant adjusted OM is based on the assumption that Coriant had flat GM% and fixed OPEX in 2018

2017

2018

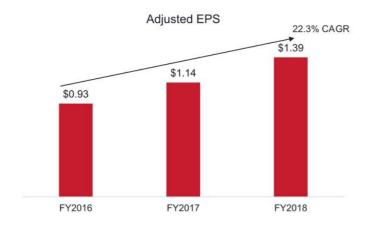
Copyright © Ciena Corporation 2019. All rights reserved. Confidential & Proprietary.

2015

2014



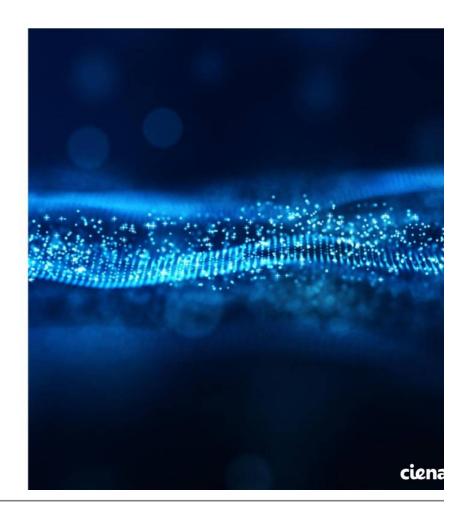
Delivering profitability and total shareholder return







Business outlook and long-term targets



Our fiscal 2019 performance is driven by a combination of strategic execution and favorable dynamics

Industry dynamics

- Favorable competitive dynamics
 - Subscale vendors struggle financially and with innovation
 - Larger competitors face competing investment priorities
- Web-scale spending continues to outpace the overall market
- Spending by some service provider customers recovers from lower levels

Copyright © Ciena Corporation 2019. All rights reserved. Confidential & Proprietary.

"Flight to quality"

- Customer trust in Ciena and strong relationships
 - Web-scale providers pursue quality products and a strong roadmap
 - Service providers seek strong, long-term partners
- Tier 1 service provider wins at a higher rate

Continued strategic execution

- WaveLogic Ai continues to outperform alternative products and WaveLogic 5 launch timing leads the market
- Complementary solutions that continue to meet customer requirements including Blue Planet Software Automation & Services and Packet Networking
- · Ciena's global scale is a differentiator
- Diversification as a result of broad based geographies, market verticals and customers

All the above is resulting in intensified share gains



Long-term financial targets¹ 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 ince in each of the next three y

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.



Long-term financial targets*

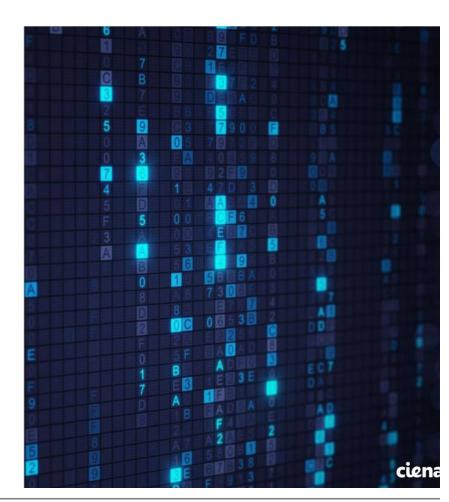
Three-year annual revenue growth targets							
Optical Systems	Approximately 4-6%						
Attached Services	Approximately 4-6%						
Packet Networking	Approximately 8-10%						
Blue Planet	Approximately \$100M-\$120M ¹						

^{*}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

Q2 fiscal 2019 appendix



Gross Profit Reconciliation (Amounts in thousands)

	Q2 FY 2019	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 2
GAAP gross profit	\$374,677	\$323,341	\$398,075	\$351,543	\$29
Share-based compensation-products	702	637	705	783	
Share-based compensation-services	907	770	651	618	
Amortization of intangible assets	3,303	3,418	2,957	2,534	
Total adjustments related to gross profit	4,912	4,825	4,313	3,935	
Adjusted (non-GAAP) gross profit	\$379,589	\$328,166	\$402,388	\$355,478	\$25
Adjusted (non-GAAP) gross margin	43.9%	42.2%	44.7%	43.4%	100



	Q2 FY 2019	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 20
GAAP operating expense	\$294,357	\$275,398	\$302,205	\$266,269	\$261
Share-based compensation-research and development	4,083	3,391	3,385	3,082	3
Share-based compensation-sales and marketing	4,346	3,785	3,741	3,417	3
Share-based compensation-general and administrative	5,491	5,112	5,588	4,538	!
Amortization of intangible assets	5,529	5,528	4,654	3,837	3
Significant asset impairments and restructuring costs	4,068	2,273	1,460	6,359	, i
Acquisition and integration costs, excluding share-based compensation	1,135	1,608	3,778	1,333	
Legal settlement		137	1,929	2,753	
Total adjustments related to operating expense	\$24,652	\$21,834	\$24,535	\$25,319	\$20
Adjusted (non-GAAP) operating expense	\$269,705	\$253,564	\$277,670	\$240,950	\$240
Income from Operations Reconciliation (Amounts in thousands)	Q2 FY 2019	Q1 FY 2019	Q4 FY 2018	Q3 FY 2018	Q2 FY 20
	Q2 FY 2019 \$80,320	Q1 FY 2019 \$47,943	Q4 FY 2018 \$95,870	Q3 FY 2018 \$85,274	Q2 FY 20 \$3
(Amounts in thousands)				12.000000000000000000000000000000000000	100000000000000000000000000000000000000
(Amounts in thousands) GAAP income from operations	\$80,320	\$47,943	\$95,870	\$85,274	100000000000000000000000000000000000000
(Amounts in thousands) GAAP income from operations Total adjustments related to gross profit Total adjustments related to operating expense	\$80,320 4,912	\$47,943 4,825	\$95,870 4,313	\$85,274 3,935	\$:
(Amounts in thousands) GAAP income from operations Total adjustments related to gross profit	\$80,320 4,912 24,652	\$47,943 4,825 21,834	\$95,870 4,313 24,535	\$85,274 3,935 25,319	Q2

12.7%

9.6%

13.9%

Copyright © Ciena Corporation 2019. All rights reserved. Confidential & Proprietary.

Adjusted (non-GAAP) operating margin



14.0%

Net Income Reconciliation (Amounts in thousands) Q2 FY 2019 Q1 FY 2019 Q4 FY 2018 Q3 FY 2018 Q2 FY 2 GAAP net income \$52,738 \$33,616 \$63,977 \$50,840 \$ Exclude GAAP provision (benefit) for income taxes 17,867 9,139 (10,224)19,280 Income before income taxes 70,605 42,755 53,753 70,120 Total adjustments related to income from operations 29,564 26,659 28,848 29,254 Loss on extinguishment and modification of debt 13,887 Non-cash interest expense 727 793 Change in fair value of debt conversion liability 12,070 Adjusted income before income taxes 100,169 69,414 109,285 100,167 Non-GAAP tax provision on adjusted income before income taxes 23,940 16,590 28,272 25,913 Adjusted (non-GAAP) net income \$ \$76,229 \$52,824 \$81,013 \$74,254 Weighted average basic common shares outstanding 156,170 156,314 143,659 143,400 Weighted average dilutive potential common shares outstanding $^{\rm 1}$ 158,289 158,174 157,745 159,998

Net Income per Common Share									
	Q2 F1	/ 2019	Q1 F	Y 2019	Q4 F	2018	Q3 F)	2018	Q2 FY 2
GAAP diluted net income per common share	\$	0.33	\$	0.21	\$	0.34	\$	0.34	\$
Adjusted (Non-GAAP) diluted net income per common share	\$	0.48	\$	0.33	\$	0.53	\$	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 2019 includes 2.1 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)	
Net income (GAAP)	\$
Add: Interest expense	
Less: Interest and other income (loss), net	
Add: Loss on extinguishment and modification of debt	
Add: Provision (benefit) for income taxes	
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	
Add: Amortization of intangible assets	
EBITDA	,
Add: Shared-based compensation cost	
Add: Significant asset impairments and restructuring costs	
Add: Acquisition and integration costs	
Add: Legal settlement	
Adjusted EBITDA	

Q2 F	Y 2019	Q1 I	Y 2019	Q4	FY 2018	Q3	FY 2018	Q2 FY
\$	52,738	\$	33,616	\$	63,977	\$	50,840	\$
	9,471		9,441		14,873		13,611	
	(244)		4,253		(13,357)		(1,543)	
	5		5		(13,887)		ā	
	17,867		9,139		(10,224)		19,280	
	21,482		21,513		21,110		21,704	
	8,832		8,947		7,611		6,371	
\$	110,634	\$	78,403	\$	124,591	\$	113,349	\$
	15,607		13,755		14,076		12,337	
	4,068		2,273		1,460		6,359	
	1,135		1,608		3,778		1,333	
	±		137		1,929		2,753	
\$	131,444	\$	96,176	\$	145,834	\$	136,131	\$

