

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549  
FORM 10-Q**

(Mark one)

**QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the quarterly period ended January 31, 2020**

**OR**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

Commission File Number: **001-36250**

**Ciena Corporation**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of incorporation)  
**7035 Ridge Road, Hanover, MD**  
(Address of principal executive offices)

**23-2725311**  
(IRS Employer Identification No.)  
**21076**  
(Zip Code)

**(410) 694-5700**  
(Registrant's telephone number, including area code)  
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
<b>Common Stock, \$0.01 par value</b>	<b>CIEN</b>	<b>New York Stock Exchange</b>

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as determined in Rule 12b-2 of the Exchange Act). Yes  No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date:

Class	Outstanding at March 6, 2020
common stock, \$0.01 par value	153,503,455

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

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

	Quarter Ended January 31,	
	2020	2019
Revenue:		
Products	\$ 687,215	\$ 642,532
Services	145,697	135,995
Total revenue	832,912	778,527
Cost of goods sold:		
Products	389,013	380,442
Services	73,364	74,744
Total cost of goods sold	462,377	455,186
Gross profit	370,535	323,341
Operating expenses:		
Research and development	130,900	128,633
Selling and marketing	107,066	98,113
General and administrative	42,468	39,243
Amortization of intangible assets	5,853	5,528
Significant asset impairments and restructuring costs	4,472	2,273
Acquisition and integration costs	1,819	1,608
Total operating expenses	292,578	275,398
Income from operations	77,957	47,943
Interest and other income, net	3,646	4,253
Interest expense	(8,815)	(9,441)
Loss on extinguishment and modification of debt	(646)	—
Income before income taxes	72,142	42,755
Provision for income taxes	9,814	9,139
Net income	\$ 62,328	\$ 33,616
Basic net income per common share	\$ 0.40	\$ 0.22
Diluted net income per potential common share	\$ 0.40	\$ 0.21
Weighted average basic common shares outstanding	154,334	156,314
Weighted average dilutive potential common shares outstanding	155,738	158,174

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

**CIENA CORPORATION**  
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
(in thousands)  
(unaudited)

	Quarter Ended January 31,	
	2020	2019
Net income	\$ 62,328	\$ 33,616
Change in unrealized gain (loss) on available-for-sale securities, net of tax	(86)	301
Change in unrealized gain (loss) on foreign currency forward contracts, net of tax	(1,079)	1,560
Change in unrealized loss on forward starting interest rate swaps, net of tax	(1,480)	(7,871)
Change in cumulative translation adjustments	(2,982)	1,150
Other comprehensive loss	(5,627)	(4,860)
<b>Total comprehensive income</b>	<b>\$ 56,701</b>	<b>\$ 28,756</b>

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

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

	January 31, 2020	October 31, 2019
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 837,286	\$ 904,045
Short-term investments	110,067	109,940
Accounts receivable, net of allowance for doubtful accounts of \$22.3 million and \$20.1 million as of January 31, 2020 and October 31, 2019, respectively.	655,105	724,854
Inventories, net	342,673	345,049
Prepaid expenses and other	321,313	297,914
Total current assets	2,266,444	2,381,802
Long-term investments	10,076	10,014
Equipment, building, furniture and fixtures, net	277,739	286,884
Operating right-of-use assets	50,148	—
Goodwill	310,913	297,937
Other intangible assets, net	125,640	112,781
Deferred tax asset, net	699,439	714,942
Other long-term assets	90,488	88,986
Total assets	\$ 3,830,887	\$ 3,893,346
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 311,748	\$ 344,819
Accrued liabilities and other short-term obligations	273,305	382,740
Deferred revenue	122,410	111,381
Operating lease liabilities	18,623	—
Current portion of long-term debt	7,000	7,000
Total current liabilities	733,086	845,940
Long-term deferred revenue	44,425	45,492
Other long-term obligations	125,607	148,747
Long-term operating lease liabilities	53,333	—
Long-term debt, net	680,786	680,406
Total liabilities	\$ 1,637,237	\$ 1,720,585
Commitments and contingencies (Note 21)		
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; 153,946,833 and 154,403,850 shares issued and outstanding	1,539	1,544
Additional paid-in capital	6,801,907	6,837,714
Accumulated other comprehensive loss	(27,711)	(22,084)
Accumulated deficit	(4,582,085)	(4,644,413)
Total stockholders' equity	2,193,650	2,172,761
Total liabilities and stockholders' equity	\$ 3,830,887	\$ 3,893,346

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

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

	Three Months Ended January 31,	
	2020	2019
<b>Cash flows provided by (used in) operating activities:</b>		
Net income	\$ 62,328	\$ 33,616
<b>Adjustments to reconcile net income to net cash provided by (used in) operating activities:</b>		
Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	25,782	21,513
Share-based compensation costs	15,602	13,755
Amortization of intangible assets	9,687	8,947
Deferred taxes	10,788	5,037
Provision for inventory excess and obsolescence	6,699	4,673
Provision for warranty	7,898	3,891
Other	4,540	3,356
<b>Changes in assets and liabilities:</b>		
Accounts receivable	64,938	38,544
Inventories	(4,481)	(67,555)
Prepaid expenses and other	(29,792)	1,133
Operating lease right-of-use assets	4,176	—
Accounts payable, accruals and other obligations	(142,229)	(76,351)
Deferred revenue	8,926	(4,664)
Short and long-term operating lease liabilities	(5,098)	—
Net cash provided by (used in) operating activities	<u>39,764</u>	<u>(14,105)</u>
<b>Cash flows provided by (used in) investing activities:</b>		
Payments for equipment, furniture, fixtures and intellectual property	(26,820)	(15,345)
Purchase of available for sale securities	(29,733)	(68,516)
Proceeds from maturities of available for sale securities	30,000	60,000
Proceeds from sales of available for sale securities	—	98,265
Settlement of foreign currency forward contracts, net	(73)	(4,650)
Acquisition of business, net of cash acquired	(28,300)	—
Purchase of equity investment	—	(333)
Net cash provided by (used in) investing activities	<u>(54,926)</u>	<u>69,421</u>
<b>Cash flows used in financing activities:</b>		
Payment of long-term debt	—	(1,750)
Payment of debt issuance costs	(382)	—
Payment of finance lease obligations	(722)	(758)
Payment for debt conversion liability	—	(111,268)
Shares repurchased for tax withholdings on vesting of stock unit awards	(12,572)	(10,026)
Repurchases of common stock - repurchase program	(49,203)	(19,721)
Proceeds from issuance of common stock	11,862	10,899
Net cash used in financing activities	<u>(51,017)</u>	<u>(132,624)</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(643)	695
Net decrease in cash, cash equivalents and restricted cash	<u>(66,822)</u>	<u>(76,613)</u>
Cash, cash equivalents and restricted cash at beginning of period	904,161	745,423
Cash, cash equivalents and restricted cash at end of period	<u>\$ 837,339</u>	<u>\$ 668,810</u>
<b>Supplemental disclosure of cash flow information</b>		
Cash paid during the period for interest	\$ 9,325	\$ 10,007
Cash paid during the period for income taxes, net	\$ 8,325	\$ 3,402
Operating lease payments	\$ 5,642	\$ —
<b>Non-cash investing and financing activities</b>		
Purchase of equipment in accounts payable	\$ 5,905	\$ 5,471
Repurchase of common stock in accrued liabilities from repurchase program	\$ 1,501	\$ 1,441
Conversion of debt conversion liability into 1,585,140 shares of common stock	\$ —	\$ 52,944
Operating lease right-of-use assets subject to lease liability	\$ 1,157	\$ —

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

**CIENA CORPORATION**  
**CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**  
(in thousands, except share data)  
(unaudited)

	Common Stock Shares	Par Value	Additional Paid-in-Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
Balance at October 31, 2019	154,403,850	\$ 1,544	\$ 6,837,714	\$ (22,084)	\$ (4,644,413)	\$ 2,172,761
Net income	—	—	—	—	62,328	62,328
Other comprehensive loss	—	—	—	(5,627)	—	(5,627)
Repurchase of common stock - repurchase program	(1,288,111)	(13)	(50,691)	—	—	(50,704)
Issuance of shares from employee equity plans	1,128,096	11	11,851	—	—	11,862
Share-based compensation expense	—	—	15,602	—	—	15,602
Shares repurchased for tax withholdings on vesting of stock unit awards	(297,002)	(3)	(12,569)	—	—	(12,572)
Balance at January 31, 2020	<u>153,946,833</u>	<u>\$ 1,539</u>	<u>\$ 6,801,907</u>	<u>\$ (27,711)</u>	<u>\$ (4,582,085)</u>	<u>\$ 2,193,650</u>

	Common Stock Shares	Par Value	Additional Paid-in-Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
Balance at October 31, 2018	154,318,531	\$ 1,543	\$ 6,881,223	\$ (5,780)	\$ (4,947,652)	\$ 1,929,334
Effect of adoption of new accounting standards	—	—	—	—	49,805	49,805
Net income	—	—	—	—	33,616	33,616
Other comprehensive loss	—	—	—	(4,860)	—	(4,860)
Repurchase of common stock - repurchase program	(591,897)	(6)	(21,156)	—	—	(21,162)
Issuance of shares from employee equity plans	1,329,352	13	10,886	—	—	10,899
Share-based compensation expense	—	—	13,755	—	—	13,755
Settlement of debt conversion liability	1,585,140	16	52,928	—	—	52,944
Shares repurchased for tax withholdings on vesting of stock unit awards	(304,916)	(3)	(10,023)	—	—	(10,026)
Balance at January 31, 2019	<u>156,336,210</u>	<u>\$ 1,563</u>	<u>\$ 6,927,613</u>	<u>\$ (10,640)</u>	<u>\$ (4,864,231)</u>	<u>\$ 2,054,305</u>

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

**CIENA CORPORATION**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**(unaudited)**

**(1) INTERIM FINANCIAL STATEMENTS**

The interim financial statements included herein for Ciena Corporation and its wholly owned subsidiaries (“Ciena”) have been prepared by Ciena, without audit, pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (the “SEC”). In the opinion of management, the financial statements included in this report reflect all normal recurring adjustments that Ciena considers necessary for the fair statement of the results of operations of Ciena for the interim periods covered and of the financial position of Ciena at the date of the interim balance sheets. Certain information and footnote disclosures normally included in the annual financial statements prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) have been condensed or omitted pursuant to SEC rules and regulations. The Condensed Consolidated Balance Sheet as of October 31, 2019 was derived from audited financial statements, but does not include all disclosures required by GAAP. However, Ciena believes that the disclosures are adequate to understand the information presented herein. The operating results for interim periods are not necessarily indicative of the operating results for the entire year. These financial statements should be read in conjunction with Ciena’s audited consolidated financial statements and the notes thereto included in Ciena’s annual report on Form 10-K for the fiscal year ended October 31, 2019.

Ciena has a 52 or 53-week fiscal year, with quarters ending on the Saturday nearest to the last day of January, April, July and October, respectively, of each year. Fiscal 2020 and 2019 are 52-week fiscal years. For purposes of financial statement presentation, each fiscal year is described as having ended on October 31, and the fiscal quarters are described as having ended on January 31, April 30 and July 31 of each fiscal year.

**(2) SIGNIFICANT ACCOUNTING POLICIES**

Except for the changes in certain policies described below, there have been no material changes to Ciena’s significant accounting policies, compared to the accounting policies described in Note 1, Ciena Corporation and Significant Accounting Policies and Estimates, in Notes to Consolidated Financial Statements in Item 8 of Part II of the 2019 Annual Report.

*Newly Issued Accounting Standards - Effective*

*Leases*

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Codification ASC 842, *Leases*, which requires an entity to recognize assets and liabilities on the balance sheet for the rights and obligations created by leased assets and to provide additional disclosures. Effective November 1, 2019, Ciena adopted ASC 842 which requires right-of-use (“ROU”) assets and lease liabilities to be recorded on the balance sheet for leases. The guidance specifies that at the inception of a contract, an entity must determine whether the contract is or contains a lease. The contract is or contains a lease if the contract conveys the right to control the use of the property, plant, or equipment for a designated term in exchange for consideration. Ciena’s evaluation of its contracts followed the assessment of whether there was a right to obtain substantially all of the economic benefits from the use and the right to direct the use of the identified asset in the contract. Operating leases are included in the Operating right-of-use assets (“Operating ROU assets”), Operating lease liabilities and Long-term operating lease liabilities in the Condensed Consolidated Balance Sheets. Finance leases are included in Equipment, building, furniture and fixtures, net (“Finance ROU assets”), Accrued liabilities and other short-term obligations and Other long-term obligations are included in the Condensed Consolidated Balance Sheets.

Ciena adopted the guidance on a modified retrospective basis as of November 1, 2019, such that related amounts in prior periods have not been restated. Ciena has operating and finance leases that primarily relate to real property. As a practical expedient, Ciena has elected the “package of practical expedients” and, as a result, did not reassess existing lease identifications, lease classifications or initial direct costs. As a practical expedient, Ciena has elected not to capitalize leases with a term of 12 months or less without a purchase option that it is likely to exercise. Also as a practical expedient for disclosure, Ciena has elected not to separate lease and non-lease components on operating and finance leases. Lease components are payment items directly attributable to the use of the underlying asset, while non-lease components are explicit elements of a contract not directly related to the use of the underlying asset, including pass through operating expenses like common area maintenance and utilities.

Operating ROU assets and lease liabilities and Finance ROU assets and lease liabilities are recognized on the Condensed Consolidated Balance Sheets at the present value of the future lease payments over the life of the lease term. Ciena uses discount rates based on incremental borrowing rates, on a collateralized basis, for the respective underlying assets, for terms



similar to the respective leases when implicit rates for leases are not determinable. Operating lease costs are included as rent expense in the Condensed Consolidated Statements of Operations. Fixed base payments on operating leases paid directly to the lessor are recorded as lease expense on a straight-line basis. Related variable payments based on usage, changes in an index, or market rate are expensed as incurred. Finance ROU assets are generally amortized on a straight line basis over the lease term with the interest expense on the lease liability recorded using the interest method. The amortization and interest expense are recorded separately in the Condensed Consolidated Statements of Operations.

Upon adoption, Ciena recorded Operating ROU assets of \$53.3 million and lease liabilities of \$76.0 million related to its operating leases. As of October 31, 2019, the restructuring reserve liability for vacated office space of \$11.1 million was included in Accrued liabilities and other short-term obligations and Other long-term obligations on the Condensed Consolidated Balance Sheet under prior accounting guidance. Upon adoption of the updated guidance, the existing lease reserve liability was reclassified as a reduction to the Operating ROU assets. ROU assets will be tested for impairment when circumstances indicate that the carrying values may not be recoverable. The adoption of this guidance did not require a cumulative effect adjustment or have an impact on the Condensed Consolidated Statements of Income or Condensed Consolidated Statements of Cash Flows.

#### Opening Balance Adjustments

The following table summarizes the cumulative effect of the changes made to Ciena's Condensed Consolidated Balance Sheet in connection with the adoption of ASC 842 (in millions):

	Balance at October 31, 2019	New Lease Accounting Standard	Adjusted Balance at November 1, 2019
<b>ASSETS:</b>			
Operating right-of-use assets	\$ —	\$ 53,334 <sup>(1)</sup>	\$ 53,334
Total assets	\$ 3,893,346	\$ 53,334	\$ 3,946,680
<b>LIABILITIES AND STOCKHOLDERS' EQUITY:</b>			
Accrued liabilities and other short-term obligations	\$ 382,740	\$ (1,484) <sup>(2)</sup>	\$ 381,256
Short-term lease liabilities	\$ —	20,498 <sup>(3)</sup>	\$ 20,498
Other long-term obligations	\$ 148,747	(21,244) <sup>(4)</sup>	\$ 127,503
Long-term operating lease liabilities	\$ —	55,564 <sup>(5)</sup>	\$ 55,564
Total liabilities and stockholders equity	\$ 3,893,346	\$ 53,334	\$ 3,946,680

- (1) Represents \$76.0 million of operating leases recognized as Operating ROU assets upon adoption of ASC 842, less \$5.4 million of deferred rent, \$6.2 million of tenant improvement allowances, \$1.5 million of short-term restructuring reserve liability and \$9.6 million of long-term restructuring reserve liability all recognized as a reduction to Right-of-use assets.
- (2) Represents \$1.5 million of short-term restructuring reserve liability recognized as a reduction to Operating ROU assets.
- (3) Represents \$20.5 million of lease liabilities for operating leases.
- (4) Represents \$9.6 million of long-term restructuring reserve liability, \$5.4 million of deferred rent, and \$6.2 million of tenant improvement allowances recognized as a reduction to Right-of-use assets.
- (5) Represents \$55.6 million of lease liabilities for operating leases.

See Note 15 for additional information.

#### Fair Value Measurement

In August 2018, the FASB issued ASU No. 2018-13 ("ASU 2018-13"), *Fair Value Measurement (Topic 820): Disclosure Framework* which modifies the disclosure requirements on fair value measurements. Ciena adopted ASU 2018-13 beginning the first quarter of fiscal year 2020. Adoption of ASU 2018-13 did not have a material effect on Ciena's financial position or results of operations.

#### Newly Issued Accounting Standards - Not Yet Effective

In June 2016, the FASB issued ASU No. 2016-13 (“ASU 2016-13”), *Financial Instruments - Credit Losses*, which requires measurement and recognition of expected credit losses for financial assets held based on historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. ASU 2016-13 is effective for Ciena beginning in the first quarter of fiscal 2021, and early adoption is permitted. Ciena is currently evaluating the impact of this accounting standard update on its Consolidated Financial Statements and related disclosures.

### (3) REVENUE

#### Disaggregation of Revenue

Ciena's disaggregated revenue represents similar groups that depict the nature, amount, and timing of revenue and cash flows for Ciena's various offerings. The sales cycle, contractual obligations, customer requirements, and go-to-market strategies may differ for each of its product categories, resulting in different economic risk profiles for each category.

The tables below (in thousands) set forth Ciena's disaggregated revenue for the respective period:

	Quarter Ended January 31, 2020				
	Networking Platforms	Platform Software and Services	Blue Planet Automation Software and Services	Global Services	Total
<b>Product lines:</b>					
Converged Packet Optical	\$ 591,549	\$ —	\$ —	\$ —	\$ 591,549
Packet Networking	67,508	—	—	—	67,508
Platform Software and Services	—	51,888	—	—	51,888
Blue Planet Automation Software and Services	—	—	15,466	—	15,466
Maintenance Support and Training	—	—	—	61,793	61,793
Installation and Deployment	—	—	—	34,954	34,954
Consulting and Network Design	—	—	—	9,754	9,754
Total revenue by product line	<u>\$ 659,057</u>	<u>\$ 51,888</u>	<u>\$ 15,466</u>	<u>\$ 106,501</u>	<u>\$ 832,912</u>

<b>Timing of revenue recognition:</b>					
Products and services at a point in time	\$ 659,057	\$ 13,114	\$ 3,736	\$ 4,197	\$ 680,104
Services transferred over time	—	38,774	11,730	102,304	152,808
Total revenue by timing of revenue recognition	<u>\$ 659,057</u>	<u>\$ 51,888</u>	<u>\$ 15,466</u>	<u>\$ 106,501</u>	<u>\$ 832,912</u>

	Quarter Ended January 31, 2019				
	Networking Platforms	Platform Software and Services	Blue Planet Automation Software and Services	Global Services	Total
<b>Product lines:</b>					
Converged Packet Optical	\$ 548,997	\$ —	\$ —	\$ —	\$ 548,997
Packet Networking	71,569	—	—	—	71,569
Platform Software and Services	—	41,598	—	—	41,598
Blue Planet Automation Software and Services	—	—	14,974	—	14,974
Maintenance Support and Training	—	—	—	61,277	61,277
Installation and Deployment	—	—	—	30,622	30,622
Consulting and Network Design	—	—	—	9,490	9,490
Total revenue by product line	<u>\$ 620,566</u>	<u>\$ 41,598</u>	<u>\$ 14,974</u>	<u>\$ 101,389</u>	<u>\$ 778,527</u>

<b>Timing of revenue recognition:</b>					
Products and services at a point in time	\$ 620,566	\$ 16,044	\$ 6,228	\$ 3,566	\$ 646,404
Services transferred over time	—	25,554	8,746	97,823	132,123
Total revenue by timing of revenue recognition	<u>\$ 620,566</u>	<u>\$ 41,598</u>	<u>\$ 14,974</u>	<u>\$ 101,389</u>	<u>\$ 778,527</u>

Effective the beginning of fiscal 2020, Ciena’s Global Sales and Marketing organization combined its previous North America and Caribbean and Latin America (“CALA”) regions into a new “Americas” sales region. Accordingly, Ciena reflects its sales geographically around the following markets: (i) Americas; (ii) Europe, Middle East and Africa (“EMEA”); and (iii) Asia Pacific, Japan and India (“APAC”). Within each geographic area, we maintain specific teams or personnel that focus on a particular region, country, customer or market vertical. These teams include sales management, account salespersons and sales engineers, as well as services professionals and commercial management personnel, who ensure that we maintain a high-touch, consultative relationship with our customers.

For the periods below, Ciena’s geographic distribution of revenue was as follows (in thousands):

	Quarter Ended January 31,	
	2020	2019
Geographic distribution:		
Americas	\$ 574,004	\$ 516,481
EMEA	129,965	129,190
APAC	128,943	132,856
Total revenue by geographic distribution	\$ 832,912	\$ 778,527

- *Networking Platforms* reflects sales of Ciena’s Converged Packet Optical and Packet Networking product lines.
  - Converged Packet Optical - includes the 6500 Packet-Optical Platform, 5430 Reconfigurable Switching System, Waveserver® stackable interconnect system (“Waveserver”), the family of CoreDirector® Multiservice Optical Switches and the OTN configuration for the 5410 Reconfigurable Switching System. This product line also includes sales of the Z-Series Packet-Optical Platform.
  - Packet Networking - includes the 3000 family of service delivery switches and service aggregation switches and the 5000 family of service aggregation switches. This product line also includes the 8700 Packetwave Platform, the Ethernet packet configuration for the 5410 Service Aggregation Switch, and the 6500 Packet Transport System (PTS), which combines packet switching, control plane operation, and integrated optics.

The Networking Platforms segment also includes sales of operating system software and enhanced software features embedded in each of the product lines above. Revenue from this segment is included in product revenue on the Condensed Consolidated Statements of Operations. Operating system software and enhanced software features embedded in Ciena hardware are each considered distinct performance obligations for which the revenue is generally recognized upfront at a point in time upon transfer of control.

- *Platform Software and Services* provides analytics, data, and planning tools to assist customers in managing Ciena’s Networking Platforms products in their networks. Ciena’s platform software includes its Manage, Control and Plan (MCP) domain controller solution, OneControl Unified Management System, ON-Center® Network and Service Management Suite, Ethernet Services Manager, Optical Suite Release and Planet Operate. Platform software-related services revenue includes sales of subscription, installation, support, and consulting services related to Ciena’s software platforms, operating system software and enhanced software features embedded in each of the Networking Platforms product lines above. Revenue from the software portion of this segment is included in product revenue on the Condensed Consolidated Statements of Operations. Revenue from services portions of this segment is included in services revenue on the Condensed Consolidated Statements of Operations.
- *Blue Planet® Automation Software and Services* is a comprehensive, open software suite, together with related services, that allows customers to use enhanced knowledge about their networks to drive adaptive optimization of their services and operations. Ciena’s Blue Planet Automation Platform includes multi-domain service orchestration (MDSO), network function virtualization (NFV), management and orchestration (NFV MANO), analytics, network health predictor (NHP), route optimization and assurance (ROA), inventory management, unified assurance and analytics (UAA) and Ciena’s SDN Multilayer Controller and virtual wide area network (V-WAN) application. Services revenue includes sales of subscription, installation, support, consulting and design services related to Ciena’s Blue Planet Automation Platform. Revenue from the software portion of this segment is included in product revenue on the Condensed Consolidated Statements of Operations. Revenue from services portions of this segment is included in services revenue on the Condensed Consolidated Statements of Operations.

Ciena’s software platform revenue typically reflects sales of either perpetual or term-based software licenses, and these sales are considered a distinct performance obligation where revenue is generally recognized upfront at a point in time upon transfer of control. Revenue from software subscription and support are recognized ratably over the period during which the services are performed. Revenue from professional services for solution customization, software and solution support services, consulting and design, and build-operate-transfer services relating to Ciena’s software offerings are recognized over time with Ciena applying the input method to determine the amount of revenue to be recognized in a given period.

- *Global Services* reflects sales of a broad range of Ciena’s services for maintenance support and training, installation and deployment, and consulting and network design activities. Revenue from this segment is included in services revenue on the Condensed Consolidated Statements of Operations.

Ciena’s Global Services are considered a distinct performance obligation where revenue is generally recognized over time. Revenue from maintenance support is recognized ratably over the period during which the services are performed. Revenue from installation and deployment services and consulting and network design services are recognized over time with Ciena applying the input method to determine the amount of revenue to be recognized in a given period. Revenue from training services is generally recognized at a point in time upon completion of the service.

#### *Contract Balances*

The following table provides information about receivables, contract assets and contract liabilities (deferred revenue) from contracts with customers (in thousands):

	Balance at January 31, 2020	Balance at October 31, 2019
Accounts receivable, net	\$ 655,105	\$ 724,854
Contract assets	\$ 83,717	\$ 84,046
Deferred revenue	\$ 166,835	\$ 156,873

Our contract assets represent unbilled accounts receivable where transfer of a product or service has occurred but invoicing is conditional upon completion of future performance obligations. These amounts are primarily related to installation and deployment and professional services arrangements where transfer of control has occurred, but Ciena has not yet invoiced the customer. Contract assets are included in prepaid expenses and other current assets in the Condensed Consolidated Balance Sheets. See Note 11 for further discussion.

Contract liabilities consist of deferred revenue and represent advanced payments against non-cancelable customer orders received prior to revenue recognition. Ciena recognized approximately \$49.0 million and \$39.4 million of revenue during the first three months of fiscal 2020 and 2019 that was included in the deferred revenue balance at October 31, 2019 and November 1, 2018, respectively. Revenue recognized due to changes in transaction price from performance obligations satisfied or partially satisfied in previous periods was immaterial during the three months ended January 31, 2020 and 2019.

#### *Capitalized Contract Acquisition Costs*

Capitalized contract acquisition costs consist of deferred sales commissions, and were \$13.1 million and \$15.7 million as of January 31, 2020 and October 31, 2019, respectively, and were included in other current assets and other assets. The amortization expense associated with these costs was \$5.6 million and \$4.1 million during the first three months of fiscal 2020 and 2019, respectively, and was included in sales and marketing expense.

#### *Remaining Performance Obligations*

Remaining Performance Obligations (RPO) are comprised of non-cancelable customer purchase orders for products and services that are awaiting transfer of control for revenue recognition under the applicable contract terms. As of January 31, 2020, the aggregate amount of RPO was \$905 million. As of January 31, 2020, Ciena expects approximately 82% of the RPO to be recognized as revenue within the next twelve months.

## **(4) BUSINESS COMBINATIONS**

### *Centina Systems, Inc. Acquisition*

On November 2, 2019 Ciena acquired Centina Systems, Inc. (“Centina”), a provider of service assurance analytics and network performance management solutions, for approximately \$34.0 million in cash. This transaction has been accounted for as the acquisition of a business.

During the first quarter of fiscal 2020, Ciena incurred approximately \$0.5 million of acquisition-related costs associated with this transaction. These costs primarily reflect fees associated with financial, legal and accounting advisors.

The following table summarizes the final purchase price allocation related to the acquisition based on the estimated fair value of the acquired assets and assumed liabilities (in thousands):

	Amount
Cash and cash equivalents	\$ 5,718
Accounts receivable	610
Prepaid expenses and other	536
Equipment, furniture and fixtures	17
Goodwill	13,055
Customer relationships and contracts	400
Developed technology	22,200
Accounts payable	(47)
Accrued liabilities	(286)
Deferred revenue	(1,493)
Deferred tax liability	(6,692)
Total purchase consideration	<u>\$ 34,018</u>

Customer relationships and contracts represent agreements with existing Centina customers and have an estimated useful life of two years.

Developed technology represents purchased technology that has reached technological feasibility and for which Centina had substantially completed development as of the date of acquisition. Fair value was determined using future discounted cash flows related to the projected income stream of the developed technology for a discrete projection period. Cash flows were discounted to their present value as of the closing date. Developed technology is amortized on a straight-line basis over its estimated useful life of five years.

The goodwill generated from the acquisition of Centina is primarily related to expected synergies. The total goodwill amount was recorded in the Blue Planet Automation Software and Services segment. The goodwill is not deductible for income tax purposes.

Pro forma disclosures have not been included due to immateriality.

## (5) RESTRUCTURING COSTS

Ciena has undertaken a number of restructuring activities intended to reduce expense and to better align its workforce and costs with market opportunities, product development and business strategies. The following table sets forth the restructuring activity and balance of the restructuring liability accounts, which are included in Accrued liabilities and other short-term obligations on our Condensed Consolidated Balance Sheets, for the three months ended January 31, 2020 (in thousands):

	Workforce reduction	Consolidation of excess facilities and other restructuring activities	Total
Balance at October 31, 2019	\$ 3,983	\$ 11,160	\$ 15,143
Charges	1,204 <sup>(1)</sup>	3,268 <sup>(2)</sup>	4,472
Adjustments related to ASC 842	—	(11,160) <sup>(3)</sup>	(11,160)
Cash payments	(2,955)	(3,268)	(6,223)
Balance at January 31, 2020	\$ 2,232	\$ —	\$ 2,232
Current restructuring liabilities	\$ 2,232	\$ —	\$ 2,232
Non-current restructuring liabilities	\$ —	\$ —	\$ —

- (1) Reflects a global workforce reduction of approximately 22 employees during the three months ended January 31, 2020 as part of a business optimization strategy to improve gross margin, constrain operating expense and redesign certain business processes.
- (2) Primarily represents variable costs and imputed interest expense related to restructured facilities
- (3) Represents restructuring reserve liability recognized as a reduction to Operating right-of-use assets, net in relation to adoption of ASC 842. See Notes 2 and 15 for further discussion.

The following table sets forth the restructuring activity and balance of the restructuring liability accounts, which are included in Accrued liabilities and other short-term obligations on our Condensed Consolidated Balance Sheets for the three months ended January 31, 2019 (in thousands):

	Workforce reduction	Consolidation of excess facilities	Total
Balance at October 31, 2018	\$ 2,108	\$ 1,739	\$ 3,847
Charges	1,752 <sup>(1)</sup>	521 <sup>(2)</sup>	2,273
Cash payments	(3,009)	(548)	(3,557)
Balance at January 31, 2019	\$ 851	\$ 1,712	\$ 2,563
Current restructuring liabilities	\$ 851	\$ 525	\$ 1,376
Non-current restructuring liabilities	\$ —	\$ 1,187	\$ 1,187

- (1) Reflects a global workforce reduction of approximately 10 employees during the three months ended January 31, 2019 as part of a business optimization strategy to improve gross margin, constrain operating expense and redesign certain business processes.
- (2) Reflects unfavorable lease commitments in connection with a portion of facilities located in Petaluma, California and Spokane, Washington.

## (6) INTEREST AND OTHER INCOME, NET

The components of interest and other income, net, are as follows (in thousands):

	Quarter Ended January 31,	
	2020	2019
Interest income	\$ 3,390	\$ 3,872
Gains on non-hedge designated foreign currency forward contracts	637	22
Foreign currency exchange gains (losses)	(771)	783
Other	390	(424)
Interest and other income, net	\$ 3,646	\$ 4,253

Ciena Corporation, as the U.S. parent entity, uses the U.S. Dollar as its functional currency; however, some of its foreign branch offices and subsidiaries use local currencies as their functional currencies. Ciena recorded \$0.8 million in foreign

currency exchange rate losses during the first three months of fiscal 2020 and \$0.8 million in foreign currency exchange rate gains during the first three months of fiscal 2019, as a result of monetary assets and liabilities that were transacted in a currency other than the entity's functional currency, and the related remeasurement adjustments were recorded in interest and other income, net, on the Condensed Consolidated Statements of Operations. From time to time, Ciena uses foreign currency forwards to hedge this type of balance sheet exposure. These forwards are not designated as hedges for accounting purposes, and any net gain or loss associated with these derivatives is reported in interest and other income, net, on the Condensed Consolidated Statements of Operations. During the first three months of fiscal 2020, Ciena recorded gains of \$0.6 million from non-hedge designated foreign currency forward contracts. During the first three months of fiscal 2019, Ciena recorded minimal gains from non-hedge designated foreign currency forward contracts.

## (7) INCOME TAXES

On December 2, 2019, the U.S. Department of the Treasury released final regulations and proposed regulations under Section 59A, Base Erosion and Anti-Abuse Tax ("BEAT"). BEAT, which requires certain U.S. corporations to pay a minimum tax associated with deductible payments to non-U.S. related parties, was enacted by the Tax Cuts and Jobs Act (the "Tax Act"). Also, on December 2, 2019, the U.S. Department of the Treasury released final regulations that provide additional guidance with respect to the foreign tax credit regime under the Tax Act.

The effective tax rate for the three months ended January 31, 2020 was lower than the effective tax rate for the three months ended January 31, 2019, primarily due to the effect of the final regulations on December 2, 2019.

## (8) SHORT-TERM AND LONG-TERM INVESTMENTS

As of the dates indicated, investments are comprised of the following (in thousands):

	January 31, 2020			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government obligations:				
Included in short-term investments	\$ 109,962	\$ 105	\$ —	\$ 110,067
Included in long-term investments	10,073	3	—	10,076
	<u>\$ 120,035</u>	<u>\$ 108</u>	<u>\$ —</u>	<u>\$ 120,143</u>

  

	October 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government obligations:				
Included in short-term investments	\$ 109,715	\$ 225	\$ —	\$ 109,940
Included in long-term investments	10,017	—	(3)	10,014
	<u>\$ 119,732</u>	<u>\$ 225</u>	<u>\$ (3)</u>	<u>\$ 119,954</u>

The following table summarizes the final legal maturities of debt investments at January 31, 2020 (in thousands):

	Amortized Cost	Estimated Fair Value
Less than one year	\$ 109,962	\$ 110,067
Due in 1-2 years	10,073	10,076
	<u>\$ 120,035</u>	<u>\$ 120,143</u>

## (9) FAIR VALUE MEASUREMENTS

As of the date indicated, the following table summarizes the assets and liabilities that are recorded at fair value on a recurring basis (in thousands):



	January 31, 2020			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Money market funds	\$ 632,620	\$ —	\$ —	\$ 632,620
Bond mutual fund	50,180	—	—	50,180
U.S. government obligations	—	120,143	—	120,143
Foreign currency forward contracts	—	273	—	273
<b>Total assets measured at fair value</b>	<b>\$ 682,800</b>	<b>\$ 120,416</b>	<b>\$ —</b>	<b>\$ 803,216</b>
<b>Liabilities:</b>				
Foreign currency forward contracts	\$ —	\$ 710	\$ —	\$ 710
Forward starting interest rate swaps	—	22,225	—	22,225
Contingent consideration	—	—	3,705	3,705
<b>Total liabilities measured at fair value</b>	<b>\$ —</b>	<b>\$ 22,935</b>	<b>\$ 3,705</b>	<b>\$ 26,640</b>

	October 31, 2019			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Money market funds	\$ 759,114	\$ —	\$ —	\$ 759,114
U.S. government obligations	—	119,954	—	119,954
Foreign currency forward contracts	—	1,570	—	1,570
<b>Total assets measured at fair value</b>	<b>\$ 759,114</b>	<b>\$ 121,524</b>	<b>\$ —</b>	<b>\$ 880,638</b>
<b>Liabilities:</b>				
Foreign currency forward contracts	\$ —	\$ 35	\$ —	\$ 35
Forward starting interest rate swaps	—	21,093	—	21,093
Contingent consideration	—	—	3,705	3,705
<b>Total liabilities measured at fair value</b>	<b>\$ —</b>	<b>\$ 21,128</b>	<b>\$ 3,705</b>	<b>\$ 24,833</b>

As of the date indicated, the assets and liabilities above are presented on Ciena's Condensed Consolidated Balance Sheets as follows (in thousands):

	January 31, 2020			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Cash equivalents	\$ 682,800	\$ —	\$ —	\$ 682,800
Short-term investments	—	110,067	—	110,067
Prepaid expenses and other	—	273	—	273
Long-term investments	—	10,076	—	10,076
<b>Total assets measured at fair value</b>	<b>\$ 682,800</b>	<b>\$ 120,416</b>	<b>\$ —</b>	<b>\$ 803,216</b>
<b>Liabilities:</b>				
Accrued liabilities and other short-term obligations	\$ —	\$ 710	\$ 3,705	\$ 4,415
Other long-term obligations	—	22,225	—	22,225
<b>Total liabilities measured at fair value</b>	<b>\$ —</b>	<b>\$ 22,935</b>	<b>\$ 3,705</b>	<b>\$ 26,640</b>

	October 31, 2019			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Cash equivalents	\$ 759,114	\$ —	\$ —	\$ 759,114
Short-term investments	—	109,940	—	109,940
Prepaid expenses and other	—	1,570	—	1,570
Long-term investments	—	10,014	—	10,014
<b>Total assets measured at fair value</b>	<b>\$ 759,114</b>	<b>\$ 121,524</b>	<b>\$ —</b>	<b>\$ 880,638</b>
<b>Liabilities:</b>				
Accrued liabilities and other short-term obligations	\$ —	\$ 35	\$ —	\$ 35
Other long-term obligations	—	21,093	3,705	24,798
<b>Total liabilities measured at fair value</b>	<b>\$ —</b>	<b>\$ 21,128</b>	<b>\$ 3,705</b>	<b>\$ 24,833</b>

Ciena did not have any transfers between Level 1 and Level 2 fair value measurements during the periods presented.

Ciena's Level 3 liability includes \$3.7 million in accrued liabilities and other short-term obligations as of January 31, 2020. This reflects a contingent consideration element of a three-year payout arrangement associated with Ciena's purchase of DonRiver Holdings, LLC ("DonRiver") in the fourth quarter of fiscal 2018. As of January 31, 2020, there was no material change to the fair value.

#### **(10) INVENTORIES**

As of the dates indicated, inventories are comprised of the following (in thousands):

	January 31, 2020	October 31, 2019
Raw materials	\$ 106,522	\$ 99,041
Work-in-process	11,728	13,657
Finished goods	219,907	226,622
Deferred cost of goods sold	49,256	53,051
<b>Gross inventories</b>	<b>387,413</b>	<b>392,371</b>
Provision for excess and obsolescence	(44,740)	(47,322)
<b>Inventories, net</b>	<b>\$ 342,673</b>	<b>\$ 345,049</b>

Ciena writes down its inventory for estimated obsolescence or unmarketable inventory by an amount equal to the difference between the cost of inventory and the estimated net realizable value based on assumptions about future demand, which are affected by changes in Ciena's strategic direction, discontinuance of a product or introduction of newer versions of products, declines in the sales of or forecasted demand for certain products, and general market conditions. During the first three months of fiscal 2020, Ciena recorded a provision for excess and obsolescence of \$6.7 million, primarily related to a decrease in the forecasted demand for certain Networking Platforms products. Deductions from the provision for excess and obsolete inventory relate primarily to disposal activities.

#### **(11) PREPAID EXPENSES AND OTHER**

As of the dates indicated, prepaid expenses and other are comprised of the following (in thousands):

	January 31, 2020	October 31, 2019
Prepaid VAT and other taxes	\$ 87,706	\$ 84,706
Contract assets for unbilled accounts receivable	83,717	84,046
Prepaid expenses	65,806	48,680
Product demonstration equipment, net	37,866	38,900
Other non-trade receivables	36,236	28,136
Capitalized contract acquisition costs	9,391	11,677
Deferred deployment expense	318	125
Derivative assets	273	1,570
Restricted cash	—	74
	<u>\$ 321,313</u>	<u>\$ 297,914</u>

Depreciation of product demonstration equipment was \$2.2 million during the first three months of each of fiscal 2020 and 2019.

For further discussion on contract assets and capitalized contract acquisition costs, see Note 3 above.

## (12) OTHER BALANCE SHEET DETAILS

As of the dates indicated, accrued liabilities and other short-term obligations are comprised of the following (in thousands):

	January 31, 2020	October 31, 2019
Compensation, payroll related tax and benefits <sup>(1)</sup>	\$ 68,924	\$ 182,363
Warranty	51,190	48,498
Vacation	22,708	22,290
Contingent consideration	3,705	4,372
Contingent compensation	2,880	—
Finance lease obligations	2,710	2,764
Interest payable	717	1,007
Other	120,471	121,446
	<u>\$ 273,305</u>	<u>\$ 382,740</u>

<sup>(1)</sup> Reduction is primarily due to the timing of bonus payments to employees under our annual cash incentive compensation plan.

The following table summarizes the activity in Ciena's accrued warranty for the fiscal periods indicated (in thousands):

Three Months Ended January 31,	Beginning Balance	Current Period Provisions	Settlements	Ending Balance
2019	\$ 44,740	3,891	(4,183)	\$ 44,448
2020	\$ 48,498	7,898	(5,206)	\$ 51,190

## (13) DERIVATIVE INSTRUMENTS

### *Foreign Currency Derivatives*

As of January 31, 2020 and October 31, 2019, Ciena had forward contracts to hedge its foreign exchange exposure in order to reduce the variability in its Canadian Dollar- and Indian Rupee-denominated expense, which principally relates to research and development activities. The notional amount of these contracts was approximately \$180.4 million and \$197.4 million as of January 31, 2020 and October 31, 2019, respectively. These foreign exchange contracts have maturities of 24 months or less and have been designated as cash flow hedges.

As of January 31, 2020 and October 31, 2019, Ciena had forward contracts to hedge its foreign exchange exposure in order to reduce the variability in various currencies of certain balance sheet items. The notional amount of these contracts was approximately \$187.7 million and \$206.0 million as of January 31, 2020 and October 31, 2019, respectively. These foreign exchange contracts have maturities of 12 months or less and have not been designated as hedges for accounting purposes.

#### Interest Rate Derivatives

Ciena is exposed to floating rates of LIBOR interest on its term loan borrowings (see Note 16 below) and has hedged such risk by entering into floating to fixed interest rate swap arrangements (“interest rate swaps”). The interest rate swaps fix the LIBOR rate for \$350.0 million of the New 2025 Term Loan (as defined in Note 16 below) at 2.957% through September 2023. The total notional amount of interest rate swaps in effect was \$350.0 million as of January 31, 2020 and October 31, 2019.

Ciena expects the variable rate payments to be received under the terms of the interest rate swaps to offset exactly the forecasted variable rate payments on the equivalent notional amounts of the term loan. These derivative contracts have been designated as cash flow hedges.

Other information regarding Ciena’s derivatives is immaterial for separate financial statement presentation. See Note 6 and Note 9 above.

#### (14) ACCUMULATED OTHER COMPREHENSIVE INCOME

The following table summarizes the changes in accumulated balances of other comprehensive income (“AOCI”), net of tax, for the three months ended January 31, 2020:

	Unrealized Gain/ (Loss) on Available-for-sale Securities	Unrealized Gain/(Loss) on Foreign Currency Forward Contracts	Unrealized Gain/(Loss) on Forward Starting Interest Rate Swaps	Cumulative Foreign Currency Translation Adjustment	Total
Balance at October 31, 2019	\$ 152	\$ 925	\$ (13,686)	\$ (9,475)	\$ (22,084)
Other comprehensive loss before reclassifications	(86)	(921)	(1,718)	(2,982)	(5,707)
Amounts reclassified from AOCI	—	(158)	238	—	80
Balance at January 31, 2020	\$ 66	\$ (154)	\$ (15,166)	\$ (12,457)	\$ (27,711)

The following table summarizes the changes in AOCI, net of tax, for the three months ended January 31, 2019:

	Unrealized Loss on Available- for-sale Securities	Unrealized Loss on Foreign Currency Forward Contracts	Unrealized Loss on Forward Starting Interest Rate Swaps	Cumulative Foreign Currency Translation Adjustment	Total
Balance at October 31, 2018	\$ (425)	\$ (3,060)	\$ 6,417	\$ (8,712)	\$ (5,780)
Other comprehensive income (loss) before reclassifications	301	402	(7,593)	1,150	(5,740)
Amounts reclassified from AOCI	—	1,158	(278)	—	880
Balance at January 31, 2019	\$ (124)	\$ (1,500)	\$ (1,454)	\$ (7,562)	\$ (10,640)

All amounts reclassified from AOCI related to settlement (gains) losses on foreign currency forward contracts designated as cash flow hedges impacted research and development expense on the Condensed Consolidated Statements of Operations. All amounts reclassified from AOCI related to settlement (gains) losses on forward starting interest rate swaps designated as cash flow hedges impacted interest and other income, net, on the Condensed Consolidated Statements of Operations.

#### (15) LEASES

Ciena leases over 1.4 million square feet of facilities globally related to the ongoing operations of its business segments and related functions. Ciena's principal executive offices are located in Hanover, Maryland. Ciena's largest facilities are research and development centers located in Ottawa, Canada and Gurgaon, India. Ciena also has engineering and/or service delivery facilities located in San Jose, California; Petaluma, California; Alpharetta, Georgia; Quebec, Canada; Austin, Texas; and Pune and Bangalore, India. In addition, Ciena leases various smaller offices in regions throughout the world to support sales and services operations. Office facilities are leased under various non-cancelable operating or finance leases. Ciena's current leases have remaining terms that vary up to 13 years. Certain leases provide for options to extend up to 10 years and/or options to terminate within eight years.

As previously disclosed in Note 2, the restructuring reserve liability related to our subleased space and vacated space for which subleases are being pursued was \$11.1 million as of October 31, 2019. Upon Ciena's adoption of ASC 842 on November 1, 2019, the existing Accrued liabilities and other short-term obligations and Other long-term obligations were reclassified as a reduction of the Operating right-of-use assets recorded in accordance with the updated guidance.

Leases included in the Condensed Consolidated Balance Sheets were as follows:

	Classification	As of January 31, 2020
Operating leases:		
Operating ROU Assets	Operating right-of-use assets	\$ 50,148
Operating lease liabilities	Operating lease liabilities and Long-term operating lease liabilities	71,956
Finance leases:		
Buildings, gross	Equipment, building, furniture and fixtures, net	\$ 71,235
Less: accumulated depreciation	Equipment, building, furniture and fixtures, net	(14,548)
Buildings, net		\$ 56,687
Finance lease liabilities	Accrued liabilities and other short-term obligations and other long-term obligations	\$ 66,831

The components of lease expense included in the Condensed Consolidated Statement of Operations were as follows:

	Classification	Three months ended January 31, 2020
Operating lease costs	Operating expense	\$ 4,457
Finance lease cost:		
Amortization of finance ROU asset	Operating expense	1,140
Interest on finance lease liabilities	Interest expense	1,244
Total finance lease cost		2,384
Non-capitalized lease cost	Operating expense	621
Variable lease cost <sup>(1)</sup>	Operating expense	1,311
Net lease cost <sup>(2)</sup>		\$ 8,773

(1) Variable lease costs includes expenses relating to insurance, taxes, maintenance and other costs required by the applicable operating lease. Variable lease costs are determined by whether they are to be included in base rent and if amounts are based on a consumer price index.

(2) Excludes other operating expense of \$4.3 million for the three months ended January 31, 2020, related to amortization of leasehold improvements.

Lease expense (excluding amortization of leasehold improvements of \$2.4 million) incurred in the three months ended January 31, 2019 was \$6.8 million.

Future minimum lease payments and the present value of minimum lease payments related to operating and finance leases as of January 31, 2020 were as follows:

	Operating Leases	Finance Leases	Total
Remaining fiscal 2020	\$ 15,778	\$ 7,512	\$ 23,290
2021	18,261	7,491	25,752
2022	13,440	7,932	21,372
2023	10,157	8,008	18,165
2024	8,052	8,024	16,076
Thereafter	12,205	64,616	76,821
Total lease payments	77,893	103,583	181,476
Less: Imputed interest	(5,937)	(36,752)	(42,689)
Present value of lease liabilities	71,956	66,831	138,787
Less: Current portion of present value of minimum lease payments	(18,623)	(2,710)	(21,333)
Long-term portion of present value of minimum lease payments	\$ 53,333	\$ 64,121	\$ 117,454

As of January 31, 2020, the weighted average remaining lease terms and weighted average discount rates for operating and finance leases were as follows:

Weighted-average remaining lease term in years:

Operating leases	4.91
Finance leases	12.62
Weighted-average discount rates:	
Operating leases	2.39%
Finance leases	7.56%

There was no significant non-cash lease activity for the three months ended January 31, 2020.

As of October 31, 2019, minimum aggregate rentals under operating leases were as follows:

	2020	2021	2022	2023	2024	Thereafter	Total
Operating leases <sup>(1)</sup>	\$ 28,776	\$ 24,184	\$ 16,767	\$ 13,393	\$ 10,632	\$ 26,110	\$ 119,862

1) The amount for operating lease commitments above include estimated variable expenses relating to insurance, taxes, maintenance and other costs required by the applicable operating lease.

## (16) SHORT-TERM AND LONG-TERM DEBT

### *New 2025 Term Loan*

Pursuant to a Credit Agreement, dated July 15, 2014, as amended (the "Credit Agreement"), by and among Ciena, the lenders party thereto and Bank of America, N.A., as administrative agent (the "Administrative Agent"), Ciena maintained an existing senior secured term loan with an outstanding aggregate principal amount of \$693.0 million as of January 23, 2020 and maturing on September 28, 2025 (the "Old 2025 Term Loan").

On January 23, 2020, Ciena, as borrower, and Ciena Communications, Inc., Ciena Government Solutions, Inc., Ciena Communications International, LLC and Blue Planet Software, Inc., as guarantors, entered into a Refinancing Amendment to Credit Agreement with the lenders party thereto and the Administrative Agent (the "Refinancing Agreement"), pursuant to which Ciena consummated a permitted refinancing of the entire outstanding amount of the Old 2025 Term Loan, and in accordance therewith, incurred new senior secured term loans in an aggregate principal amount of \$693.0 million and maturing on September 28, 2025 (the "New 2025 Term Loan"). The proceeds of the New 2025 Term Loan were used in their entirety to

refinance the 2025 Term Loan. This arrangement was primarily accounted for as a modification of debt and, as such, \$0.1 million of debt issuance costs associated with the New 2025 Term Loan was expensed.

The Refinancing Agreement amends the Credit Agreement and provides that the New 2025 Term Loan will, among other things:

- mature on September 28, 2025;
- amortize in equal quarterly installments in aggregate amounts equal to 0.25%, or \$1.73 million, of the principal amount of the New 2025 Term Loan as of January 23, 2020, with the balance payable at maturity;
- be subject to mandatory prepayment provisions on the occurrence of certain specified events substantially similar to the 2025 Term Loan, including certain asset sales, debt issuances, and receipt of annual Excess Cash Flow (as defined in the Credit Agreement);
- bear interest, at Ciena's election, at a per annum rate equal to (a) LIBOR (subject to a floor of 0.00%) plus an applicable margin of 1.75%, or (b) a base rate (subject to a floor of 1.00%) plus an applicable margin of 0.75%; and
- be repayable at any time at Ciena's election, provided that repayment of the New 2025 Term Loan with proceeds of certain indebtedness prior to July 23, 2020 will require a prepayment premium of 1.00% of the aggregate principal amount of such prepayment.

Except as amended by the Refinancing Agreement, the remaining terms of the Credit Agreement remain in full force and effect.

The net carrying values of Ciena's term loans were comprised of the following for the fiscal periods indicated (in thousands):

	January 31, 2020			October 31, 2019	
	Principal Balance	Unamortized Discount	Deferred Debt Issuance Costs	Net Carrying Value	Net Carrying Value
Term Loan Payable due September 28, 2025 (New)	\$ 693,000	\$ (1,824)	\$ (3,390)	\$ 687,786	\$ —
Term Loan Payable due September 28, 2025 (Old)	\$ —	\$ —	\$ —	\$ —	\$ 687,406

Deferred debt issuance costs that were deducted from the carrying amounts of the term loans totaled \$3.4 million at January 31, 2020 and \$3.6 million at October 31, 2019. Deferred debt issuance costs are amortized using the straight-line method, which approximates the effect of the effective interest rate, through the maturity of the term loans. The amortization of deferred debt issuance costs for these term loans are included in interest expense, and were \$0.2 million during the first three months of fiscal 2020 and fiscal 2019. The carrying value of the term loans listed above is also net of any unamortized debt discounts.

As of January 31, 2020, the estimated fair value of the New 2025 Term Loan was \$694.7 million. Ciena's term loan is categorized as Level 2 in the fair value hierarchy. Ciena estimated the fair value of its term loan using a market approach based on observable inputs, such as current market transactions involving comparable securities.

## (17) EARNINGS PER SHARE CALCULATION

The following tables (in thousands except per share amounts) reconcile basic net income per common share ("Basic EPS") and diluted net income per potential common share ("Diluted EPS"). Basic EPS is computed using the weighted average number of common shares outstanding. Diluted EPS is computed using the weighted average number of the following, in each case, to the extent the effect is not anti-dilutive: (i) common shares outstanding; (ii) shares issuable upon vesting of stock unit awards; and (iii) shares issuable under Ciena's employee stock purchase plan and upon exercise of outstanding stock options, using the treasury stock method.

Numerator	Quarter Ended January 31,	
	2020	2019
Net income used to calculate Basic and Diluted EPS	\$ 62,328	\$ 33,616

Denominator	Quarter Ended January 31,	
	2020	2019
Basic weighted average shares outstanding	154,334	156,314
Add: Shares underlying outstanding stock options and stock unit awards and issuable under employee stock purchase plan	1,404	1,860
Dilutive weighted average shares outstanding	155,738	158,174

EPS	Quarter Ended January 31,	
	2020	2019
Basic EPS	\$ 0.40	\$ 0.22
Diluted EPS	\$ 0.40	\$ 0.21

The following table summarizes the weighted average shares excluded from the calculation of the denominator for Diluted EPS due to their anti-dilutive effect for the periods indicated (in thousands):

	Quarter Ended January 31,	
	2020	2019
Shares underlying stock options and stock unit awards	731	401
Total shares excluded due to anti-dilutive effect	731	401

## (18) STOCKHOLDERS' EQUITY

### Stock Repurchase Program

On December 13, 2018, Ciena announced that its Board of Directors authorized a program to repurchase up to \$500 million of Ciena's common stock. The amount and timing of repurchases are subject to a variety of factors including liquidity, cash flow, stock price, and general business and market conditions. The program may be modified, suspended, or discontinued at any time.

The following table summarizes activity of the stock repurchase program, reported based on trade date:

	Shares Repurchased	Weighted-Average Price per Share	Amount Repurchased (in thousands)
Cumulative balance at October 31, 2019	3,838,466	\$ 39.10	\$ 150,076
Repurchase of common stock under the stock repurchase program	1,288,111	39.36	50,704
Cumulative balance at January 31, 2020	5,126,577	\$ 39.16	\$ 200,780

The purchase price for the shares of Ciena's stock repurchased is reflected as a reduction of common stock and additional paid-in capital.

### Stock Repurchases Related to Stock Unit Award Tax Withholdings

Ciena repurchases shares of common stock to satisfy employee tax withholding obligations due on vesting of stock unit awards. The purchase price of \$12.6 million for the shares of Ciena's stock repurchased during the first three months of fiscal 2020 is reflected as a reduction to stockholders' equity. Ciena is required to allocate the purchase price of the repurchased shares as a reduction of common stock and additional paid-in capital.



**(19) SHARE-BASED COMPENSATION EXPENSE**

The following table summarizes share-based compensation expense for the periods indicated (in thousands):

	Quarter Ended January 31,	
	2020	2019
Product costs	\$ 671	\$ 637
Service costs	842	770
Share-based compensation expense included in cost of goods sold	1,513	1,407
Research and development	3,849	3,391
Sales and marketing	4,613	3,785
General and administrative	5,527	5,112
Share-based compensation expense included in operating expense	13,989	12,288
Share-based compensation expense capitalized in inventory, net	100	60
Total share-based compensation	\$ 15,602	\$ 13,755

As of January 31, 2020, total unrecognized share-based compensation expense was approximately \$141.7 million, which relates to unvested stock unit awards and is expected to be recognized over a weighted-average period of 1.7 years.

## (20) SEGMENTS AND ENTITY-WIDE DISCLOSURES

### Segment Reporting

Ciena has the following operating segments for reporting purposes: (i) Networking Platforms; (ii) Platform Software and Services; (iii) Blue Planet Automation Software and Services; and (iv) Global Services. During fiscal 2019, Ciena separated its previous Software and Software-Related Services segment into two stand-alone operating segments. Because Ciena previously disclosed its Platform Software and Services and Blue Planet Automation Software and Services as distinct product lines in its presentation of segment revenue for Software and Software-Related Services, there is no significant change to the presentation of segment revenues as a result of this separation. Comparative periods have been retrospectively adjusted to disclose segment profit for Platform Software and Services and Blue Planet Automation Software and Services. See Note 3 to Ciena's Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

Ciena's long-lived assets, including equipment, building, furniture and fixtures, finite-lived intangible assets and maintenance spares, are not reviewed by Ciena's chief operating decision maker for purposes of evaluating performance and allocating resources. As of January 31, 2020, equipment, building, furniture and fixtures, net, totaled \$277.7 million, and operating right of use assets, net totaled \$50.1 million, primarily supporting asset groups within Ciena's Networking Platforms, Platform Software and Services and Blue Planet Automation Software and Services segments and supporting Ciena's unallocated selling and general and administrative activities. As of January 31, 2020, \$17.9 million of Ciena's intangible assets, net were assigned to asset groups within Ciena's Networking Platforms segment and \$107.7 million of Ciena's intangible assets, net were assigned to asset groups within Ciena's Blue Planet Automation Software and Services segment. As of January 31, 2020, \$65.7 million, \$156.2 million and \$89.0 million of Ciena's Goodwill was assigned to asset groups within Ciena's Networking Platforms, Platform Software and Services and Blue Planet Automation Software and Services segments, respectively. As of January 31, 2020, all of the maintenance spares, net, totaling \$54.9 million, were assigned to asset groups within Ciena's Global Services segment.

### Segment Revenue

The table below sets forth Ciena's segment revenue for the respective periods (in thousands):

	Quarter Ended January 31,	
	2020	2019
Revenue:		
Networking Platforms		
Converged Packet Optical	\$ 591,549	\$ 548,997
Packet Networking	67,508	71,569
Total Networking Platforms	659,057	620,566
Platform Software and Services	51,888	41,598
Blue Planet Automation Software and Services	15,466	14,974
Global Services		
Maintenance Support and Training	61,793	61,277
Installation and Deployment	34,954	30,622
Consulting and Network Design	9,754	9,490
Total Global Services	106,501	101,389
Consolidated revenue	\$ 832,912	\$ 778,527

### Segment Profit (Loss)

Segment profit (loss) is determined based on internal performance measures used by Ciena's chief executive officer to assess the performance of each operating segment in a given period. In connection with that assessment, the chief executive officer excludes the following items: selling and marketing costs; general and administrative costs; amortization of intangible

assets; significant asset impairments and restructuring costs; acquisition and integration costs; interest and other income, net; interest expense; loss on extinguishment and modification of debt and provision for income taxes.

The table below sets forth Ciena’s segment profit (loss) and the reconciliation to consolidated net income during the respective periods indicated (in thousands):

	Quarter Ended January 31,	
	2020	2019
<b>Segment profit (loss):</b>		
Networking Platforms	\$ 168,270	\$ 136,590
Platform Software and Services	28,951	20,464
Blue Planet Automation Software and Services	(3,113)	(2,047)
Global Services	45,527	39,701
<b>Total segment profit</b>	<b>239,635</b>	<b>194,708</b>
<b>Less: Non-performance operating expenses</b>		
Selling and marketing	107,066	98,113
General and administrative	42,468	39,243
Amortization of intangible assets	5,853	5,528
Significant asset impairments and restructuring costs	4,472	2,273
Acquisition and integration costs	1,819	1,608
<b>Add: Other non-performance financial items</b>		
Interest expense and other income, net	(5,169)	(5,188)
Loss on extinguishment and modification of debt	(646)	—
Less: Provision for income taxes	9,814	9,139
<b>Consolidated net income</b>	<b>\$ 62,328</b>	<b>\$ 33,616</b>

#### Entity-Wide Reporting

Ciena’s operating segments each engage in business across three geographic regions: Americas; Europe, Middle East and Africa (“EMEA”); and Asia-Pacific, Japan and India (“APAC”). Americas include activities in North America and South America (previously, Caribbean and Latin America (“CALA”)). The following table reflects Ciena’s geographic distribution of revenue principally based on the relevant location for Ciena’s delivery of products and performance of services. For the periods below, Ciena’s geographic distribution of revenue was as follows (in thousands):

	Quarter Ended January 31,	
	2020	2019
Americas	\$ 574,004	\$ 516,481
EMEA	129,965	129,190
APAC	128,943	132,856
<b>Total</b>	<b>\$ 832,912</b>	<b>\$ 778,527</b>

Ciena’s revenue includes \$524.3 million and \$464.1 million of United States revenue for the first quarter of fiscal 2020 and 2019, respectively. No other country accounted for 10% or more of total revenue for the periods presented above.

The following table reflects Ciena’s geographic distribution of equipment, building, furniture and fixtures, net, with any country accounting for at least 10% of total equipment, building, furniture and fixtures, net, specifically identified. Equipment, building, furniture and fixtures, net, attributable to geographic regions outside of the U.S. and Canada are reflected as “Other International.” For the periods below, Ciena’s geographic distribution of equipment, building, furniture and fixtures, net, was as follows (in thousands):

	January 31, 2020	October 31, 2019
Canada	\$ 209,101	\$ 211,901
United States	51,819	58,119
Other International	16,819	16,864
Total	<u>\$ 277,739</u>	<u>\$ 286,884</u>

For the periods below, the only customers that accounted for at least 10% of Ciena's revenue were as follows (in thousands):

	Quarter Ended January 31,	
	2020	2019
Verizon	\$ 114,548	\$ 88,775
AT&T	84,010	94,172
Web-scale provider	n/a	89,514
Total	<u>\$ 198,558</u>	<u>\$ 272,461</u>

n/a Denotes revenue representing less than 10% of total revenue for the period

The Web-scale provider noted above contributed greater than 10% of total revenue for the first time in fiscal 2019 and purchased products from each of Ciena's operating segments excluding Blue Planet Automation Software and Services. The other customers identified above purchased products and services from each of Ciena's operating segments.

## (21) COMMITMENTS AND CONTINGENCIES

### *Canadian Grant*

During fiscal 2018, Ciena entered into agreements related to the Evolution of Networking Services through a Corridor in Quebec and Ontario for Research and Innovation ("ENCQOR") project with the Canadian federal government, the government of the province of Ontario and the government of the province of Quebec to develop a 5G technology corridor between Quebec and Ontario to promote research and development, small business enterprises and entrepreneurs in Canada. Under these agreements, Ciena can receive up to an aggregate CAD\$57.6 million (approximately \$43.5 million) in reimbursement from the three Canadian government entities for eligible costs over a period commencing on February 20, 2017 and ending on March 31, 2022. Ciena anticipates receiving recurring disbursements over this period. Amounts received under the agreements are subject to recoupment in the event that Ciena fails to achieve certain minimum investment, employment and project milestones. As of January 31, 2020, Ciena has recorded CAD\$32.5 million (approximately \$24.6 million) in cumulative benefits as a reduction in research and development expense of which CAD\$3.6 million (approximately \$2.7 million) was recorded in the first three months of fiscal 2020. As of January 31, 2020, amounts receivable from this grant were CAD\$12.0 million (approximately \$9.1 million).

### *Tax Contingencies*

Ciena is subject to various tax liabilities arising in the ordinary course of business. Ciena does not expect that the ultimate settlement of these tax liabilities will have a material effect on its results of operations, financial position or cash flows.

### *Litigation*

Ciena is subject to various legal proceedings, claims and other matters arising in the ordinary course of business, including those that relate to employment, commercial, tax and other regulatory matters. Ciena is also subject to intellectual property related claims, including claims against third parties that may involve contractual indemnification obligations on the part of Ciena. Ciena does not expect that the ultimate costs to resolve such matters will have a material effect on its results of operations, financial position or cash flows.

## **(22) SUBSEQUENT EVENTS**

### *Stock Repurchase Program*

From the end of the first quarter of fiscal 2020 through March 6, 2020, Ciena repurchased an additional 443,958 shares of its common stock, for an aggregate purchase price of \$18.6 million at an average price of \$41.90 per share, inclusive of repurchases pending settlement. As of March 6, 2020, Ciena has repurchased an aggregate of 5,570,535 shares and has an aggregate of \$280.6 million of authorized funds remaining under its stock repurchase program.

### **Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

#### **Cautionary Note Regarding Forward-Looking Statements**

*This report contains statements that discuss future events or expectations, projections of results of operations or financial condition, changes in the markets for our products and services, trends in our business, business prospects and strategies and other "forward-looking" information. In some cases, you can identify "forward-looking statements" by words like "may," "will," "can," "should," "could," "expects," "future," "plans," "anticipates," "believes," "estimates," "predicts," "intends," "potential," "projects," "targets," or "continue" or the negative of those words and other comparable words. These statements may relate to, among other things: our competitive landscape; market conditions and growth opportunities; factors impacting our industry and markets; factors impacting the businesses of network operators and their network architectures; adoption of next-generation network technology and software programmability and automation of networks; our strategy, including our research and development, supply chain and go-to-market initiatives; efforts to increase application of our solutions in customer networks and to increase the reach of our business into new or growing customer and geographic markets; our backlog and seasonality in our business; expectations for our financial results, revenue, gross margin, operating expense and key operating measures in future periods; the adequacy of our sources of liquidity to satisfy our working capital needs, capital expenditures, and other liquidity requirements; business initiatives including information technology (IT) transitions or initiatives; the impact of the Tax Cuts and Jobs Act and changes in our effective tax rates; and market risks associated with financial instruments and foreign currency exchange rates. These statements are subject to known and unknown risks, uncertainties and other factors, and actual events or results may differ materially due to factors such as:*

- our ability to execute our business and growth strategies;*
- fluctuations in our revenue, gross margin and operating results and our financial results generally;*
- the loss of any of our large customers, a significant reduction in their spending, or a material change in their networking or procurement strategies;*
- the competitive environment in which we operate;*
- market acceptance of products and services currently under development and delays in product or software development;*
- lengthy sales cycles and onerous contract terms with communications service providers, Web-scale providers and other large customers;*
- product performance or security problems and undetected errors;*
- our ability to diversify our customer base beyond our traditional customers and to broaden the application for our solutions in communications networks;*
- the level of growth in network traffic and bandwidth consumption and the corresponding level of investment in network infrastructures by network operators;*
- the international scale of our operations;*
- fluctuations in currency exchange rates;*
- our ability to forecast accurately demand for our products for purposes of inventory purchase practices;*
- the impact of pricing pressure and price compression that we regularly encounter in our markets;*
- our ability to enforce our intellectual property rights, and costs we may incur in response to intellectual property right infringement claims made against us;*
- the continued availability, on commercially reasonable terms, of software and other technology under third-party licenses;*
- the potential failure to maintain the security of confidential, proprietary or otherwise sensitive business information or systems or to protect against cyber attacks;*
- the performance of our third-party contract manufacturers;*
- changes or disruption in components or supplies provided by third parties, including sole and limited source suppliers;*
- our ability to manage effectively our relationships with third-party service partners and distributors;*

- unanticipated risks and additional obligations in connection with our resale of complementary products or technology of other companies;
- our ability to grow and to maintain our new distribution relationships under which we will make available certain technology as a component;
- our exposure to the credit risks of our customers and our ability to collect receivables;
- modification or disruption of our internal business processes and information systems;
- the effect of our outstanding indebtedness on our liquidity and business;
- fluctuations in our stock price and our ability to access the capital markets to raise capital;
- unanticipated expenses or disruptions to our operations caused by facilities transitions or restructuring activities;
- our ability to attract and retain experienced and qualified personnel;
- disruptions to our operations caused by strategic acquisitions and investments or the inability to achieve the expected benefits and synergies of newly-acquired businesses;
- our ability to commercialize and to grow our software business and address networking strategies including software-defined networking and network function virtualization;
- changes in, and the impact of, government regulations, including with respect to: the communications industry generally; the business of our customers; the use, import or export of products; and the environment, potential climate change, and other social initiatives;
- the impact of the Tax Cuts and Jobs Act, future legislation or executive action in the U.S. relating to tax policy, changes in tax regulations and related accounting, and changes in our effective tax rates;
- future legislation or executive action in the U.S. or foreign countries relating to trade regulations, including the imposition of tariffs and duties;
- factors beyond our control such as natural disasters, acts of war or terrorism, and epidemics, including the recent outbreak of the coronavirus COVID-19;
- the write-down of goodwill, long-lived assets, or our deferred tax assets;
- our ability to maintain effective internal controls over financial reporting and liabilities that result from the inability to comply with corporate governance requirements; and
- adverse results in litigation matters.

*These are only some of the factors that may affect the forward-looking statements contained in this report. For a discussion identifying additional important factors that could cause actual results to vary materially from those anticipated in the forward-looking statements, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors” in this report. For a more complete understanding of the risks associated with an investment in our securities, you should review these factors and the rest of this report in combination with the more detailed description of our business and management’s discussion and analysis of financial condition and risk factors described in our annual report on Form 10-K for fiscal 2019, which we filed with the SEC on December 20, 2019 (the “2019 Annual Report”). However, we operate in a very competitive and rapidly changing environment and new risks and uncertainties emerge, are identified or become apparent from time to time. We cannot predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this report. You should be aware that the forward-looking statements contained in this report are based on our current views and assumptions. We undertake no obligation to revise or to update any forward-looking statements made in this report to reflect events or circumstances after the date hereof or to reflect new information or the occurrence of unanticipated events, except as required by law. The forward-looking statements in this report are intended to be subject to protection afforded by the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Unless the context requires otherwise, references in this annual report to “Ciena,” the “Company,” “we,” “us” and “our” refer to Ciena Corporation and its consolidated subsidiaries.*

## **Overview**

We are a networking systems, services and software company, providing solutions that enable a wide range of network operators to deploy and manage next-generation networks that deliver services to businesses and consumers. We provide hardware, software and services that support the transport, switching, aggregation, service delivery and management of video, data and voice traffic on communications networks. Our solutions are used by communications service providers, cable and multiservice operators, Web-scale providers, submarine network operators, governments, enterprises, research and education institutions and other emerging network operators.

Our solutions include our portfolio of Networking Platforms, including our Converged Packet Optical and Packet Networking products, that can be applied from the network core to end user access points, and that allow network operators to scale capacity, increase transmission speeds, allocate traffic and adapt dynamically to changing end-user service demands. We offer Platform Software that provides management and domain control of our hardware solutions and automates network lifecycle operations, including provisioning equipment and services. Through our Blue Planet® Automation Software, we

enable network providers to use network data, analytics and policy-based assurance to achieve closed loop automation across multi-vendor and multi-domain network environments, streamlining key business and network processes. To complement our hardware and software products, we offer a broad range of services that help our customers build, operate and improve their networks and associated operational environments.

We refer to our complete portfolio vision as the Adaptive Network™. The Adaptive Network emphasizes a programmable network infrastructure, software control and automation capabilities, and network analytics and intelligence. By transforming network infrastructures into a dynamic, programmable environment driven by automation and analytics, network operators can realize greater business agility, dynamically adapt to changing end user service demands and rapidly introduce new revenue-generating services. They can also gain valuable real-time network insights, allowing them to optimize network operation and maximize the return on their network infrastructure investment.

#### *Strategic Initiatives*

##### *Investment in Blue Planet Automation Software*

We have continued to pursue both organic investments and acquisition opportunities to expand our Blue Planet Automation Software and Services portfolio and business. On November 4, 2019, we acquired privately held Centina Systems, Inc. (“Centina”), a provider of service assurance analytics and network performance management solutions. The acquisition of Centina is intended to accelerate Blue Planet’s software strategy of providing closed loop, intelligent automation solutions that help communications service providers to analyze network conditions, traffic demands and resource availability, and to determine the best placement of traffic for optimal service quality and resource utilization. See Note 4 to our Condensed Consolidated Financial Statements included in Item 1 of Part 1 of this report.

##### *Investment in Adaptive Network Offerings and 5G Innovation*

We have continued to use our significant research and development investment capacity to push the pace of innovation in our markets and provide offerings that promote our Adaptive Network vision through further advances in programmable hardware, analytics, and control and automation. In the first quarter of fiscal 2020, we began market trials of our fifth-generation WaveLogic coherent modem technology, which is capable of delivering 800 gigabits of capacity per second over a single wavelength. We expect to make this technology available in certain Converged Packet Optical platforms beginning in the second quarter of fiscal 2020.

In February 2020, we announced the future addition of several new wireline routing platforms to support the demands of mobile xHaul (fronthaul, midhaul and backhaul) transport and to enable mobile network operator migration from 4G to 5G networks. In addition, we enhanced our Blue Planet Intelligent Automation software portfolio for 5G automation applications, including vendor-agnostic network slicing features and dynamic planning capabilities that are intended to better enable mobile network operator delivery of 5G mobile services. We expect to make these new products available in the second half of fiscal 2020.

##### *2025 Term Loan Refinancing Amendment to Credit Agreement*

We refinanced our existing senior secured term loan with an outstanding aggregate principal amount of \$693 million as of January 23, 2020 and maturing on September 28, 2025 for a lower per annum rate equal to (a) LIBOR plus an applicable margin of 1.75%, or (b) a base rate (subject to a floor of 1.00%) plus an applicable margin of 0.75%. All other terms remain in effect.

##### *Coronavirus (COVID-19)*

We have taken a number of precautionary steps to safeguard our business and our employees from the effects of the novel coronavirus COVID-19, including implementing travel bans and restrictions, temporarily closing offices and canceling participation in various industry events. We have also implemented certain business continuity plans, including flexible working arrangements, designed to minimize any potential business disruption and to protect our supply chain and operations. As a result of the spread of the coronavirus, to date we have experienced some disruption and delay of supply, principally related to China, and logistics challenges, including certain limitations on our ability to access certain sites that have impacted our customer fulfillment operations. We expect these conditions to have an adverse impact on our revenue and results of operations for the second quarter of fiscal 2020. We are monitoring the situation and actively assessing further possible implications to our business, supply chain and customer demand. However, the coronavirus situation remains dynamic. For example, on February 28, 2020, the World Health Organization (WHO) raised its assessment of the coronavirus threat from high to very high at a global level due to the continued increase in the number of cases and affected countries. As a result, the broader implications for our business and results of operations remain uncertain. If the coronavirus or its adverse effects become more prevalent in the locations where we, our customers, suppliers or manufacturers conduct business, or we experience more pronounced disruptions in our operations, we may experience constrained supply or curtailed customer demand that may materially adversely impact our business and results of operations in future periods.

*Available Information.* Our quarterly reports on Form 10-Q, annual reports on Form 10-K, current reports on Form 8-K, and any amendments thereto filed or furnished with the SEC are available through the SEC’s website at [www.sec.gov](http://www.sec.gov) and are available free of charge on our website as soon as reasonably practicable after we file or furnish these documents. We routinely post the reports above, recent news and announcements, financial results and other information about Ciena that is important to investors in the “Investors” section of our website at [www.ciena.com](http://www.ciena.com). Information on our website is not deemed to be incorporated by reference into this report. Investors are encouraged to review the “Investors” section of our website because, as with the other disclosure channels that we use, from time to time we may post material information on that site that is not otherwise disseminated by us.

For additional information on our business, industry, market opportunity, competitive landscape, and strategy, see our 2019 Annual Report.



## Consolidated Results of Operations

### Operating Segments

Our results of operations are presented based on the following operating segments: (i) Networking Platforms; (ii) Platform Software and Services; (iii) Blue Planet Automation Software and Services; and (iv) Global Services. See Note 20 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

### Quarter ended January 31, 2020 compared to the quarter ended January 31, 2019

#### Revenue

During the first quarter of fiscal 2020, approximately 17.7% of our revenue was non-U.S. Dollar-denominated, primarily including sales in Japanese Yen, Euro, Canadian Dollars and Brazilian Reals. During the first quarter of fiscal 2020, as compared to the first quarter of fiscal 2019, the U.S. Dollar generally strengthened against these currencies. Consequently, our revenue reported in U.S. Dollars was reduced slightly by approximately \$0.9 million, or 0.1%, as compared to the first quarter of fiscal 2019. The table below sets forth the changes in our operating segment revenue for the periods indicated (in thousands, except percentage data):

	Quarter Ended January 31,				Increase	
	2020	%*	2019	%*	(decrease)	%**
<b>Revenue:</b>						
<b>Networking Platforms</b>						
Converged Packet Optical	\$ 591,549	71.0	\$ 548,997	70.5	\$ 42,552	7.8
Packet Networking	67,508	8.1	71,569	9.2	(4,061)	(5.7)
Total Networking Platforms	659,057	79.1	620,566	79.7	38,491	6.2
Platform Software and Services	51,888	6.2	41,598	5.3	10,290	24.7
Blue Planet Automation Software and Services	15,466	1.9	14,974	1.9	492	3.3
<b>Global Services</b>						
Maintenance Support and Training	61,793	7.4	61,277	8.0	516	0.8
Installation and Deployment	34,954	4.2	30,622	3.9	4,332	14.1
Consulting and Network Design	9,754	1.2	9,490	1.2	264	2.8
Total Global Services	106,501	12.8	101,389	13.1	5,112	5.0
Consolidated revenue	\$ 832,912	100.0	\$ 778,527	100.0	\$ 54,385	7.0

\* Denotes % of total revenue

\*\* Denotes % change from 2019 to 2020

- **Networking Platforms segment revenue** increased, reflecting a product line sales increase of \$42.6 million of our Converged Packet Optical products, partially offset by a product line sales decrease of \$4.1 million of our Packet Networking products.
  - Converged Packet Optical sales increased, reflecting increases of \$42.5 million of our 6500 Packet-Optical Platform primarily to communications service providers, cable and multi service operators and government, and \$34.3 million of our 5430 Reconfigurable Switching Systems to communications service providers. These increases were partially offset by a sales decrease of \$35.4 million of our Waveserver products to Web-scale providers.
  - Packet Networking sales decreased, primarily reflecting a sales decrease of \$14.4 million of our 6500 Packet Transport System (PTS) to communication service providers. The sales decrease was partially offset by a

sales increase of \$8.1 million of our 3000 and 5000 families of service delivery and aggregation switches to communication service providers.

- **Platform Software and Services segment revenue** increased, reflecting an increase of \$8.7 million in software sales and \$1.6 million related to services to communication service providers.
- **Blue Planet Automation Software and Services segment revenue** slightly increased, reflecting an increase of \$3.0 million in software services partially offset by a decrease in software sales of \$2.5 million. Our entrance into the software automation market is in the early stages and, as such, revenue from our Blue Planet Automation Software platform has not been significant to date.
- **Global Services segment revenue** increased, primarily reflecting a sales increase of \$4.3 million of our installation and deployment services.

Our operating segments engage in business and operations across three geographic regions: Americas, EMEA and APAC. As discussed in Note 3, effective the beginning of fiscal 2020, our Global Sales and Marketing organization combined our previous North America and CALA regions into a new America sales region. The following table reflects our geographic distribution of revenue principally based on the relevant location for our delivery of products and performance of services. Our revenue, when considered by geographic distribution, can fluctuate significantly, and the timing of revenue recognition for large network projects, particularly outside of the United States, can result in large variations in geographic revenue results in any particular period. The table below sets forth the changes in geographic distribution of revenue for the periods indicated (in thousands, except percentage data):

	Quarter Ended January 31,				Increase	
	2020	%*	2019	%*	(decrease)	%**
Americas	\$ 574,004	68.9	\$ 516,481	66.3	\$ 57,523	11.1
EMEA	129,965	15.6	129,190	16.6	775	0.6
APAC	128,943	15.5	132,856	17.1	(3,913)	(2.9)
Total	\$ 832,912	100.0	\$ 778,527	100.0	\$ 54,385	7.0

\* Denotes % of total revenue

\*\* Denotes % change from 2019 to 2020

- **Americas revenue** increased primarily reflecting sales increases of \$46.3 million within our Networking Platforms segment, \$6.4 million within our Global Services segment and \$7.2 million within our Platform Software and Services segment. These sales increases were slightly offset by a sales decrease of \$2.4 million within our Blue Planet Automation Software and Services segment. The increase within our Networking Platforms segment reflects a product line sales increase of \$51.4 million of Converged Packet Optical products, primarily related to sales increases of \$54.9 million of our 6500 Packet-Optical Platform and \$23.6 million of our 5430 Reconfigurable Switching Systems partially offset by a decrease of \$28.6 million of our Waveserver products. Our 6500 Packet-Optical Platform sales primarily reflect increased sales to communications service providers, government customers and cable and multiservice operators. Our 5430 Reconfigurable Switching Systems sales primarily reflect increased sales to communications service providers. Waveserver sales reflect decreased sales to Web-scale providers.
- **EMEA revenue** slightly increased primarily reflecting an increase of \$2.1 million within our Networking Platforms segment. The revenue increase within our Networking Platforms segment reflects a product line sales increase of \$1.9 million of Converged Packet Optical products, primarily related to sales increases of \$4.4 million of our 6500 Packet-Optical Platform to communications service providers, and \$8.7 million of 5430 Reconfigurable Switching Systems to communications service providers. This increase is partially offset by a revenue decrease of \$10.7 million of our Waveserver products primarily to Web-scale providers.
- **APAC revenue** slightly decreased primarily reflecting a decrease of \$9.8 million within our Networking Platforms segment, partially offset by sales increases of \$3.1 million within our Blue Planet Automation Software and Services segment and \$2.7 million within Platform Software and Services segment. Our Networking Platforms segment revenue primarily reflects a decrease of \$16.7 million in sales of our 6500 Packet-Optical Platform primarily to communications service providers in India, partially offset by an increase of \$4.0 million in sales of our Waveserver products primarily to Web-scale providers.

#### Cost of Goods Sold and Gross Profit

Product cost of goods sold consists primarily of amounts paid to third-party contract manufacturers, component costs, employee-related costs and overhead, shipping and logistics costs associated with manufacturing-related operations, warranty and other contractual obligations, royalties, license fees, amortization of intangible assets, cost of excess and obsolete inventory and, when applicable, estimated losses on committed customer contracts.

Services cost of goods sold consists primarily of direct and third-party costs associated with our provision of services including installation, deployment, maintenance support, consulting and training activities, and, when applicable, estimated losses on committed customer contracts. The majority of these costs relate to personnel, including employee and third-party contractor-related costs.

Our gross profit as a percentage of revenue, or “gross margin,” can fluctuate due to a number of factors, particularly when viewed on a quarterly basis. Our gross margin can fluctuate and be adversely impacted depending on our revenue concentration within a particular segment, product line, geography, or customer, including our success in selling software in a particular period. Our gross margin remains highly dependent on our continued ability to drive product cost reductions relative to the price erosion that we regularly encounter in our markets. Moreover, we are often required to compete with aggressive pricing and commercial terms, and, to secure business with new and existing customers, we may agree to pricing or other unfavorable commercial terms that adversely affect our gross margin. Success in taking share and winning new business can result in additional pressure on gross margin from these pricing dynamics and the early stages of these network deployments. Early stages of new network builds also often include an increased concentration of lower margin “common” equipment, photonics sales and installation services, with the intent to improve margin as we sell channel cards and maintenance services to customers adding capacity or services to their networks. Gross margin can be impacted by technology-based price compression and the introduction or substitution of new platforms with improved price for performance as compared to existing solutions that carry higher margins. Gross margin can also be impacted by changes in expense for excess and obsolete inventory and warranty obligations.

Service gross margin can be affected by the mix of customers and services, particularly the mix between deployment and maintenance services, geographic mix and the timing and extent of any investments in internal resources to support this business.

The tables below set forth the changes in revenue, cost of goods sold and gross profit for the periods indicated (in thousands, except percentage data):

	Quarter Ended January 31,				Increase	
	2020	%*	2019	%*	(decrease)	%**
Total revenue	\$ 832,912	100.0	\$ 778,527	100.0	\$ 54,385	7.0
Total cost of goods sold	462,377	55.5	455,186	58.5	7,191	1.6
Gross profit	\$ 370,535	44.5	\$ 323,341	41.5	\$ 47,194	14.6

\* Denotes % of total revenue

\*\* Denotes % change from 2019 to 2020

	Quarter Ended January 31,				Increase	
	2020	%*	2019	%*	(decrease)	%**
Product revenue	\$ 687,215	100.0	\$ 642,532	100.0	\$ 44,683	7.0
Product cost of goods sold	389,013	56.6	380,442	59.2	8,571	2.3
Product gross profit	\$ 298,202	43.4	\$ 262,090	40.8	\$ 36,112	13.8

\* Denotes % of product revenue

\*\* Denotes % change from 2019 to 2020

	Quarter Ended January 31,				Increase	
	2020	%*	2019	%*	(decrease)	%**
Service revenue	\$ 145,697	100.0	\$ 135,995	100.0	\$ 9,702	7.1
Service cost of goods sold	73,364	50.4	74,744	55.0	(1,380)	(1.8)
Service gross profit	\$ 72,333	49.6	\$ 61,251	45.0	\$ 11,082	18.1

\* Denotes % of services revenue

\*\* Denotes % change from 2019 to 2020

- **Gross profit as a percentage of revenue** increased, reflecting improved product and services gross profit as described below. In recent periods, we have encountered fluctuations or reductions in our gross margin as a result of our strategy to leverage our technology leadership and to capture aggressively additional market share and displace competitors, with the intent to improve margin in the long term as we sell channel cards, maintenance services, and other higher margin products to customers adding capacity or services to their networks. In the fiscal quarter ended January 31, 2020, our gross margin benefited from the success of this ongoing strategy and the resulting favorable mix of customers, network deployments and capacity additions during the period. Continued implementation of this strategy may require that we agree to aggressive pricing, commercial concessions and other unfavorable terms, or result in an unfavorable mix of revenues from early stage deployments during a particular period, which can adversely impact gross margin.
- **Gross profit on products as a percentage of product revenue** increased, primarily due to a favorable mix of customers and products and product cost reductions, partially offset by market-based price compression we encountered during the period.
- **Gross profit on services as a percentage of services revenue** increased, primarily due to higher mix of software-related service sales, as described above, and a reduction in the mix of early stage international network deployments.

#### Operating Expense

Operating expense consists of the component elements described below.

- *Research and development expense* primarily consists of salaries and related employee expense (including share-based compensation expense), prototype costs relating to design, development, product testing, depreciation expense, and third-party consulting costs.
- *Selling and marketing expense* primarily consists of salaries, commissions and related employee expense (including share-based compensation expense) and sales and marketing support expense, including travel, demonstration units, trade show expense, and third-party consulting costs.
- *General and administrative expense* primarily consists of salaries and related employee expense (including share-based compensation expense) and costs for third-party consulting and other services.
- *Amortization of intangible assets* primarily reflects the amortization of both purchased technology and the value of customer relationships derived from our acquisitions.
- *Significant asset impairments and restructuring costs* primarily reflect actions we have taken to improve the alignment of our workforce, facilities and operating costs with perceived market opportunities, business strategies, changes in market and business conditions and significant impairments of assets.
- *Acquisition and integration costs* consist of expenses for financial, legal and accounting advisors, severance and other employee-related costs associated with our acquisitions of Packet Design, LLC (“Packet Design”), DonRiver and Centina, including costs associated with a three-year earn-out arrangement related to the DonRiver acquisition for 2019.

During the first quarter of fiscal 2020, approximately 50.7% of our operating expense was non-U.S. Dollar-denominated, including expenses in Canadian Dollars, Indian Rupees, British Pounds and Euros. During the first quarter of fiscal 2020 as compared to the first quarter of fiscal 2019, the U.S. Dollar generally strengthened against these currencies. Consequently, our

operating expense reported in U.S. Dollars was reduced slightly by approximately \$0.3 million, or 0.1%, as compared to the first quarter of fiscal 2019, due to the strengthening U.S. Dollar, net of hedging. The table below sets forth the changes in operating expense for the periods indicated (in thousands, except percentage data):

	Quarter Ended January 31,				Increase	
	2020	%*	2019	%*	(decrease)	%**
Research and development	\$ 130,900	15.7	\$ 128,633	16.5	\$ 2,267	1.8
Selling and marketing	107,066	12.9	98,113	12.6	8,953	9.1
General and administrative	42,468	5.1	39,243	5.0	3,225	8.2
Amortization of intangible assets	5,853	0.7	5,528	0.7	325	5.9
Significant asset impairments and restructuring costs	4,472	0.5	2,273	0.3	2,199	96.7
Acquisition and integration costs	1,819	0.2	1,608	0.2	211	13.1
<b>Total operating expenses</b>	<b>\$ 292,578</b>	<b>35.1</b>	<b>\$ 275,398</b>	<b>35.3</b>	<b>\$ 17,180</b>	<b>6.2</b>

\* Denotes % of total revenue

\*\* Denotes % change from 2019 to 2020

- **Research and development expense** increased by \$2.3 million, primarily reflecting an increase in employee and compensation costs.
- **Selling and marketing expense** increased by \$9.0 million, primarily reflecting an increase in employee and compensation cost.
- **General and administrative expense** increased by \$3.2 million, primarily reflecting increases of \$2.1 million in bad debt expense and \$1.0 million in employee and compensation costs.
- **Amortization of intangible assets** increased due to additional intangibles acquired in connection with our acquisition of Centina in the first quarter of fiscal 2020.
- **Significant asset impairments and restructuring costs** reflect global workforce reductions as part of a business optimization strategy to improve gross margin, constrain operating expense, and redesign certain business processes. For the first quarter of fiscal 2019, unfavorable lease commitments for certain facility locations in the United States and India where we have vacated unused space.
- **Acquisition and integration costs** reflect financial, legal and accounting advisors and severance and other employment-related costs related to our acquisitions of Packet Design, DonRiver and Centina.

#### Other Items

The table below sets forth the changes in other items for the periods indicated (in thousands, except percentage data):

	Quarter Ended January 31,				Increase	
	2020	%*	2019	%*	(decrease)	%**
Interest and other income, net	\$ 3,646	0.4	\$ 4,253	0.5	\$ (607)	(14.3)
Interest expense	\$ 8,815	1.1	\$ 9,441	1.2	\$ (626)	(6.6)
Loss on extinguishment and modification of debt	\$ (646)	0.1	\$ —	0.0	\$ (646)	—
Provision for income taxes	\$ 9,814	1.2	\$ 9,139	1.2	\$ 675	7.4

\* Denotes % of total revenue

\*\* Denotes % change from 2019 to 2020

- **Interest and other income, net** primarily reflects the impact of foreign exchange rates on assets and liabilities denominated in a currency other than the relevant functional currency, net of hedging activity.
- **Interest expense** decreased, primarily due to a reduction of LIBOR rates impacting our 2025 Term Loan.

- **Loss on extinguishment and modification of debt** reflects the refinancing of our 2025 Term Loan. See Note 16 to our Condensed Consolidated Financial Statements in Item 1 of Part 1 of this report for more details.
- **Provision for income taxes** increased, due to higher earnings for the first quarter of fiscal 2020. The effective tax rate for the first quarter of fiscal 2020 was lower compared to the first quarter of fiscal 2019, primarily due to the effect of the final regulations released on December 2, 2019

### Segment Profit (Loss)

The table below sets forth the changes in our segment profit (loss) for the respective periods (in thousands, except percentage data):

	Quarter Ended January 31,		Increase (decrease)	%*
	2020	2019		
Segment profit (loss):				
Networking Platforms	\$ 168,270	\$ 136,590	\$ 31,680	23.2
Platform Software and Services	\$ 28,951	\$ 20,464	\$ 8,487	41.5
Blue Planet Automation Software and Services	\$ (3,113)	\$ (2,047)	\$ (1,066)	52.1
Global Services	\$ 45,527	\$ 39,701	\$ 5,826	14.7

\* Denotes % change from 2019 to 2020

- **Networking Platforms segment profit** increased, primarily due to higher sales volume and higher gross margin as described above.
- **Platform Software and Services segment profit** increased, primarily due to higher sales volume, as described above, partially offset by higher research and development cost.
- **Blue Planet Automation Software and Services segment loss** increased, primarily reflecting decreased software sales and higher research and development costs, partially offset by higher gross margin on software-related services, as described above.
- **Global Services segment profit** increased, primarily due to higher sales volume and improved gross margin, as described above.

### Liquidity and Capital Resources

*Overview.* For the three months ended January 31, 2020, we generated \$39.8 million of cash from operating activities, as our net income (adjusted for non-cash charges) of \$143.3 million exceeded our working capital requirements of \$103.5 million. For additional details on our cash provided by operating activities, see the discussion below entitled “Cash Provided By Operating Activities.”

Despite our cash generated from operations, cash, cash equivalents and investments decreased by \$66.6 million during the first three months of fiscal 2020. The decrease in cash primarily reflects (i) cash used to fund our investing activities for capital expenditures totaling \$26.8 million, (ii) cash used for the acquisition of Centina of \$28.3 million, (iii) cash used for stock repurchases under our stock repurchase program of \$49.2 million, and (iv) stock repurchases on vesting of our stock unit awards to employees relating to tax withholding of \$12.6 million. Proceeds from the issuance of equity under our employee stock purchase plans provided \$11.9 million in cash during the three months ended January 31, 2020.

	January 31, 2020	October 31, 2019	Increase (decrease)
Cash and cash equivalents	\$ 837,286	\$ 904,045	\$ (66,759)
Short-term investments in marketable debt securities	110,067	109,940	127
Long-term investments in marketable debt securities	10,076	10,014	62
Total cash and cash equivalents and investments in marketable debt securities	\$ 957,429	\$ 1,023,999	\$ (66,570)

*Principal Sources of Liquidity.* Our principal sources of liquidity on hand include our cash, cash equivalents and investments, which as of January 31, 2020 totaled \$957.4 million, as well as the senior secured asset-backed revolving credit

facility to which we and certain of our subsidiaries are parties (the “ABL Credit Facility”). The ABL Credit Facility provides for a total commitment of \$300 million with a maturity date of October 28, 2024. We principally use the ABL Credit Facility to support the issuance of letters of credit that arise in the ordinary course of our business and thereby to reduce our use of cash required to collateralize these instruments. As of January 31, 2020, letters of credit totaling \$81.9 million were collateralized by our ABL Credit Facility. There were no borrowings outstanding under the ABL Credit Facility as of January 31, 2020.

*Foreign Liquidity.* The amount of cash, cash equivalents, and short-term investments held by our foreign subsidiaries was \$64.0 million as of January 31, 2020. We intend to reinvest indefinitely our foreign earnings. If we were to repatriate the accumulated historical foreign earnings, the estimated amount of unrecognized deferred income tax liability related to foreign withholding taxes would be approximately \$32.0 million.

*Stock Repurchase Authorization.* On December 13, 2018, Ciena announced that its Board of Directors authorized a program to repurchase up to \$500 million of its common stock, which replaced in its entirety the previous stock repurchase program authorized in fiscal 2018. We repurchased \$50.7 million under this program during the first quarter of fiscal 2020, and had \$299.2 million remaining under the current authorization as of January 31, 2020. The amount and timing of repurchases are subject to a variety of factors including liquidity, cash flow, stock price and general business and market conditions. The program may be modified, suspended, or discontinued at any time.

*Liquidity Position.* We regularly evaluate our liquidity position, debt obligations, and anticipated cash needs to fund our operating or investment plans, and may consider capital raising and other market opportunities that may be available to us. We regularly evaluate alternatives to manage our capital structure and to reduce our debt. Based on past performance and current expectations, we believe that cash from operations, cash, cash equivalents, investments, and other sources of liquidity, including our ABL Credit Facility, will satisfy our working capital needs, capital expenditures, and other liquidity requirements associated with our operations through at least the next 12 months.

#### *Cash Provided By Operating Activities*

The following sections set forth the components of our \$39.8 million of cash provided by operating activities during the first three months of fiscal 2020:

#### *Net income (adjusted for non-cash charges)*

The following table sets forth our net income (adjusted for non-cash charges) during the period (in thousands):

	Three months ended January 31, 2020
Net income	\$ 62,328
Adjustments for non-cash charges:	
Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	25,782
Share-based compensation costs	15,602
Amortization of intangible assets	9,687
Deferred taxes	10,788
Provision for inventory excess and obsolescence	6,699
Provision for warranty	7,898
Other	4,540
Net income (adjusted for non-cash charges)	<u>\$ 143,324</u>

#### *Working Capital*

We used \$103.5 million of cash for working capital during the period. The following table sets forth the major components of the cash used in working capital (in thousands):

	Three months ended	
	January 31, 2020	
Cash provided by accounts receivable	\$	64,938
Cash used in inventories		(4,481)
Cash used in prepaid expenses and other		(29,792)
Cash used in accounts payable, accruals and other obligations		(142,229)
Cash provided by deferred revenue		8,926
Cash used in operating lease assets and liabilities, net		(922)
<b>Total cash used for working capital</b>	<b>\$</b>	<b>(103,560)</b>

As compared to the end of fiscal 2019:

- The \$64.9 million of cash provided by accounts receivable during the first three months of fiscal 2020 reflects increased cash collections;
- The \$4.5 million of cash used in inventory during the first three months of fiscal 2020 primarily reflects increases in raw materials to meet customer delivery schedules;
- The \$29.8 million of cash used in prepaid expense and other during the first three months of fiscal 2020 primarily reflects increases in upfront future discounts paid to customers and higher non-customer receivables;
- The \$142.2 million of cash used in accounts payable, accruals and other obligations during the first three months of fiscal 2020 primarily reflects the timing of payments for bonuses to employees under our annual cash incentive compensation plan and inventory purchases;
- The \$8.9 million of cash provided by deferred revenue during the first three months of fiscal 2020 represents an increase in advanced payments received from customers prior to revenue recognition.
- The \$0.9 million of cash used in operating lease assets and liabilities, net, during the first three months of fiscal 2020 represents cash paid for operating leases. For more details, see Note 15 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

Our days sales outstanding (“DSOs”) for the first three months of fiscal 2020 were 80 days, and our inventory turns for the first three months of fiscal 2020 were 4.5. The calculation of DSOs includes accounts receivables and contract assets for unbilled receivables included in prepaid expenses and other.

#### *Cash Paid for Interest*

The following table sets forth the cash paid for interest during the period (in thousands):

	Three months ended	
	January 31, 2020	
Term Loan due September 28, 2025 (Old) <sup>(1)</sup>	\$	6,691
Interest rate swaps <sup>(2)</sup>		1,055
ABL Credit Facility <sup>(3)</sup>		331
Finance leases		1,248
<b>Cash paid during period</b>	<b>\$</b>	<b>9,325</b>

(1) Interest on the Old 2025 Term Loan was payable periodically based on the interest period selected for borrowing. The Old 2025 Term Loan bore interest at LIBOR for the chosen borrowing period plus a spread of 2.00% subject to a minimum LIBOR rate of 0.00%. On January 23, 2020, we refinanced and replaced this term loan with the New 2025 Term Loan. See Note 16 to our Condensed Consolidated Financial Statements included in Item I of Part I of this report for more information. At the end of the first quarter of fiscal 2020, the interest rate on the New 2025 Term Loan was 3.41%.

(2) The interest rate swaps fix the LIBOR rate for \$350.0 million of the New 2025 Term Loan at 2.957% through September 2023.



- (3) During the first three months of fiscal 2020, we utilized the ABL Credit Facility to collateralize certain standby letters of credit and paid \$0.3 million in commitment fees, interest expense and other administrative charges relating to the ABL Credit Facility.

### **Contractual Obligations**

There have been no material changes to our contractual obligations since October 31, 2019. For a summary of our contractual obligations, see Item 7 of Part II of the 2019 Annual Report.

### **Off-Balance Sheet Arrangements**

We do not engage in any off-balance sheet financing arrangements. In particular, we do not have any equity interests in so-called limited purpose entities, which include special purpose entities (SPEs) and structured finance entities.

### **Critical Accounting Policies and Estimates**

The preparation of our consolidated financial statements requires that we make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expense, and related disclosure of contingent assets and liabilities. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty. On an ongoing basis, we reevaluate our estimates, including those related to revenue recognition, share-based compensation, bad debts, inventories, intangible and other long-lived assets, goodwill, income taxes, warranty obligations, restructuring, derivatives and hedging, and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Among other things, these estimates form the basis for judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. To the extent that there are material differences between our estimates and actual results, our consolidated financial statements will be affected.

Our critical accounting policies and estimates have not changed materially since October 31, 2019, except for items listed below. For a discussion of our critical accounting policies and estimates, see Item 7 of Part II of the 2019 Annual Report.

#### *Leases*

For our lease accounting policies due to ASC 842, see Notes 2 and 15 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

### **Effects of Recent Accounting Pronouncements**

See Note 2 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report for information relating to our discussion of the effects of recent accounting pronouncements.

### **Item 3. Quantitative and Qualitative Disclosures About Market Risk**

Our exposure to market risk has not changed materially since October 31, 2019. For a discussion of quantitative and qualitative disclosures about market risk, see Item 7A of Part II of the 2019 Annual Report.

### **Item 4. Controls and Procedures**

#### **Disclosure Controls and Procedures**

As of the end of the period covered by this report, we carried out an evaluation under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended). Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

#### **Changes in Internal Control over Financial Reporting**

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended) during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## **PART II — OTHER INFORMATION**

### **Item 1. Legal Proceedings**

The information set forth under the heading “Litigation” in Note 21, Commitments and Contingencies, to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report, is incorporated herein by reference.

### **Item 1A. Risk Factors**

*There has been no material change to our Risk Factors from those presented in our 2019 Annual Report, other than as set forth below. Investing in our securities involves a high degree of risk. Before investing in our securities, you should consider carefully the information contained in this report and in our 2019 Annual Report, including the risk factors identified in Item 1A of Part I thereof (Risk Factors). This report contains forward-looking statements that involve risks and uncertainties. See “Cautionary Note Regarding Forward-Looking Statements” in “Management’s Discussion and Analysis of Financial Conditions and Results of Operations” above. Our actual results could differ materially from those contained in the forward-looking statements. Any of the risks discussed in our 2019 Annual Report, in this report, in other reports we file with the SEC, and other risks we have not anticipated or discussed, could have a material adverse impact on our business, financial condition or results of operations.*

#### **The effects of a pandemic or widespread health epidemic such as the coronavirus outbreak could have a material adverse effect on our business and results of operations.**

On January 30, 2020, the WHO declared a global emergency due to the outbreak of the 2019 novel coronavirus COVID-19 first identified in Wuhan, China, and on February 28, 2020, the WHO raised its assessment of the threat from high to very high at a global level. As a result of the coronavirus outbreak, we have temporarily closed Ciena offices in several impacted locations, implemented certain travel restrictions and withdrawn from certain industry events. We have also experienced some disruption and delays in our supply chain, principally related to China, and logistics challenges, including certain limitations on our ability to access certain sites that have impacted our customer fulfillment operations. We expect these existing conditions to have an adverse impact on our revenue and results of operations for the second quarter of fiscal 2020.

The situation relating to the spread of the coronavirus and its potential effects on our business in our second quarter of fiscal 2020 and thereafter remains dynamic, and the broader implications for our business and results of operations remain uncertain. These implications could include further disruptions or restrictions on our ability to source, manufacture or distribute our products, including temporary closures of our key manufacturing facilities in Mexico and Thailand, or the facilities of our suppliers and their contract manufacturers. In particular, our supply chain includes certain direct and indirect suppliers based in China who supply components and finished goods to us, our manufacturers or our third-party suppliers. To date, the Chinese government has: imposed certain restrictions on business operations and the movement of people and goods, including the temporary closure of some factories and businesses, to limit the spread of the coronavirus in and around Wuhan; may extend

these restrictions in duration or to other affected regions; and imposed lesser restrictions in other areas including Beijing. Other countries have also imposed and may impose restrictions on business operations and movement to limit the spread of the coronavirus. Delays in production or delivery of components or raw materials made in China or elsewhere in our global supply chain due to restrictions imposed to limit the spread of the coronavirus could delay or inhibit our ability to obtain supply of components and finished goods. If the coronavirus becomes more prevalent in the locations where we, our customers or suppliers conduct business, or we experience more pronounced disruptions in our operations, we may experience constrained supply or curtailed demand that may materially adversely impact our business and results of operations in future periods. A significant outbreak of epidemic, pandemic, or contagious diseases in the human population could result in a widespread health crisis that could adversely affect the broader economies, financial markets and overall demand environment for our products. These adverse supply and demand implications could have a material adverse effect on our business, financial condition, results of operations, or cash flows.

**Our revenue, gross margin and operating results can fluctuate significantly and unpredictably from quarter to quarter.**

Our revenue, gross margin and results of operations can fluctuate significantly and unpredictably from quarter to quarter. Our budgeted expense levels are based on our visibility into customer spending plans and our projections of future revenue and gross margin. Visibility into customer spending levels can be uncertain, spending patterns are subject to change, and reductions in our expense levels can take significant time to implement. A significant portion of our quarterly revenue is generated from customer orders received during that same quarter (which we refer to as “book to revenue”). Accordingly, our revenue for a particular quarter is difficult to predict, and a shortfall in expected orders in any given quarter can materially adversely affect our revenue and results of operations for that quarter or future quarterly periods. Additional factors that contribute to fluctuations in our revenue, gross margin and operating results include:

- changes in spending levels or network deployment plans by customers, particularly with respect to our service provider and Web-scale provider customers;
- order timing and volume, including book to revenue orders;
- shipment and delivery timing;
- backlog levels;
- the level of competition and pricing pressure in our industry;
- the pace and impact of price erosion that we regularly encounter in our markets;
- the impact of commercial concessions or unfavorable commercial terms required to maintain incumbency or secure new opportunities with key customers;
- the mix of revenue by product segment, geography and customer in any particular quarter;
- our level of success in achieving targeted cost reductions and improved efficiencies in our supply chain;
- our incurrence of start-up costs, including lower margin phases of projects required to support initial deployments, gain new customers or enter new markets;
- our level of success in accessing new markets and obtaining new customers;
- technology-based price compression and our introduction of new platforms with improved price for performance;
- changing market, economic and political conditions, including the impact of tariffs and other trade restrictions;
- factors beyond our control such as natural disasters, acts of war or terrorism, and epidemics;
- the financial stability of our customers and suppliers;
- consolidation activity among our customers, suppliers and competitors;
- the timing of revenue recognition on sales, particularly relating to large orders;
- installation service availability and readiness of customer sites;
- availability of components and manufacturing capacity;
- adverse impact of foreign exchange; and
- seasonal effects in our business.

As a result of these factors and other conditions affecting our business and operating results, we believe that quarterly comparisons of our operating results are not necessarily a good indication of possible future performance. Quarterly fluctuations from the above factors may cause our revenue, gross margin and results of operations to underperform in relation to our guidance, long-term financial targets or the expectations of financial analysts or investors, which may cause volatility or decreases in our stock price.

**We rely on third-party contract manufacturers, and our business and results of operations may be adversely affected by risks associated with their businesses, financial condition and the geographies in which they operate.**

We rely on third-party contract manufacturers with facilities in Canada, Mexico, Thailand and the United States to perform a substantial portion of our supply chain activities, including component sourcing, manufacturing, product testing and quality,

and fulfillment and logistics relating to the distribution and support of our products. There are a number of risks associated with our dependence on contract manufacturers, including:

- reduced control over delivery schedules and planning;
- reliance on the quality assurance procedures of third parties;
- potential uncertainty regarding manufacturing yields and costs;
- availability of manufacturing capability and capacity, particularly during periods of high demand;
- risks and uncertainties associated with the locations or countries where our products are manufactured, including potential manufacturing disruptions caused by social, geopolitical, environmental or health factors, including potential pandemics or widespread health epidemics;
- changes in U.S. law or policy governing tax, trade, manufacturing, development and investment in the countries where we currently manufacture our products, including the World Trade Organization Information Technology Agreement or other free trade agreements;
- inventory liability for excess and obsolete supply;
- limited warranties provided to us; and
- potential misappropriation of our intellectual property.

These and other risks could impair our ability to fulfill orders, harm our sales and impact our reputation with customers. If our contract manufacturers are unable or unwilling to continue manufacturing our products or components of our products, or if we experience a disruption of manufacturing or our contract manufacturers discontinue operations, we may be required to identify and qualify alternative manufacturers, which could cause us to be delayed in or unable to meet our supply requirements to our customers and result in the breach of our customer agreements. The process of qualifying a new contract manufacturer and commencing volume production is expensive and time-consuming, and if we are required to change or qualify a new contract manufacturer, we would likely experience significant business disruption and could lose revenue and damage our existing customer relationships.

**The international scale of our sales and operations exposes us to additional risk and expense that could adversely affect our results of operations.**

We market, sell and service our products globally, maintain personnel in numerous countries, and rely on a global supply chain for sourcing important components and manufacturing our products. Our international sales and operations are subject to inherent risks, including:

- adverse social, political and economic conditions in countries outside the United States;
- effects of adverse changes in currency exchange rates;
- greater difficulty in collecting accounts receivable and longer collection periods;
- difficulty and cost of staffing and managing foreign operations;
- higher incidence of corruption or unethical business practices;
- less protection for intellectual property rights in some countries;
- tax and customs changes that adversely impact our global sourcing strategy, manufacturing practices, transfer-pricing, or competitiveness of our products for global sales;
- compliance with certain testing, homologation or customization of products to conform to local standards;
- significant changes to free trade agreements, trade protection measures, tariffs, export compliance, domestic preference procurement requirements, qualification to transact business and additional regulatory requirements; and
- natural disasters, acts of war or terrorism, and epidemics.

Our international operations are subject to complex foreign and U.S. laws and regulations, including anti-bribery and corruption laws, antitrust or competition laws, data privacy laws, such as the EU General Data Protection Regulation, and environmental regulations, among others. In particular, recent years have seen a substantial increase in anti-bribery law enforcement activity by U.S. regulators, and we currently operate and seek to operate in many parts of the world that are recognized as having greater potential for corruption. Violations of any of these laws and regulations could result in fines and penalties, criminal sanctions against us or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in certain geographies, and significant harm to our business reputation. Our policies and procedures to ensure compliance with these laws and regulations and to mitigate these risks may not protect us from all acts committed by our employees or third-party vendors, including contractors, agents and services partners. Additionally, the costs of complying with these laws (including the costs of investigations, auditing and monitoring) could adversely affect our current or future business.

The success of our international sales and operations will depend, in large part, on our ability to anticipate and manage these risks effectively. Our failure to manage any of these risks could harm our international operations, reduce our

international sales, and could give rise to liabilities, costs or other business difficulties that could adversely affect our operations and financial results.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

**Issuer Purchases of Equity Securities**

The following table provides a summary of repurchases of our common stock during the first quarter of fiscal 2020:

<b>Period</b>	<b>Total Number of Shares Purchased<sup>(1)</sup></b>	<b>Average Price Paid Per Share</b>	<b>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs<sup>(1)</sup></b>	<b>Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in Thousands)</b>
November 1, 2019 to November 30, 2019	456,729	\$ 37.46	456,729	\$ 332,815
December 1, 2019 to December 31, 2019	423,800	\$ 38.55	423,800	\$ 316,478
January 1, 2020 to January 31, 2020	407,582	\$ 42.34	407,582	\$ 299,220
	<u>1,288,111</u>	\$ 39.36	<u>1,288,111</u>	

(1) On December 13, 2018, we announced that our Board of Directors authorized a program to repurchase up to \$500 million of our common stock. The amount and timing of repurchases are subject to a variety of factors including liquidity, cash flow, stock price and general business and market conditions. The program may be modified, suspended, or discontinued at any time.

**Item 3. Defaults Upon Senior Securities**

Not applicable.

**Item 4. Mine Safety Disclosures**

Not applicable.

**Item 5. Other Information**

Not applicable.

**Item 6. Exhibits**

10.1	<a href="#"><u>Change in Control Severance Agreement dated November 30, 2019, between Ciena Corporation and Gary B. Smith (Incorporated by reference from Exhibit 10.23 of Ciena's Annual Report on Form 10-K, filed with the SEC on December 20, 2019).</u>*</a>
10.2	<a href="#"><u>Change in Control Severance Agreement dated November 30, 2019, between Ciena Corporation and Executive Officers (Incorporated by reference from Exhibit 10.24 of Ciena's Annual Report on Form 10-K, filed with the SEC on December 20, 2019).</u>*</a>
10.3	<a href="#"><u>Refinancing Amendment to Credit Agreement, dated January 23, 2020, by and among Ciena Corporation, Ciena Communications, Inc., Ciena Government Solutions, Inc., Ciena Communications International, LLC, Blue Planet Software, Inc., Bank of America, N.A., as administrative agent, and the lenders party thereto (Incorporated by reference from Exhibit 10.1 of Ciena's Current Report on Form 8-K, filed with the SEC on January 28, 2020).</u>++</a>
31.1	<a href="#"><u>Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934 as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u></a>
31.2	<a href="#"><u>Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934 as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u></a>
32.1	<a href="#"><u>Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u></a>
32.2	<a href="#"><u>Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u></a>
101.INS	Inline XBRL Instance Document - The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

\* Represents management contract or compensatory plan or arrangement.

++ Representations and warranties included in these agreements, as amended, were made by the parties to one another in connection with a negotiated transaction. These representations and warranties were made as of specific dates, only for purposes of these agreements and for the benefit of the parties thereto. These representations and warranties were subject to important exceptions and limitations agreed upon by the parties, including being qualified by confidential disclosures, made for the purposes of allocating contractual risk between the parties rather than establishing these matters as facts. These agreements are filed with this report only to provide investors with information regarding its terms and conditions, and not to provide any other factual information regarding Ciena or any other party thereto. Accordingly, investors should not rely on the representations and warranties contained in these agreements or any description thereof as characterizations of the actual state of facts or condition of any party, its subsidiaries or affiliates. The information in these agreements should be considered together with Ciena's public reports filed with the SEC

## 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: March 11, 2020

By: /s/ Gary B. Smith

Gary B. Smith  
President, Chief Executive Officer  
and Director  
(Duly Authorized Officer)

Date: March 11, 2020

By: /s/ James E. Moylan, Jr.

James E. Moylan, Jr.  
Senior Vice President, Finance and  
Chief Financial Officer  
(Principal Financial Officer)

**CIENA CORPORATION**  
**CERTIFICATION OF CHIEF EXECUTIVE OFFICER**

I, Gary B. Smith, certify that:

1. I have reviewed this quarterly report of Ciena Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 11, 2020

/s/ Gary B. Smith

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Gary B. Smith

President and Chief Executive Officer



**CIENA CORPORATION**  
**CERTIFICATION OF CHIEF FINANCIAL OFFICER**

I, James E. Moylan, Jr., certify that:

1. I have reviewed this quarterly report of Ciena Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 11, 2020

/s/ James E. Moylan, Jr.

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James E. Moylan, Jr.

Senior Vice President and Chief Financial Officer

**CIENA CORPORATION**

**Written Statement of Chief Executive Officer**

**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

The undersigned, the Chief Executive Officer of Ciena Corporation (the "Company"), hereby certifies that, to his knowledge, on the date hereof:

- (a) the Report on Form 10-Q of the Company for the quarter ended January 31, 2020 filed on the date hereof with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (b) information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Gary B. Smith

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Gary B. Smith

President and Chief Executive Officer

March 11, 2020

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Ciena Corporation and will be retained by Ciena Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

**CIENA CORPORATION**

**Written Statement of Chief Financial Officer**

**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

The undersigned, the Chief Financial Officer of Ciena Corporation (the "Company"), hereby certifies that, to his knowledge, on the date hereof:

- (a) the Report on Form 10-Q of the Company for the quarter ended January 31, 2020 filed on the date hereof with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (b) information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James E. Moylan, Jr.

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James E. Moylan, Jr.

Senior Vice President and Chief Financial Officer

March 11, 2020

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Ciena Corporation and will be retained by Ciena Corporation and furnished to the Securities and Exchange Commission or its staff upon request.