

**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 July 29, 2023

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
(I.R.S. 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(s)	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	CIEN	New York Stock Exchange

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 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 defined 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 as of September 1, 2023
Common Stock, par value \$0.01 per share	147,842,355

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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		Nine Months Ended	
	July 29, 2023	July 30, 2022	July 29, 2023	July 30, 2022
Revenue:				
Products	\$ 865,197	\$ 684,284	\$ 2,678,242	\$ 2,109,239
Services	202,689	183,697	578,820	552,412
Total revenue	1,067,886	867,981	3,257,062	2,661,651
Cost of goods sold:				
Products	516,900	434,756	1,559,120	1,259,378
Services	102,045	92,446	305,372	275,526
Total cost of goods sold	618,945	527,202	1,864,492	1,534,904
Gross profit	448,941	340,779	1,392,570	1,126,747
Operating expenses:				
Research and development	189,392	150,025	561,115	457,758
Selling and marketing	118,266	105,880	367,156	344,700
General and administrative	49,349	41,121	151,184	131,191
Significant asset impairments and restructuring costs	4,174	7,692	16,625	20,203
Amortization of intangible assets	9,487	8,919	26,773	26,757
Acquisition and integration costs	59	35	3,474	598
Total operating expenses	370,727	313,672	1,126,327	981,207
Income from operations	78,214	27,107	266,243	145,540
Interest and other income, net	10,187	366	50,711	4,860
Interest expense	(24,060)	(12,642)	(63,819)	(33,275)
Income before income taxes	64,341	14,831	253,135	117,125
Provision for income taxes	34,608	4,319	89,507	21,868
Net income	\$ 29,733	\$ 10,512	\$ 163,628	\$ 95,257
Basic net income per common share	\$ 0.20	\$ 0.07	\$ 1.09	\$ 0.63
Diluted net income per potential common share	\$ 0.20	\$ 0.07	\$ 1.09	\$ 0.62
Weighted average basic common shares outstanding	149,690	149,862	149,472	152,083
Weighted average dilutive potential common shares outstanding	149,977	150,463	149,867	153,209

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

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

	Quarter Ended		Nine Months Ended	
	July 29, 2023	July 30, 2022	July 29, 2023	July 30, 2022
Net income	\$ 29,733	\$ 10,512	\$ 163,628	\$ 95,257
Change in unrealized gain (loss) on available-for-sale securities, net of tax	378	(79)	2,075	(2,184)
Change in unrealized gain (loss) on foreign currency forward contracts, net of tax	5,124	(91)	9,314	(6,776)
Change in unrealized gain (loss) on interest rate swaps, net of tax	12,324	(1,613)	5,497	9,425
Change in cumulative translation adjustments	10,151	(4,037)	17,981	(22,783)
Other comprehensive gain (loss)	27,977	(5,820)	34,867	(22,318)
Total comprehensive income	<u>\$ 57,710</u>	<u>\$ 4,692</u>	<u>\$ 198,495</u>	<u>\$ 72,939</u>

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)

	July 29, 2023	October 29, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 1,117,922	\$ 994,352
Short-term investments	141,843	153,989
Accounts receivable, net of allowance for credit losses of \$11.2 million and \$11.0 million as of July 29, 2023 and October 29, 2022, respectively.	997,373	920,772
Inventories, net	1,192,522	946,730
Prepaid expenses and other	361,692	370,053
Total current assets	3,811,352	3,385,896
Long-term investments	21,098	35,385
Equipment, building, furniture and fixtures, net	287,455	267,779
Operating right-of-use assets	40,482	45,108
Goodwill	446,596	328,322
Other intangible assets, net	219,085	69,517
Deferred tax asset, net	792,299	824,008
Other long-term assets	104,847	113,617
Total assets	<u>\$ 5,723,214</u>	<u>\$ 5,069,632</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 393,144	\$ 516,047
Accrued liabilities and other short-term obligations	355,622	360,782
Deferred revenue	188,104	137,899
Operating lease liabilities	16,941	18,925
Current portion of long-term debt	11,930	6,930
Total current liabilities	965,741	1,040,583
Long-term deferred revenue	71,873	62,336
Other long-term obligations	156,893	150,335
Long-term operating lease liabilities	37,800	42,392
Long-term debt, net	1,543,900	1,061,125
Total liabilities	<u>2,776,207</u>	<u>2,356,771</u>
Commitments and contingencies (Note 23)		
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; 148,772,513 and 148,412,943 shares issued and outstanding	1,488	1,484
Additional paid-in capital	6,425,899	6,390,252
Accumulated other comprehensive loss	(11,778)	(46,645)
Accumulated deficit	(3,468,602)	(3,632,230)
Total stockholders' equity	<u>2,947,007</u>	<u>2,712,861</u>
Total liabilities and stockholders' equity	<u>\$ 5,723,214</u>	<u>\$ 5,069,632</u>

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

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

	Nine Months Ended	
	July 29, 2023	July 30, 2022
Cash flows used in operating activities:		
Net income	\$ 163,628	\$ 95,257
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	69,213	68,280
Share-based compensation costs	95,405	77,827
Amortization of intangible assets	36,274	36,521
Deferred taxes	(64,005)	(19,824)
Provision for inventory excess and obsolescence	18,767	12,038
Provision for warranty	18,860	12,416
Gain on cost method equity investments, net	(26,368)	(4,120)
Other	13,694	3,678
Changes in assets and liabilities:		
Accounts receivable	(80,399)	74,478
Inventories	(262,345)	(464,664)
Prepaid expenses and other	72,062	(39,805)
Operating lease right-of-use assets	11,003	12,504
Accounts payable, accruals and other obligations	(133,880)	(37,587)
Deferred revenue	57,547	34,949
Short- and long-term operating lease liabilities	(16,596)	(15,197)
Net cash used in operating activities	(27,140)	(153,249)
Cash flows used in investing activities:		
Payments for equipment, furniture, fixtures and intellectual property	(83,422)	(66,908)
Purchases of investments	(119,240)	(614,333)
Proceeds from sales and maturities of investments	150,646	460,000
Settlement of foreign currency forward contracts, net	(3,272)	4,450
Purchase of cost method equity investments	—	(8,000)
Acquisition of business, net of cash acquired	(230,048)	(62,043)
Net cash used in investing activities	(285,336)	(286,834)
Cash flows provided by (used in) financing activities:		
Proceeds from issuance of senior notes	—	400,000
Proceeds from issuance of term loan, net	497,500	—
Payment of long-term debt	(6,448)	(3,465)
Payment of debt issuance costs	(5,422)	(5,159)
Payment of finance lease obligations	(2,830)	(2,555)
Shares repurchased for tax withholdings on vesting of stock unit awards	(29,794)	(41,280)
Repurchases of common stock - repurchase program, net	(57,736)	(487,792)
Proceeds from issuance of common stock	31,276	30,224
Net cash provided by (used in) financing activities	426,546	(110,027)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	9,501	(12,780)
Net increase (decrease) in cash, cash equivalents and restricted cash	123,571	(562,890)
Cash, cash equivalents and restricted cash at beginning of period	994,378	1,422,604
Cash, cash equivalents and restricted cash at end of period	\$ 1,117,949	\$ 859,714
Supplemental disclosure of cash flow information		
Cash paid during the period for interest	\$ 56,709	\$ 24,823
Cash paid during the period for income taxes, net	\$ 68,058	\$ 28,593
Operating lease payments	\$ 18,038	\$ 16,342
Non-cash investing and financing activities		
Purchase of equipment in accounts payable	\$ 4,579	\$ 9,320
Repurchase of common stock in accrued liabilities from repurchase program	\$ 3,500	\$ 5,000
Operating right-of-use assets subject to lease liability	\$ 9,771	\$ 8,226
Gain on cost method equity investments, net	\$ 26,368	\$ 4,120

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 29, 2022	148,412,943	\$ 1,484	\$ 6,390,252	\$ (46,645)	\$ (3,632,230)	\$ 2,712,861
Net income	—	—	—	—	163,628	163,628
Other comprehensive income	—	—	—	34,867	—	34,867
Repurchase of common stock - repurchase program, net	(1,441,435)	(14)	(61,222)	—	—	(61,236)
Issuance of shares from employee equity plans	2,429,069	24	31,252	—	—	31,276
Share-based compensation expense	—	—	95,405	—	—	95,405
Shares repurchased for tax withholdings on vesting of stock unit awards	(628,064)	(6)	(29,788)	—	—	(29,794)
Balance at July 29, 2023	<u>148,772,513</u>	<u>\$ 1,488</u>	<u>\$ 6,425,899</u>	<u>\$ (11,778)</u>	<u>\$ (3,468,602)</u>	<u>\$ 2,947,007</u>
	Common Stock Shares	Par Value	Additional Paid-in-Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
Balance at October 30, 2021	154,858,981	\$ 1,549	\$ 6,803,162	\$ 439	\$ (3,785,132)	\$ 3,020,018
Net income	—	—	—	—	95,257	95,257
Other comprehensive loss	—	—	—	(22,318)	—	(22,318)
Repurchase of common stock - repurchase program, net	(8,279,710)	(83)	(491,909)	—	—	(491,992)
Issuance of shares from employee equity plans	2,359,326	23	30,201	—	—	30,224
Share-based compensation expense	—	—	77,827	—	—	77,827
Shares repurchased for tax withholdings on vesting of stock unit awards	(645,240)	(6)	(41,274)	—	—	(41,280)
Balance at July 30, 2022	<u>148,293,357</u>	<u>\$ 1,483</u>	<u>\$ 6,378,007</u>	<u>\$ (21,879)</u>	<u>\$ (3,689,875)</u>	<u>\$ 2,667,736</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”).

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America (“GAAP”) requires Ciena to make judgments, assumptions, and estimates that affect the amounts reported in the Condensed Consolidated Financial Statements and accompanying notes. 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 materially from these estimates under different assumptions or conditions. To the extent that there are material differences between Ciena’s estimates and actual results, Ciena’s consolidated financial statements will be affected.

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 GAAP have been condensed or omitted pursuant to SEC rules and regulations. The Condensed Consolidated Balance Sheet as of October 29, 2022 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 fiscal 2022 (the “2022 Annual Report”).

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 2023 and 2022 are 52-week fiscal years.

(2) SIGNIFICANT ACCOUNTING POLICIES

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 2022 Annual Report.

Newly Issued Accounting Standards - Not Yet Effective

In October 2021, the Financial Accounting Standards Board (the “FASB”) issued Accounting Standards Update (“ASU”) No. 2021-08 (“ASU 2021-08”), *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers* to improve the accounting for acquired revenue contracts with customers in a business combination to address recognition of an acquired contract liability and payment terms and their effect on subsequent revenue recognized by the acquirer. ASU 2021-08 is effective for annual periods beginning after December 15, 2022 on a prospective basis. Early adoption is permitted. Ciena is currently evaluating the impact of this ASU on its condensed consolidated financial statements and related disclosures.

(3) REVENUE

Disaggregation of Revenue

Ciena’s disaggregated revenue as presented below depicts the nature, amount, and timing of revenue and cash flows for similar groupings of Ciena’s various offerings. The sales cycle, contractual obligations, customer requirements, and go-to-market strategies may differ across Ciena’s product lines, resulting in different economic risk profiles for each line.

The tables below set forth Ciena’s disaggregated revenue for the periods indicated (in thousands):

Quarter Ended July 29, 2023					
	Networking Platforms	Platform Software and Services	Blue Planet Automation Software and Services	Global Services	Total
Product lines:					
Converged Packet Optical	\$ 718,997	\$ —	\$ —	\$ —	\$ 718,997
Routing and Switching	127,563	—	—	—	127,563
Platform Software and Services	—	78,880	—	—	78,880
Blue Planet Automation Software and Services	—	—	13,167	—	13,167
Maintenance Support and Training	—	—	—	72,887	72,887
Installation and Deployment	—	—	—	46,840	46,840
Consulting and Network Design	—	—	—	9,552	9,552
Total revenue by product line	<u>\$ 846,560</u>	<u>\$ 78,880</u>	<u>\$ 13,167</u>	<u>\$ 129,279</u>	<u>\$ 1,067,886</u>
Timing of revenue recognition:					
Products and services at a point in time	\$ 846,560	\$ 15,980	\$ 2,832	\$ 11,886	\$ 877,258
Services transferred over time	—	62,900	10,335	117,393	190,628
Total revenue by timing of revenue recognition	<u>\$ 846,560</u>	<u>\$ 78,880</u>	<u>\$ 13,167</u>	<u>\$ 129,279</u>	<u>\$ 1,067,886</u>

Quarter Ended July 30, 2022					
	Networking Platforms	Platform Software and Services	Blue Planet Automation Software and Services	Global Services	Total
Product lines:					
Converged Packet Optical	\$ 563,837	\$ —	\$ —	\$ —	\$ 563,837
Routing and Switching	100,741	—	—	—	100,741
Platform Software and Services	—	63,483	—	—	63,483
Blue Planet Automation Software and Services	—	—	17,342	—	17,342
Maintenance Support and Training	—	—	—	72,760	72,760
Installation and Deployment	—	—	—	38,704	38,704
Consulting and Network Design	—	—	—	11,114	11,114
Total revenue by product line	<u>\$ 664,578</u>	<u>\$ 63,483</u>	<u>\$ 17,342</u>	<u>\$ 122,578</u>	<u>\$ 867,981</u>
Timing of revenue recognition:					
Products and services at a point in time	\$ 664,578	\$ 15,230	\$ 4,632	\$ 9,408	\$ 693,848
Services transferred over time	—	48,253	12,710	113,170	174,133
Total revenue by timing of revenue recognition	<u>\$ 664,578</u>	<u>\$ 63,483</u>	<u>\$ 17,342</u>	<u>\$ 122,578</u>	<u>\$ 867,981</u>

Nine Months Ended July 29, 2023					
	Networking Platforms	Platform Software and Services	Blue Planet Automation Software and Services	Global Services	Total
Product lines:					
Converged Packet Optical	\$ 2,239,180	\$ —	\$ —	\$ —	\$ 2,239,180
Routing and Switching	377,378	—	—	—	377,378
Platform Software and Services	—	221,768	—	—	221,768
Blue Planet Automation Software and Services	—	—	49,139	—	49,139
Maintenance Support and Training	—	—	—	213,938	213,938
Installation and Deployment	—	—	—	120,901	120,901
Consulting and Network Design	—	—	—	34,758	34,758
Total revenue by product line	<u>\$ 2,616,558</u>	<u>\$ 221,768</u>	<u>\$ 49,139</u>	<u>\$ 369,597</u>	<u>\$ 3,257,062</u>
Timing of revenue recognition:					
Products and services at a point in time	\$ 2,616,558	\$ 48,290	\$ 14,143	\$ 36,553	\$ 2,715,544
Services transferred over time	—	173,478	34,996	333,044	541,518
Total revenue by timing of revenue recognition	<u>\$ 2,616,558</u>	<u>\$ 221,768</u>	<u>\$ 49,139</u>	<u>\$ 369,597</u>	<u>\$ 3,257,062</u>
Nine months ended July 30, 2022					
	Networking Platforms	Platform Software and Services	Blue Planet Automation Software and Services	Global Services	Total
Product lines:					
Converged Packet Optical	\$ 1,730,066	\$ —	\$ —	\$ —	\$ 1,730,066
Routing and Switching	295,638	—	—	—	295,638
Platform Software and Services	—	205,557	—	—	205,557
Blue Planet Automation Software and Services	—	—	55,334	—	55,334
Maintenance Support and Training	—	—	—	219,270	219,270
Installation and Deployment	—	—	—	120,504	120,504
Consulting and Network Design	—	—	—	35,282	35,282
Total revenue by product line	<u>\$ 2,025,704</u>	<u>\$ 205,557</u>	<u>\$ 55,334</u>	<u>\$ 375,056</u>	<u>\$ 2,661,651</u>
Timing of revenue recognition:					
Products and services at a point in time	\$ 2,025,704	\$ 66,655	\$ 17,442	\$ 31,368	\$ 2,141,169
Services transferred over time	—	138,902	37,892	343,688	520,482
Total revenue by timing of revenue recognition	<u>\$ 2,025,704</u>	<u>\$ 205,557</u>	<u>\$ 55,334</u>	<u>\$ 375,056</u>	<u>\$ 2,661,651</u>

Ciena reports its sales geographically using the following markets: (i) the United States, Canada, the Caribbean and Latin America (“Americas”); (ii) Europe, Middle East and Africa (“EMEA”); and (iii) Asia Pacific, Japan and India (“APAC”). Within each geographic area, Ciena maintains 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. The following table reflects Ciena’s geographic distribution of revenue based principally on the relevant location for Ciena’s delivery of products and performance of services.

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

	Quarter Ended		Nine Months Ended	
	July 29, 2023	July 30, 2022	July 29, 2023	July 30, 2022
Geographic distribution:				
Americas	\$ 749,479	\$ 617,366	\$ 2,308,934	\$ 1,913,350
EMEA	152,834	124,185	479,053	420,075
APAC	165,573	126,430	469,075	328,226
Total revenue by geographic distribution	<u>\$ 1,067,886</u>	<u>\$ 867,981</u>	<u>\$ 3,257,062</u>	<u>\$ 2,661,651</u>

Ciena's revenue includes \$685.8 million and \$574.3 million of United States revenue for the third quarter of fiscal 2023 and 2022, respectively. For the nine months ended July 29, 2023 and July 30, 2022, United States revenue was \$2.1 billion and \$1.8 billion, respectively. No other country accounted for 10% or more of total revenue for the periods indicated in the above table.

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

	Quarter Ended		Nine Months Ended	
	July 29, 2023	July 30, 2022	July 29, 2023	July 30, 2022
Web-scale provider	\$ 124,897	n/a	\$ 369,678	n/a
AT&T	n/a	100,293	\$ 357,382	314,358
Verizon	n/a	108,495	n/a	273,158
Total	<u>\$ 124,897</u>	<u>\$ 208,788</u>	<u>\$ 727,060</u>	<u>\$ 587,516</u>

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

The Web-scale provider noted in the above table purchased products from each of Ciena's operating segments excluding Blue Planet® Automation Software and Services for each of the periods presented. The other customers identified above purchased products and services from each of Ciena's operating segments for each of the periods presented.

- *Networking Platforms* revenue reflects sales of Ciena's Converged Packet Optical and Routing and Switching product lines.
 - Converged Packet Optical - includes the 6500 Packet-Optical Platform, the Waveserver® modular interconnect system, the 6500 Reconfigurable Line System (RLS), the 5400 family of Packet-Optical Platforms, and the Coherent ELS open line system (OLS). This product line includes the WL5n 100G-400G coherent pluggable transceivers. This product line also includes the Z-Series Packet-Optical Platform and Optical Microsystems products.
 - Routing and Switching - includes the 3000 family of service delivery platforms and the 5000 family of service aggregation. This product line also includes the 6500 Packet Transport System (PTS), which combines packet switching, control plane operation, and integrated optics, the 8100 Coherent IP networking platforms, the 8700 Packetwave Platform, and virtualization software. This product line also includes SD-Edge software and passive optical network ("PON") routing and switching portfolio products from our recent acquisitions of Benu Networks, Inc. ("Benu") and Tibit Communications, Inc. ("Tibit") respectively, during the first quarter of fiscal 2023. This product line also includes Ciena's WaveRouter® product, which was introduced during the second quarter of fiscal 2023, for which there have been no sales to date.

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* offerings provide domain control management, analytics, data and planning tools, and applications to assist customers in managing their networks, including by creating more efficient operations and more

proactive visibility into their networks. Ciena's platform software includes its Manage, Control and Plan ("MCP") domain controller solution, its suite of MCP applications, and its OneControl Unified Management System, as well as planning tools and a number of legacy software solutions that support Ciena's installed base of network solutions. 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, cloud native, and standards-based software portfolio, together with related services, that enables customers to realize digital transformation through the automation of the services lifecycle. Ciena's Blue Planet Automation Platform includes multi-domain service orchestration (MDSO), inventory management (BPI), route optimization and analysis (ROA), network function virtualization orchestration (NFVO), and unified assurance and analytics (UAA). 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 either perpetual or term-based software licenses, and these sales are considered distinct performance obligations in which revenue is generally recognized upfront at a point in time upon transfer of control. Revenue from software subscription and support is 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 is recognized over time with Ciena applying the input method to determine the amount of revenue to be recognized in a given period.

- *Global Services* revenue 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 for which 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 is also 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 as of the dates indicated (in thousands):

	Balance at July 29, 2023		Balance at October 29, 2022	
Accounts receivable, net	\$	997,373	\$	920,772
Contract assets for unbilled accounts receivable, net	\$	142,305	\$	156,039
Deferred revenue	\$	259,977	\$	200,235

Ciena's contract assets represent unbilled accounts receivable, net 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 in the Condensed Consolidated Balance Sheets. See Note 11 below.

Contract liabilities consist of deferred revenue and represent advanced payments against non-cancelable customer orders received prior to revenue recognition. Ciena recognized approximately \$119.8 million and \$98.9 million of revenue during the first nine months of fiscal 2023 and 2022, respectively, that was included in the deferred revenue balance as of October 29, 2022 and October 30, 2021, respectively. Revenue recognized due to changes in transaction price from performance obligations satisfied or partially satisfied in previous periods was immaterial during the nine months ended July 29, 2023 and July 30, 2022.

Capitalized Contract Acquisition Costs

Capitalized contract acquisition costs consist of deferred sales commissions, and were \$31.4 million and \$39.7 million as of July 29, 2023 and October 29, 2022, respectively. Capitalized contract acquisition costs were included in (i) prepaid expenses and other and (ii) other long-term assets. The amortization expense associated with these costs was \$26.0 million and \$20.5 million during the first nine months of fiscal 2023 and 2022, respectively, and was included in selling and marketing expense on the Condensed Consolidated Statements of Operations.

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 July 29, 2023, the aggregate amount of RPO was \$2.1 billion. As of July 29, 2023, Ciena expects approximately 84% of the RPO to be recognized as revenue within the next 12 months.

(4) BUSINESS COMBINATIONS

Benu and Tibit Acquisitions

On November 17, 2022, Ciena acquired Benu, a portfolio of cloud-native software solutions, including a virtual Broadband Network Gateway ((v)BNG), that complements Ciena’s existing portfolio of broadband access solutions. On December 30, 2022, Ciena acquired Tibit, a provider and developer of PON-specific hardware and operating software that can be integrated into a carrier-grade Ethernet switch and will strengthen Ciena’s portfolio of next-generation PON solutions that support residential, enterprise, and mobility use cases. These businesses were acquired for an aggregate of approximately \$291.7 million, of which \$244.7 million was paid in cash, and \$47.0 million represents the fair value of Ciena’s previously held cost method equity investment in Tibit. The acquisition of Tibit triggered the remeasurement of Ciena’s previously held investment in Tibit to fair value, which resulted in Ciena recognizing a gain on its cost method equity investment of \$26.5 million. Each of these transactions has been accounted for as the acquisition of a business.

Ciena incurred approximately \$3.4 million in acquisition-related costs associated with these acquisitions. These costs and expenses primarily include fees associated with financial, legal, and accounting advisors and employment-related costs. These costs were recorded in acquisition and integration costs on the Condensed Consolidated Statements of Operations.

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

	Amount
Cash and cash equivalents	\$ 14,634
Accounts receivable, net	443
Inventories, net	1,406
Prepaid expenses and other	810
Equipment, furniture and fixtures	1,090
Goodwill	117,997
Developed technology	75,400
In-process technology	89,100
Customer relationships and contracts	18,400
Order backlog	2,480
Deferred tax asset, net	(27,782)
Accounts payable	(420)
Accrued liabilities and other short-term obligations	(874)
Deferred revenue	(851)
Other long-term obligations	(144)
Total purchase consideration	<u>\$ 291,689</u>

Developed technology represents purchased technology that has reached technological feasibility and for which the acquired companies 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.

In-process technology represents purchased technology that had not reached technological feasibility as of the date of acquisition. Fair value was determined using future discounted cash flows related to the projected income stream of the in-process technology for a discrete projection period. Cash flows were discounted to their present value as of the closing date. Upon completion of the in-process technology, it will be amortized on a straight line basis over its estimated useful life, which will be determined on that date.

Customer relationships and contracts represent agreements with existing Tibit customers and have an estimated useful life of three years. Order backlog is amortized over the fulfillment period.

The goodwill generated from these acquisitions is primarily related to expected economic synergies. The total goodwill amount was recorded in the Networking Platforms segment. The goodwill is not deductible for income tax purposes.

Pro forma disclosures have not been included due to immateriality. The amounts of revenue and earnings for these acquisitions since the acquisition dates, which are included on the Condensed Consolidated Statements of Operations for the reporting period are immaterial.

(5) SIGNIFICANT ASSET IMPAIRMENT AND RESTRUCTURING COSTS

Restructuring Costs

Ciena has undertaken a number of restructuring activities intended to reduce expense and to 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 the Condensed Consolidated Balance Sheets, for the nine months ended July 29, 2023 (in thousands):

	Workforce reduction	Other restructuring activities	Total
Balance at October 29, 2022	\$ 1,215	\$ 4,620	\$ 5,835
Charges	4,509 ⁽¹⁾	12,116 ⁽²⁾	16,625
Cash payments	(4,920)	(16,736)	(21,656)
Balance at July 29, 2023	\$ 804	\$ —	\$ 804
Current restructuring liabilities	\$ 804	\$ —	\$ 804

⁽¹⁾ Reflects employee costs associated with workforce reductions during the nine months ended July 29, 2023 as part of a business optimization strategy to improve gross margin, constrain operating expense, and redesign certain business processes.

⁽²⁾ Primarily represents costs related to restructured real estate facilities and the redesign of certain business processes associated with Ciena's supply chain and distribution structure reorganization.

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 the Condensed Consolidated Balance Sheets for the nine months ended July 30, 2022 (in thousands):

	Workforce reduction	Other restructuring activities	Total
Balance at October 30, 2021	\$ 781	\$ —	\$ 781
Charges	2,224 ⁽¹⁾	13,992 ⁽²⁾	16,216
Cash payments	(2,423)	(13,115)	(15,538)
Balance at July 30, 2022	\$ 582	\$ 877	\$ 1,459
Current restructuring liabilities	\$ 582	\$ 877	\$ 1,459

⁽¹⁾ Reflects employee costs associated with workforce reductions during the nine months ended July 30, 2022 as part of a business optimization strategy to improve gross margin, constrain operating expense, and redesign certain business processes.

⁽²⁾ Primarily represents the redesign of certain business processes associated with Ciena's supply chain and distribution structure reorganization and costs related to restructured real estate facilities.

(6) INTEREST AND OTHER INCOME, NET

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

	Quarter Ended		Nine Months Ended	
	July 29, 2023	July 30, 2022	July 29, 2023	July 30, 2022
Interest income	\$ 12,835	\$ 2,774	\$ 30,365	\$ 4,962
Gains (losses) on non-hedge designated foreign currency forward contracts	1,679	(985)	(2,885)	(2,911)
Foreign currency exchange gains (losses)	(4,031)	(788)	(2,927)	2,711
Gain (loss) on cost method equity investments, net	(87)	—	26,368	4,120
Other	(209)	(635)	(210)	(4,022)
Interest and other income, net	<u>\$ 10,187</u>	<u>\$ 366</u>	<u>\$ 50,711</u>	<u>\$ 4,860</u>

During the first quarter of fiscal 2023, the acquisition of Tibit triggered the remeasurement of Ciena's previously held investment in Tibit to fair value, which resulted in Ciena recognizing a gain on its cost method equity investment of \$26.5 million. See Note 4 above.

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. During the first nine months of fiscal 2023, Ciena recorded \$2.9 million in foreign currency exchange rate losses as a result of monetary assets and liabilities that were transacted in a currency other than Ciena's functional currency. During the first nine months of fiscal 2022, Ciena recorded \$2.7 million in foreign currency exchange rate gains as a result of monetary assets and liabilities that were transacted in a currency other than Ciena's functional currency. 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 each of the first nine months of fiscal 2023 and 2022, Ciena recorded losses of \$2.9 million from non-hedge designated foreign currency forward contracts.

(7) INCOME TAXES

The effective tax rate for the quarter and nine months ended July 29, 2023 was higher than the effective tax rate for the quarter and nine months ended July 30, 2022, primarily due to the mandatory capitalization of research and development expenses in the third quarter and nine months ended July 29, 2023, in response to changes in U.S. tax policy.

(8) CASH EQUIVALENT, SHORT-TERM AND LONG-TERM INVESTMENTS

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

	July 29, 2023			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government obligations	\$ 94,715	\$ 1	\$ (976)	\$ 93,740
Corporate debt securities	63,401	2	(155)	63,248
Time deposits	80,854	1	(12)	80,843
	<u>\$ 238,970</u>	<u>\$ 4</u>	<u>\$ (1,143)</u>	<u>\$ 237,831</u>
Included in cash equivalents	\$ 74,890	\$ —	\$ —	\$ 74,890
Included in short-term investments	142,743	4	(904)	141,843
Included in long-term investments	21,337	—	(239)	21,098
	<u>\$ 238,970</u>	<u>\$ 4</u>	<u>\$ (1,143)</u>	<u>\$ 237,831</u>

	October 29, 2022			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government obligations	\$ 137,963	\$ —	\$ (3,379)	\$ 134,584
Corporate debt securities	54,899	1	(405)	54,495
Time deposits	55,889	—	(64)	55,825
	<u>\$ 248,751</u>	<u>\$ 1</u>	<u>\$ (3,848)</u>	<u>\$ 244,904</u>
Included in cash equivalents	\$ 55,530	\$ —	\$ —	\$ 55,530
Included in short-term investments	156,430	1	(2,442)	153,989
Included in long-term investments	36,791	—	(1,406)	35,385
	<u>\$ 248,751</u>	<u>\$ 1</u>	<u>\$ (3,848)</u>	<u>\$ 244,904</u>

The following table summarizes the final legal maturities of debt investments as of July 29, 2023 (in thousands):

	Amortized Cost	Estimated Fair Value
Less than one year	\$ 217,633	\$ 216,733
Due in 1-2 years	21,337	21,098
	<u>\$ 238,970</u>	<u>\$ 237,831</u>

(9) FAIR VALUE MEASUREMENTS

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

July 29, 2023				
	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	\$ 767,668	\$ —	\$ —	\$ 767,668
Bond mutual fund	102,715	—	—	102,715
Time deposits	80,843	—	—	80,843
Deferred compensation plan assets	12,203	—	—	12,203
U.S. government obligations	—	93,740	—	93,740
Corporate debt securities	—	63,248	—	63,248
Foreign currency forward contracts	—	2,574	—	2,574
Interest rate swaps	—	19,528	—	19,528
Total assets measured at fair value	<u>\$ 963,429</u>	<u>\$ 179,090</u>	<u>\$ —</u>	<u>\$ 1,142,519</u>
Liabilities:				
Foreign currency forward contracts	\$ —	\$ 4,691	\$ —	\$ 4,691
Interest rate swaps	—	32	—	32
Total liabilities measured at fair value	<u>\$ —</u>	<u>\$ 4,723</u>	<u>\$ —</u>	<u>\$ 4,723</u>

October 29, 2022				
	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	\$ 639,024	\$ —	\$ —	\$ 639,024
Bond mutual fund	71,145	—	—	71,145
Time deposits	55,825	—	—	55,825
Deferred compensation plan assets	12,751	—	—	12,751
U.S. government obligations	—	134,584	—	134,584
Corporate debt securities	—	54,495	—	54,495
Foreign currency forward contracts	—	251	—	251
Interest rate swaps	—	12,306	—	12,306
Total assets measured at fair value	<u>\$ 778,745</u>	<u>\$ 201,636</u>	<u>\$ —</u>	<u>\$ 980,381</u>
Liabilities:				
Foreign currency forward contracts	\$ —	\$ 15,605	\$ —	\$ 15,605
Total liabilities measured at fair value	<u>\$ —</u>	<u>\$ 15,605</u>	<u>\$ —</u>	<u>\$ 15,605</u>

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

	July 29, 2023			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	\$ 944,714	\$ 559	\$ —	\$ 945,273
Short-term investments	6,512	135,331	—	141,843
Prepaid expenses and other	—	2,574	—	2,574
Long-term investments	—	21,098	—	21,098
Other long-term assets	12,203	19,528	—	31,731
Total assets measured at fair value	<u>\$ 963,429</u>	<u>\$ 179,090</u>	<u>\$ —</u>	<u>\$ 1,142,519</u>
Liabilities:				
Accrued liabilities and other short-term obligations	\$ —	\$ 4,691	\$ —	\$ 4,691
Other long-term obligations	—	32	—	32
Total liabilities measured at fair value	<u>\$ —</u>	<u>\$ 4,723</u>	<u>\$ —</u>	<u>\$ 4,723</u>
	October 29, 2022			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	\$ 757,725	\$ 7,974	\$ —	\$ 765,699
Short-term investments	8,269	145,720	—	153,989
Prepaid expenses and other	—	251	—	251
Long-term investments	—	35,385	—	35,385
Other long-term assets	12,751	12,306	—	25,057
Total assets measured at fair value	<u>\$ 778,745</u>	<u>\$ 201,636</u>	<u>\$ —</u>	<u>\$ 980,381</u>
Liabilities:				
Accrued liabilities and other short-term obligations	\$ —	\$ 15,605	\$ —	\$ 15,605
Total liabilities measured at fair value	<u>\$ —</u>	<u>\$ 15,605</u>	<u>\$ —</u>	<u>\$ 15,605</u>

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

(10) INVENTORIES

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

	July 29, 2023	October 29, 2022
Raw materials	\$ 771,955	\$ 664,916
Work-in-process	51,763	18,232
Finished goods	333,544	258,584
Deferred cost of goods sold	77,521	41,084
Gross inventories	1,234,783	982,816
Reserve for inventory excess and obsolescence	(42,261)	(36,086)
Inventories, net	<u>\$ 1,192,522</u>	<u>\$ 946,730</u>

The increase in raw materials inventory is related to the steps Ciena has taken to mitigate the impact of supply chain constraints on its business and customers in recent prior periods and a global market shortage of semiconductor components. The increase in finished goods inventories resulted primarily from planned fulfillment of customer advance orders for which some deliveries have been rescheduled.

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 nine months of fiscal 2023, Ciena recorded a provision for inventory excess and obsolescence of \$18.8 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):

	July 29, 2023	October 29, 2022
Contract assets for unbilled accounts receivable, net	\$ 142,305	\$ 156,039
Prepaid VAT and other taxes	75,637	63,975
Prepaid expenses	55,997	55,440
Product demonstration equipment, net	41,691	35,929
Capitalized contract acquisition costs	24,349	33,516
Other non-trade receivables	17,734	24,026
Foreign currency forward contracts	2,574	251
Deferred deployment expense	1,405	877
	<u>\$ 361,692</u>	<u>\$ 370,053</u>

Depreciation of product demonstration equipment was \$5.9 million during the first nine months of fiscal 2023 and \$6.8 million during the first nine months of fiscal 2022.

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

(12) INTANGIBLE ASSETS

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

	July 29, 2023			October 29, 2022		
	Gross Intangible	Accumulated Amortization	Net Intangible	Gross Intangible	Accumulated Amortization	Net Intangible
Developed technology	\$ 503,618	\$ (408,090)	\$ 95,528	\$ 428,218	\$ (386,300)	\$ 41,918
In-process technology	89,100	—	89,100	—	—	—
Patents and licenses	8,795	(4,967)	3,828	8,415	(4,228)	4,187
Customer relationships, covenants not to compete, outstanding purchase orders and contracts	411,384	(380,755)	30,629	390,271	(366,859)	23,412
Total intangible assets	<u>\$ 1,012,897</u>	<u>\$ (793,812)</u>	<u>\$ 219,085</u>	<u>\$ 826,904</u>	<u>\$ (757,387)</u>	<u>\$ 69,517</u>

The aggregate amortization expense of intangible assets was \$36.3 million during the first nine months of fiscal 2023 and \$36.5 million during the first nine months of fiscal 2022. Expected future amortization of intangible assets for the fiscal years indicated is as follows (in thousands):

Fiscal Year	Amount
Remaining fiscal 2023	\$ 14,170
2024	39,836
2025	34,635
2026	23,348
2027	15,843
Thereafter	2,153
	<u>\$ 129,985 ⁽¹⁾</u>

⁽¹⁾ Does not include amortization of in-process technology, as estimation of the timing of future amortization expense would be impractical.

(13) GOODWILL

The following table presents the goodwill allocated to Ciena's operating segments as of July 29, 2023 and October 29, 2022, as well as the changes to goodwill during the first nine months of fiscal 2023 (in thousands):

	Balance at October 29, 2022	Acquisitions	Impairments	Translation	Balance at July 29, 2023
Platform Software and Services	\$ 156,191	\$ —	\$ —	\$ —	\$ 156,191
Blue Planet Automation Software and Services	89,049	—	—	—	89,049
Networking Platforms	83,082	117,997	—	277	201,356
Total	<u>\$ 328,322</u>	<u>\$ 117,997</u>	<u>\$ —</u>	<u>\$ 277</u>	<u>\$ 446,596</u>

(14) OTHER BALANCE SHEET DETAILS

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

	July 29, 2023	October 29, 2022
Compensation, payroll related tax and benefits	\$ 104,303	\$ 126,338
Warranty	49,504	45,503
Income taxes payable	34,577	11,472
Vacation	30,344	26,396
Foreign currency forward contracts	4,691	15,604
Interest payable	9,779	4,793
Finance lease liabilities	4,063	3,758
Other	118,361	126,918
	<u>\$ 355,622</u>	<u>\$ 360,782</u>

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

	Beginning Balance	Current Period Provisions	Settlements	Ending Balance
Nine Months Ended July 30, 2022	\$ 48,019	12,416	(14,746)	\$ 45,689
Nine Months Ended July 29, 2023	\$ 45,503	18,860	(14,859)	\$ 49,504

As of the dates indicated, deferred revenue is comprised of the following (in thousands):

	July 29, 2023	October 29, 2022
Products	\$ 34,102	\$ 19,814
Services	225,875	180,421
Total deferred revenue	259,977	200,235
Less current portion	(188,104)	(137,899)
Long-term deferred revenue	<u>\$ 71,873</u>	<u>\$ 62,336</u>

(15) DERIVATIVE INSTRUMENTS

Foreign Currency Derivatives

Ciena conducts business globally in numerous currencies, and thus is exposed to adverse foreign currency exchange rate changes. To limit this exposure, Ciena enters into foreign currency contracts. Ciena does not enter into such contracts for speculative purposes.

As of July 29, 2023 and October 29, 2022, Ciena had forward contracts to hedge its foreign exchange exposure in order to reduce variability in certain currencies for expenses principally related to research and development activities. The notional amount of these contracts was approximately \$291.4 million and \$272.2 million as of July 29, 2023 and October 29, 2022, respectively. These foreign exchange contracts have maturities of 24 months or less and have been designated as cash flow hedges.

In May 2023, Ciena entered into forward contracts designated as net investment hedges to minimize the effect of foreign exchange rate movements on its net investments in foreign operations. The notional amount of these contracts was approximately \$48.6 million as of July 29, 2023. These foreign exchange contracts have maturities of 24 months or less and have been designated as net investment hedges.

As of July 29, 2023 and October 29, 2022, 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 \$255.9 million and \$108.0 million as of July 29, 2023 and October 29, 2022, 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 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.

Prior to amending the 2025 Term Loan (as defined in Note 16 below) to replace LIBOR with the Secured Overnight Financing Rate (“SOFR”), Ciena was exposed to floating rates of LIBOR interest on its 2025 Term Loan borrowings. Ciena hedged this 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 2025 Term Loan at 2.957% through September 2023. In January 2023, Ciena entered into a LIBOR to SOFR basis swap (“basis swap”) to hedge its exposure to SOFR rate. The basis swap offsets the LIBOR exposure risk of the interest rate swaps and effectively fixes the SOFR rate for \$350.0 million of the 2025 Term Loan at 2.883% through September 2023. The total notional amount of these swaps in effect was \$350.0 million as of July 29, 2023 and October 29, 2022. In April 2022, Ciena entered into floating to fixed forward starting interest rate swap arrangements (“forward starting swaps”). The forward starting swaps fix the SOFR for \$350.0 million of the 2025 Term Loan at 2.968% from September 2023 through the 2025 Term Loan maturity. The total notional amount of forward starting swaps effective September 2023 was \$350.0 million as of July 29, 2023.

In January 2023, Ciena entered into floating-to-fixed interest rate swap arrangements (“2028 interest rate swaps”). The 2028 interest rate swaps fix the SOFR rate of approximately \$350.0 million of the principal amount of the 2030 Term Loan (as defined in Note 16 below) at 3.47% through January 2028. The total notional amount of these interest rate swaps in effect as of July 29, 2023 was \$350.0 million.

Ciena expects the variable rate payments to be received under the terms of the interest rate swaps, basis swap, forward starting swaps, and 2028 interest rate swaps to offset exactly the forecasted variable rate payments on the equivalent notional amounts of the 2025 Term Loan and 2030 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.

(16) SHORT-TERM AND LONG-TERM DEBT

Outstanding Term Loans Payable

2025 Term Loan

On January 23, 2020, Ciena entered into a Refinancing Amendment to Credit Agreement pursuant to which Ciena refinanced the entire outstanding amount of its then existing senior secured term loan and incurred a new senior secured term loan in an aggregate principal amount of \$693.0 million and maturing on September 28, 2025 (the “2025 Term Loan”).

On January 19, 2023, in connection with the Incremental Agreement (as defined below) to the Credit Agreement (as defined below), the Credit Agreement was amended to replace LIBOR with SOFR for the 2025 Term Loan in response to pending impact of FASB Accounting Standards Codification 848, *Reference Rate Reform*.

The net carrying value of the 2025 Term Loan was comprised of the following as of the dates indicated (in thousands):

	July 29, 2023				October 29, 2022
	Principal Balance	Unamortized Discount	Deferred Debt Issuance Costs	Net Carrying Value	Net Carrying Value
2025 Term Loan	\$ 670,478	\$ (687)	\$ (1,286)	\$ 668,505	\$ 673,010

Deferred debt issuance costs that were deducted from the carrying amounts of the 2025 Term Loan totaled \$1.3 million as of July 29, 2023 and \$1.7 million at October 29, 2022. 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 2025 Term Loan. The amortization of deferred debt issuance costs for the 2025 Term Loan is included in interest expense, and was approximately \$0.5 million during the first nine months of each of fiscal 2023 and fiscal 2022. The carrying value of the 2025 Term Loan listed above is also net of any unamortized debt discounts.

As of July 29, 2023, the estimated fair value of the 2025 Term Loan was \$668.8 million. Ciena's 2025 Term Loan is categorized as Level 2 in the fair value hierarchy. Ciena estimated the fair value of its 2025 Term Loan using a market approach based on observable inputs, such as current market transactions involving comparable securities.

2030 Term Loan

On January 19, 2023, Ciena entered into an Incremental Joinder and Amendment Agreement (the "Incremental Agreement") to its 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, pursuant to which Ciena incurred a new tranche of senior secured term loans in an aggregate principal amount of \$500.0 million and maturing on January 19, 2030 (the "2030 Term Loan"). Net of original issue discount and debt issuance costs, the \$492.5 million in proceeds from the 2030 Term Loan are intended to be used for general corporate purposes.

The Incremental Agreement amends the Credit Agreement and provides that the 2030 Term Loan will, among other things:

- mature on January 19, 2030;
- amortize in equal quarterly installments in aggregate amounts equal to 0.25% of the principal amount of the 2030 Term Loan as of January 19, 2023, or \$1.25 million, with the balance payable at maturity;
- be subject to mandatory prepayment on the same basis as the 2025 Term Loan, including on the occurrence of certain specified events such as 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) SOFR (subject to a floor of 0.00%) plus an applicable margin of 2.50%, or (b) a base rate (subject to a floor of 1.00%) plus an applicable margin of 1.50%; and
- be repayable at any time at Ciena's election, provided that repayment of the 2030 Term Loan with proceeds of certain indebtedness prior to July 19, 2023 will require a prepayment premium of 1.00% of the aggregate principal amount of such prepayment.

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

The net carrying value of the 2030 Term Loan was comprised of the following as of the date indicated (in thousands):

	July 29, 2023			
	Principal Balance	Unamortized Discount	Deferred Debt Issuance Costs	Net Carrying Value
2030 Term Loan	\$ 498,750	\$ (2,308)	\$ (4,679)	\$ 491,763

Deferred debt issuance costs that were deducted from the carrying amounts of the 2030 Term Loan totaled \$4.7 million as of July 29, 2023. 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 2030 Term Loan. The amortization of deferred debt issuance costs for the 2030 Term Loan is included in interest expense and was \$0.4 million during the first nine months of fiscal 2023. The carrying value of the 2030 Term Loan listed above is also net of any unamortized debt discounts.

As of July 29, 2023, the estimated fair value of the 2030 Term Loan was \$500.0 million. Ciena's 2030 Term Loan is categorized as Level 2 in the fair value hierarchy. Ciena estimated the fair value of its 2030 Term Loan using a market approach based on observable inputs, such as current market transactions involving comparable securities.

Outstanding Senior Notes Payable

2030 Notes

On January 18, 2022, Ciena entered into an Indenture among Ciena, as issuer, certain domestic subsidiaries of Ciena, as guarantors, and U.S. Bank National Association, as trustee, pursuant to which Ciena issued \$400.0 million in aggregate principal amount of 4.00% senior notes due 2030 (the "2030 Notes").

The net carrying value of the 2030 Notes was comprised of the following as of the dates indicated (in thousands):

	July 29, 2023			October 29, 2022
	Principal Balance	Deferred Debt Issuance Costs	Net Carrying Value	Net Carrying Value
2030 Senior Notes 4.00% fixed-rate	\$ 400,000	\$ (4,438)	\$ 395,562	\$ 395,045

Deferred debt issuance costs that were deducted from the carrying amount of the 2030 Notes totaled \$4.4 million as of July 29, 2023 and \$5.0 million as of October 29, 2022. 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 2030 Notes. The amortization of deferred debt issuance costs for the 2030 Notes is included in interest expense, and was approximately \$0.5 million and \$0.4 million during the first nine months of fiscal 2023 and fiscal 2022, respectively.

As of July 29, 2023, the estimated fair value of the 2030 Notes was \$350.0 million. The 2030 Notes are categorized as Level 2 in the fair value hierarchy. Ciena estimated the fair value of its 2030 Notes using a market approach based on observable inputs, such as current market transactions involving comparable securities.

(17) ABL CREDIT FACILITY

On February 10, 2023, Ciena modified its senior secured asset-backed revolving credit facility (the "ABL Credit Facility"), which provides for a total commitment of \$300.0 million to extend its maturity date to September 28, 2025. Other terms of the ABL Credit Facility remain unchanged.

(18) ACCUMULATED OTHER COMPREHENSIVE INCOME

The following table summarizes the changes in accumulated balances of other comprehensive income ("AOCI"), net of tax, for the nine months ended July 29, 2023 (in thousands):

	Unrealized Gain (Loss) on			Cumulative Translation Adjustment	Total
	Available-for-sale Securities	Foreign Currency Forward Contracts	Interest Rate Swaps		
Balance at October 29, 2022	\$ (2,965)	\$ (10,197)	\$ 9,397	\$ (42,880)	\$ (46,645)
Other comprehensive gain before reclassifications	2,075	17,070	11,763	17,981	48,889
Amounts reclassified from AOCI	—	(7,756)	(6,266)	—	(14,022)
Balance at July 29, 2023	\$ (890)	\$ (883)	\$ 14,894	\$ (24,899)	\$ (11,778)

The following table summarizes the changes in AOCI, net of tax, for the nine months ended July 30, 2022 (in thousands):

	Unrealized Gain (Loss) on			Cumulative Translation Adjustment	Total
	Available-for-sale Securities	Foreign Currency Forward Contracts	Interest Rate Swaps		
Balance at October 30, 2021	\$ (164)	\$ 6,216	\$ (12,179)	\$ 6,566	\$ 439
Other comprehensive gain (loss) before reclassifications	(2,184)	(5,207)	2,786	(22,783)	(27,388)
Amounts reclassified from AOCI	—	(1,569)	6,639	—	5,070
Balance at July 30, 2022	\$ (2,348)	\$ (560)	\$ (2,754)	\$ (16,217)	\$ (21,879)

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 interest rate swaps designated as cash flow hedges, impacted interest and other income, net, on the Condensed Consolidated Statements of Operations.

(19) EARNINGS PER SHARE CALCULATION

Basic net income per common share (“Basic EPS”) is computed using the weighted average number of common shares outstanding. Diluted net income per potential common share (“Diluted EPS”) is computed using the weighted average number of the following, in each case, to the extent that 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.

The following table presents the calculation of Basic and Diluted EPS for the periods indicated (in thousands, except per share amounts):

	Quarter Ended		Nine Months Ended	
	July 29, 2023	July 30, 2022	July 29, 2023	July 30, 2022
Net income	\$ 29,733	\$ 10,512	\$ 163,628	\$ 95,257
Basic weighted average shares outstanding	149,690	149,862	149,472	152,083
Effect of dilutive potential common shares	287	601	395	1,126
Diluted weighted average shares	149,977	150,463	149,867	153,209
Basic EPS	\$ 0.20	\$ 0.07	\$ 1.09	\$ 0.63
Diluted EPS	\$ 0.20	\$ 0.07	\$ 1.09	\$ 0.62
Antidilutive employee share-based awards, excluded	3,383	1,640	2,567	1,264

(20) STOCKHOLDERS’ EQUITY

Stock Repurchase Program

On December 9, 2021, Ciena announced that its Board of Directors authorized a program to repurchase up to \$1.0 billion of its common stock.

During the third quarter of fiscal 2023, Ciena repurchased an additional 1.4 million shares of its common stock for an aggregate purchase price of \$61.2 million at an average price of \$42.48 per share. As of July 29, 2023, Ciena (i) has repurchased 9.9 million shares for an aggregate purchase price of \$561.2 million at an average price of \$56.83 per share, and (ii) has an aggregate of \$438.8 million authorized and remaining under its stock repurchase program. 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 its common stock to satisfy employee tax withholding obligations due on vesting of stock unit awards. The related purchase price of \$29.8 million for the shares of Ciena’s stock repurchased during the first nine months of

fiscal 2023 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.

(21) SHARE-BASED COMPENSATION EXPENSE

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

	Quarter Ended		Nine Months Ended	
	July 29, 2023	July 30, 2022	July 29, 2023	July 30, 2022
Products	\$ 1,118	\$ 1,002	\$ 3,324	\$ 2,960
Services	2,687	1,940	7,643	5,467
Share-based compensation expense included in cost of goods sold	3,805	2,942	10,967	8,427
Research and development	10,954	8,233	30,919	23,372
Selling and marketing	8,770	8,075	25,949	23,196
General and administrative	9,377	7,579	27,313	22,825
Share-based compensation expense included in operating expense	29,101	23,887	84,181	69,393
Share-based compensation expense capitalized in inventory, net	127	28	257	7
Total share-based compensation expense	\$ 33,033	\$ 26,857	\$ 95,405	\$ 77,827

As of July 29, 2023, total unrecognized share-based compensation expense was approximately \$231.5 million, which relates to unvested stock unit awards and is expected to be recognized over a weighted-average period of 1.45 years.

Stock Unit Awards

Beginning in December 2022, Ciena introduced a benefit, under which, upon completion of ten years of service and reaching age 60, executive officers who are residents of the United States, the United Kingdom, or Canada and who provide 12 months' notice of their retirement will receive continued vesting of all of their granted but unvested restricted stock unit ("RSU") awards and a pro-rated amount of their performance stock unit awards and market stock unit awards. Other employees in these countries will be subject to the same eligibility and notice requirements, but will receive acceleration of their granted but unvested RSU awards upon retirement. This program accelerates the recognition of share-based compensation expense.

(22) 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.

Ciena's long-lived assets, including equipment, building, furniture and fixtures, right-of-use ("ROU") assets, 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 July 29, 2023, equipment, building, furniture and fixtures, net, totaled \$287.5 million, and operating ROU assets totaled \$40.5 million both of which support asset groups within Ciena's four operating segments and unallocated selling and general and administrative activities. As of July 29, 2023, finite-lived intangible assets, goodwill, and maintenance spares are assigned to asset groups within the following segments (in thousands):

	July 29, 2023				
	Networking Platforms	Platform Software and Services	Blue Planet Automation Software and Services	Global Services	Total
Other intangible assets, net	\$ 198,937	—	20,148	—	\$ 219,085
Goodwill	\$ 201,356	156,191	89,049	—	\$ 446,596
Maintenance spares, net	\$ —	—	—	48,165	\$ 48,165

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; significant asset impairments and restructuring costs; amortization of intangible assets; acquisition and integration costs; interest and other income, net; interest expense; and provision for income taxes.

The table below sets forth Ciena's segment profit (loss) and the reconciliation to net income for the periods indicated (in thousands):

	Quarter Ended		Nine Months Ended	
	July 29, 2023	July 30, 2022	July 29, 2023	July 30, 2022
Segment profit (loss):				
Networking Platforms	\$ 171,380	\$ 108,282	\$ 588,281	\$ 395,176
Platform Software and Services	49,691	39,646	136,028	132,698
Blue Planet Automation Software and Services	(12,072)	(10,139)	(30,044)	(17,693)
Global Services	50,550	52,965	137,190	158,808
Total segment profit	259,549	190,754	831,455	668,989
Less: Non-performance operating expenses				
Selling and marketing	118,266	105,880	367,156	344,700
General and administrative	49,349	41,121	151,184	131,191
Significant asset impairments and restructuring costs	4,174	7,692	16,625	20,203
Amortization of intangible assets	9,487	8,919	26,773	26,757
Acquisition and integration costs	59	35	3,474	598
Add: Other non-performance financial items				
Interest and other income, net	10,187	366	50,711	4,860
Interest expense	(24,060)	(12,642)	(63,819)	(33,275)
Less: Provision for income taxes	34,608	4,319	89,507	21,868
Net income	<u>\$ 29,733</u>	<u>\$ 10,512</u>	<u>\$ 163,628</u>	<u>\$ 95,257</u>

Entity-Wide Reporting

The following table reflects Ciena's geographic distribution of equipment, building, furniture and fixtures, net, and operating ROU assets, with any country accounting for at least 10% of total equipment, building, furniture and fixtures, net, and operating ROU assets specifically identified. Equipment, building, furniture and fixtures, net, and operating ROU assets attributable to geographic regions outside of the United States and Canada are reflected as "Other International." For the periods indicated, Ciena's geographic distribution of equipment, building, furniture and fixtures, net, and operating ROU assets was as follows (in thousands):

	July 29, 2023	October 29, 2022
Canada	\$ 241,416	\$ 226,451
United States	46,936	47,515
Other International	39,585	38,921
Total	<u>\$ 327,937</u>	<u>\$ 312,887</u>

(23) COMMITMENTS AND CONTINGENCIES

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.

(24) SUBSEQUENT EVENTS

Stock Repurchase Program

From the end of the third quarter of fiscal 2023 through September 1, 2023, Ciena repurchased an additional 0.9 million shares of its common stock, for an aggregate purchase price of \$38.8 million at an average price of \$41.67 per share, inclusive of repurchases pending settlement. As of September 1, 2023, Ciena has repurchased an aggregate of 10.8 million shares and has an aggregate of \$400.0 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, operational matters including the expansion of manufacturing capacity and accumulation of inventory, business prospects and strategies and other "forward-looking" information. Forward-looking statements may appear throughout this report, including in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors." In some cases, you can identify "forward-looking statements" by words like "may," "will," "would," "can," "should," "could," "expects," "future," "plans," "anticipates," "believes," "estimates," "predicts," "intends," "potential," "projects," "targets," "prepare," or "continue" or the negative of those words and other comparable words. You should be aware that the forward-looking statements contained in this report are based on our current views and assumptions, and are subject to known and unknown risks, uncertainties, and other factors that may cause actual events or results to differ materially.

For a discussion identifying some of the 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 2022, which we filed with the Securities and Exchange Commission (the "SEC") on December 16, 2022 (our "2022 Annual Report"). However, we operate in a very competitive and dynamic environment and new risks and uncertainties emerge, are identified or become apparent from time to time and therefore may not be identified in this report. 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 report to "Ciena," the "Company," "we," "us," and "our" refer to Ciena Corporation and its consolidated subsidiaries.

Overview

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our Condensed Consolidated Financial Statements and the accompanying notes thereto included in Item 1 of Part I of this report and in Item 8 of Part II of our 2022 Annual Report.

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 delivery of video, data, and voice traffic over core, metro, aggregation, and

access communications networks. Our solutions are used globally by communications service providers, cable and multiservice operators, Web-scale providers, submarine network operators, governments, and enterprises across multiple industry verticals. Our portfolio is designed to enable the Adaptive Network, which is our vision for a network end state that leverages a programmable and scalable network infrastructure, driven by software control and automation capabilities, that are informed by analytics and intelligence. Our solutions include Networking Platforms, including our Converged Packet Optical and Routing and Switching portfolios, which can be applied from the network core to end-user access points, and which allow network operators to scale capacity, increase transmission speeds, allocate traffic efficiently and adapt dynamically to changing end-user service demands. To complement our Networking Platforms, we offer Platform Software, which includes our Manage, Control and Plan (“MCP”) applications that deliver advanced multi-layer domain control and operations. Through our Blue Planet Software we also enable complete service lifecycle management automation with productized open source software (OSS) and service assurance solutions that help our customers to achieve closed loop automation across multi-vendor and multi-domain environments.

Order Volumes

From the second quarter of fiscal 2021 through the third quarter of fiscal 2022, we received an unprecedented volume of orders for our products and services. Our quarterly order volumes during this period significantly exceeded our revenue and historical order volumes, with concentration of orders among certain existing Web-scale and North America-based service provider customers. We believe some portion of these orders reflected customer acceleration of future orders due to lengthened lead times or the implementation of security of supply strategies to address the supply constraints described below. We also believe some portion of these orders reflected pre-pandemic design wins for which orders were delayed due to the dynamics of the COVID-19 pandemic. Our order volumes began to moderate in the fourth quarter of fiscal 2022. We have continued to experience reduced orders relative to revenue in the first nine months of fiscal 2023 and order volumes lower than those received during the second quarter of fiscal 2021 through the third quarter of fiscal 2022. We believe this reduction has been in part due to customers no longer needing to place significant advanced orders as supply chain conditions and lead times have improved. However, over the longer term, we continue to believe that certain trends and shifts in business and consumer behaviors, including enterprise and consumer cloud network adoption, 5G, high-definition video, generative AI, and network operator focus on resilience and automation, represent positive, long-term opportunities for our business.

Backlog and Order Delivery Timing

Historically, a meaningful portion of our quarterly revenue was generated from customer orders received during that same quarter (which we refer to as “book to revenue”) and was therefore less predictable and subject to fluctuation. As a result of elevated order volumes in recent prior periods and the supply chain constraints described below, however, we generated a significant backlog of customer orders, and, more recently, our revenue has been more significantly impacted by availability of supply, as well as customer delivery deferrals of existing backlog. Our backlog grew from \$1.2 billion at the end of fiscal 2020 to \$4.2 billion at the end of fiscal 2022. As supply chain conditions have begun to improve and we have been able to increase shipment volumes and reduce lead times, our backlog has decreased during the first nine months of fiscal 2023. We expect our backlog to continue to reduce during the remainder of fiscal 2023 as supply chain conditions improve and customers place fewer advanced orders. As that happens, we expect our reliance upon securing quarterly book to revenue orders to grow and those orders to represent a more typical composition of our quarterly revenue over time.

The timing and degree to which we fulfill our backlog will have a significant impact on our rate of revenue growth and can be affected by factors outside of our control, including the supply chain conditions and availability of components described below, and customer readiness and willingness to receive shipment against existing orders. During the first nine months of fiscal 2023, certain customers, including communications service providers and cable and multiservice operators in North America and Web-scale providers, that had earlier placed significant advanced orders, rescheduled deliveries for a portion of such orders, including in some cases until after the end of fiscal 2023. We believe that this was the result of a number of factors, including their significant order levels during a period of supply chain constraints, the recent, rapid improvement in our delivery lead times, and their inventory levels. Accordingly, our results for a particular period can be difficult to predict. As a result of these and other factors, the timing of our fulfillment of backlog could cause some volatility in our results of operations and our backlog should not necessarily be viewed as an accurate indicator of revenue for any particular period. See the risk factors captioned “Our backlog may not be an accurate indicator of our level and timing of future revenues.” and “Our revenue, gross margin, and operating results can fluctuate significantly and unpredictably from quarter to quarter.” in Item 1A of Part II of this report for further discussion of risks related to our backlog and order delivery timing.

Supply Chain Constraints

In the face of demand across a range of industries, global supply for certain raw materials and components, including, in particular, semiconductor, integrated circuits, and other electronic components used in most of our products, experienced

substantial constraint and disruption in recent prior periods. As a result, we experienced significant component shortages, extended lead times, increased costs, and unexpected cancellation or delay of previously committed supply of key components across our supplier base. While reliability of supply has improved, and the majority of our suppliers have been able to deliver by their promised, though extended, lead times, we have in the past experienced and could in the future experience volatility from suppliers of integrated circuit components that represent a small fraction of our overall materials, but which are essential for delivering finished products. This volatility can result in receiving fewer components than expected in a given period, which can adversely impact our revenue. We expect that the extended lead times and elevated supply chain costs we have experienced will persist at least through the first half of fiscal 2024. We expect these supply conditions to continue to impact our costs of goods sold in the near term and to adversely impact our ability to continue to reduce the cost to produce our products in a manner consistent with prior periods. It is unclear when the supply environment will become less volatile and what impacts it will have on our business and results of operations in future periods.

To mitigate the impact of these supply conditions on our business and customers, we have placed advanced orders for inventory and accumulating components that are in available supply. We believe that this approach positions us to produce finished goods more quickly when supply constraints ease for those components in shorter supply. As a result of these measures, as well as the rescheduling of deliveries by some of our customers as discussed above, our inventory increased from \$946.7 million at the end of fiscal 2022 to \$1.2 billion at the end of the third quarter of fiscal 2023. We have also implemented additional mitigation strategies, including expanding manufacturing capacity, implementing multi-sourcing activities, qualifying alternative parts, and redesigning products, and expect, over time, to realize certain benefits of these activities. Together with increased costs of supply, these mitigation strategies have impacted, and we expect them to continue to impact, our result of operations and cash from operations. See “Risk Factors” in Item 1A of Part II of this report for further discussion of risks related to our supply chain and our mitigation activities.

For additional information regarding our business, industry, market opportunity, competitive landscape, and strategy, see our 2022 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 3 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

Revenue

Currency Fluctuations

During the third quarter and first nine months of fiscal 2023, approximately 14.2% and 15.0% of our revenue was non-U.S. Dollar-denominated, respectively, primarily including sales in Euros, Canadian Dollars, and British Pounds. During the third quarter of fiscal 2023 as compared to the third quarter of fiscal 2022, and the first nine months of fiscal 2023 as compared to the first nine months of fiscal 2022, the U.S. Dollar fluctuated against these currencies. Consequently, our revenue reported in U.S. Dollars slightly increased by approximately \$1.1 million, or 0.1%, as compared to the third quarter of fiscal 2022, and our revenue reported in U.S. Dollars was adversely impacted by approximately \$5.6 million, or 0.2%, as compared to the first nine months of fiscal 2022.

Operating Segment Revenue

The table below sets forth the changes in our operating segment revenue for the periods indicated (in thousands, except percentage data):

	Quarter Ended			Nine Months Ended		
	July 29, 2023	July 30, 2022	%*	July 29, 2023	July 30, 2022	%*
Revenue:						
Networking Platforms						
Converged Packet Optical	\$ 718,997	\$ 563,837	27.5 %	\$ 2,239,180	\$ 1,730,066	29.4 %
	%** 67.3 %	65.0 %		68.7 %	65.0 %	
Routing and Switching	127,563	100,741	26.6 %	377,378	295,638	27.6 %
	%** 12.0 %	11.6 %		11.6 %	11.1 %	
Total Networking Platforms	846,560	664,578	27.4 %	2,616,558	2,025,704	29.2 %
	%** 79.3 %	76.6 %		80.3 %	76.1 %	
Platform Software and Services						
Platform Software and Services	78,880	63,483	24.3 %	221,768	205,557	7.9 %
	%** 7.4 %	7.3 %		6.8 %	7.7 %	
Blue Planet Automation Software and Services						
Blue Planet Automation Software and Services	13,167	17,342	(24.1)%	49,139	55,334	(11.2)%
	%** 1.2 %	2.0 %		1.5 %	2.1 %	
Global Services						
Maintenance Support and Training	72,887	72,760	0.2 %	213,938	219,270	(2.4)%
	%** 6.8 %	8.4 %		6.6 %	8.3 %	
Installation and Deployment	46,840	38,704	21.0 %	120,901	120,504	0.3 %
	%** 4.4 %	4.4 %		3.7 %	4.5 %	
Consulting and Network Design	9,552	11,114	(14.1)%	34,758	35,282	(1.5)%
	%** 0.9 %	1.3 %		1.1 %	1.3 %	
Total Global Services	129,279	122,578	5.5 %	369,597	375,056	(1.5)%
	%** 12.1 %	14.1 %		11.4 %	14.1 %	
Total revenue						
Total revenue	\$ 1,067,886	\$ 867,981	23.0 %	\$ 3,257,062	\$ 2,661,651	22.4 %

* Denotes % change from fiscal 2022 to fiscal 2023

** Denotes % of total revenue

Quarter ended July 29, 2023 as compared to the quarter ended July 30, 2022

- **Networking Platforms segment revenue** increased by \$182.0 million, reflecting product line sales increases of \$155.2 million of our Converged Packet Optical products and \$26.8 million of our Routing and Switching products.
 - Converged Packet Optical sales increased, primarily reflecting sales increases of \$120.0 million of our 6500 Reconfigurable Line System (RLS) products, primarily to Web-scale providers and \$61.8 million of our 6500 Packet-Optical Platform, primarily to enterprise customers and communications service providers, partially offset by a sales decrease of \$27.4 million of our Waveserver® products, primarily to Web-scale providers.
- Routing and Switching sales increased, primarily reflecting sales increases of \$29.6 million of our 3000 and 5000 families of service delivery and aggregation switches, primarily to cable and multiservice operators, enterprise customers and communications service providers, and \$6.8 million of our 8100 Coherent IP networking platforms, primarily to communications service providers, partially offset by a sales decrease of \$16.5 million of our virtualization software primarily to communications service providers.
- **Platform Software and Services segment revenue** increased by \$15.4 million, primarily reflecting a sales increase of \$14.8 million in our software maintenance services, primarily for our MCP software platform, to communications service providers.
- **Blue Planet Automation Software and Services segment revenue** decreased by \$4.2 million reflecting sales decreases of \$2.5 million in professional software services and \$1.7 million in software platforms, both primarily to communications service providers.

- **Global Services segment revenue** increased by \$6.7 million, primarily reflecting a sales increase of \$8.1 million of our installation and deployment services, partially offset by a sales decrease of \$1.6 million of our consulting and network design services.

Nine months ended July 29, 2023 as compared to the nine months ended July 30, 2022

- **Networking Platforms segment revenue** increased by \$590.8 million, reflecting product line sales increases of \$509.1 million of our Converged Packet Optical products and \$81.7 million of our Routing and Switching products.
 - Converged Packet Optical sales increased, primarily reflecting sales increases of \$245.5 million of our 6500 Packet-Optical Platform, primarily to communications service providers and enterprise customers, \$240.3 million of our 6500 RLS products, primarily to Web-scale providers, and \$19.7 million of our Waveserver® products, primarily to enterprise customers and communications service providers, partially offset by decreased sales to cable and multiservice operators.
 - Routing and Switching sales increased, primarily reflecting sales increases of \$42.6 million of our 3000 and 5000 families of service delivery and aggregation switches, primarily to cable and multiservice operators and enterprise customers, \$16.0 million of our virtualization software and \$14.3 million of our 8100 Coherent IP networking platforms, both primarily to communications service providers.
- **Platform Software and Services segment revenue** increased by \$16.2 million, primarily reflecting a sales increase of \$34.8 million in our software maintenance services, primarily for our MCP software platform, to communications service providers, partially offset by a sales decrease of \$18.6 million in sales of software platforms, primarily due to decreased sales of our MCP software platform.
- **Blue Planet Automation Software and Services segment revenue** decreased by \$6.2 million, primarily reflecting sales decreases of \$3.3 million in software platform sales and \$2.9 million in professional software services.
- **Global Services segment revenue** decreased by \$5.5 million, primarily reflecting a sales decrease of \$5.3 million of our maintenance support and training.

Revenue by Geographic Region

Our operating segments engage in business and operations across three geographic regions: the United States, Canada, the Caribbean and Latin America (“Americas”); Europe, Middle East and Africa (“EMEA”); and Asia Pacific, Japan and India (“APAC”). The geographic distribution of our revenue can fluctuate significantly from period to period, 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 increase in our Americas region revenue for the quarter and nine months ended July 29, 2023 was primarily driven by increased sales in the United States. The increase in our APAC region revenue for the quarter and nine months ended July 29, 2023 was primarily driven by increased sales in India and Australia. The increase in our EMEA region revenue for the quarter and nine months ended July 29, 2023 was primarily driven by increased sales in the Netherlands.

The following table reflects our geographic distribution of revenue, principally based on the relevant location for our delivery of products and performance of services. The table sets forth the changes in geographic distribution of revenue for the periods indicated (in thousands, except percentage data):

	Quarter Ended			Nine Months Ended		
	July 29, 2023	July 30, 2022	%*	July 29, 2023	July 30, 2022	%*
Americas	\$ 749,479	\$ 617,366	21.4 %	\$ 2,308,934	\$ 1,913,350	20.7 %
	%** 70.2 %	71.1 %		70.9 %	71.9 %	
EMEA	152,834	124,185	23.1 %	479,053	420,075	14.0 %
	%** 14.3 %	14.3 %		14.7 %	15.8 %	
APAC	165,573	126,430	31.0 %	469,075	328,226	42.9 %
	%** 15.5 %	14.6 %		14.4 %	12.3 %	
Total	\$ 1,067,886	\$ 867,981	23.0 %	\$ 3,257,062	\$ 2,661,651	22.4 %

* Denotes % change from fiscal 2022 to fiscal 2023

** Denotes % of total revenue

Quarter ended July 29, 2023 as compared to the quarter ended July 30, 2022

- **Americas revenue** increased by \$132.1 million, primarily reflecting sales increases of \$124.1 million within our Networking Platforms segment and \$10.6 million within our Platform Software and Services segment. These sales increases were partially offset by a sales decrease of \$3.6 million within our Blue Planet Automation Software and Services segment. The increase within our Networking Platforms segment reflects product line sales increases of \$115.8 million of our Converged Packet Optical products and \$8.3 million of our Routing and Switching products. The increase within our Converged Packet Optical product line was primarily related to sales increases of \$97.7 million of our 6500 RLS products, primarily to Web-scale providers, and \$36.0 million of our 6500 Packet-Optical Platform primarily to communications service providers. These increases were offset by a sales decrease of \$16.1 million of our Waveserver® products, primarily to Web-scale providers. The increase within our Routing and Switching product line reflected sales increases of \$14.6 million of our 3000 and 5000 families of service delivery and aggregation switches, primarily to enterprise customers and cable and multiservice operators, and \$6.6 million of our 8100 Coherent IP networking platforms, primarily to communications service providers. These increases were partially offset by a sales decrease of \$16.5 million of our virtualization software, primarily to communications service providers.
- **EMEA revenue** increased by \$28.6 million, reflecting sales increases of \$19.3 million within our Networking Platforms segment, \$4.3 million within our Global Services segment, \$3.7 million within our Platform Software and Services segment, and \$1.3 million within our Blue Planet Automation Software and Services segment. The increase within our Networking Platforms segment primarily reflects product line sales increases of \$14.9 million of our Routing and Switching product line, primarily related to a sales increase of \$13.8 million of our 3000 and 5000 families of service delivery and aggregation switches, primarily to communications service providers.
- **APAC revenue** increased by \$39.1 million, primarily reflecting a sales increase of \$38.6 million within our Networking Platforms segment. The increase within our Networking Platforms segment primarily reflects a product line sales increase of \$35.0 million of Converged Packet Optical products, which includes a sales increase of \$27.5 million of our 6500 Packet-Optical Platform, primarily to enterprise customers.

Nine months ended July 29, 2023 as compared to the nine months ended July 30, 2022

- **Americas revenue** increased by \$395.6 million, primarily reflecting sales increases of \$400.4 million within our Networking Platforms segment and \$10.4 million within our Platform Software and Services segment. These sales increases were partially offset by sales decreases of \$9.9 million within our Blue Planet Automation Software and Services segment and \$5.4 million within our Global Services segment. Our Networking Platforms segment revenue increase reflects product line sales increases of \$344.4 million of Converged Packet Optical products and \$56.0 million of Routing and Switching products. Our Converged Packet Optical revenue primarily reflects sales increases of \$192.9 million of our 6500 RLS products, primarily to Web-scale providers and \$138.9 million of our 6500 Packet-Optical Platform, primarily to communications service providers and enterprise customers. Routing and Switching product line sales primarily reflect sales increases of \$22.3 million of our 3000 and 5000 families of service delivery and aggregation switches, primarily to cable and multiservice operators and enterprise customers, \$16.0 million of our virtualization software, and \$13.1 million of our 8100 Coherent IP networking platforms, both primarily to communications service providers.
- **EMEA revenue** increased by \$59.0 million, primarily reflecting sales increases of \$45.1 million within our Networking Platforms segment, \$8.2 million within our Blue Planet Automation Software and Services segment, and \$5.2 million within our Platform Software and Services segment. Our Networking Platforms segment revenue increase primarily reflects product line sales increases of \$25.7 million of Converged Packet Optical products and \$19.4 million of our Routing and Switching products. Converged Packet Optical revenue primarily reflects a sales increase of \$42.9 million of our 6500 RLS products, primarily to Web-scale providers, partially offset by a sales decrease of \$15.6 million of our Waveserver® products, primarily to Web-scale providers. Routing and Switching product line sales primarily reflect a sales increase of \$16.7 million of our 3000 and 5000 families of service delivery and aggregation switches, primarily to communications service providers.
- **APAC revenue** increased by \$140.8 million, primarily reflecting a sales increase of \$145.4 million within our Networking Platforms segment. This sales increase was partially offset by a sales decrease of \$4.5 million within our Blue Planet Automation Software and Services segment. Our Networking Platforms segment revenue increase primarily reflects a product line sales increase of \$139.1 million of Converged Packet Optical products, including a sales increase of \$108.0 million of our 6500 Packet-Optical Platform, primarily to communications service providers and enterprise customers.

Cost of Goods Sold and Gross Profit

There are a number of important factors or conditions that can adversely affect or cause our gross profit as a percentage of product or service revenue, or “gross margin,” to fluctuate on a quarterly basis. For example, 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 as they add capacity. The component elements that comprise our product cost of goods sold and services costs of goods sold, and certain factors that can cause gross margin to fluctuate, are described in detail in the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors” sections of our 2022 Annual Report.

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			Nine Months Ended		
	July 29, 2023	July 30, 2022	%*	July 29, 2023	July 30, 2022	%*
Total revenue	\$ 1,067,886	\$ 867,981	23.0 %	\$ 3,257,062	\$ 2,661,651	22.4 %
Total cost of goods sold	618,945	527,202	17.4 %	1,864,492	1,534,904	21.5 %
Gross profit	\$ 448,941	\$ 340,779	31.7 %	\$ 1,392,570	\$ 1,126,747	23.6 %
	%**	42.0 %	39.3 %	42.8 %	42.3 %	

* Denotes % change from fiscal 2022 to fiscal 2023

** Denotes % of total revenue

	Quarter Ended			Nine Months Ended		
	July 29, 2023	July 30, 2022	%*	July 29, 2023	July 30, 2022	%*
Product revenue	\$ 865,197	\$ 684,284	26.4 %	\$ 2,678,242	\$ 2,109,239	27.0 %
Product cost of goods sold	516,900	434,756	18.9 %	1,559,120	1,259,378	23.8 %
Product gross profit	\$ 348,297	\$ 249,528	39.6 %	\$ 1,119,122	\$ 849,861	31.7 %
	%**	40.3 %	36.5 %	41.8 %	40.3 %	

* Denotes % change from fiscal 2022 to fiscal 2023

** Denotes % of product revenue

	Quarter Ended			Nine Months Ended		
	July 29, 2023	July 30, 2022	%*	July 29, 2023	July 30, 2022	%*
Services revenue	\$ 202,689	\$ 183,697	10.3 %	\$ 578,820	\$ 552,412	4.8 %
Services cost of goods sold	102,045	92,446	10.4 %	305,372	275,526	10.8 %
Services gross profit	\$ 100,644	\$ 91,251	10.3 %	\$ 273,448	\$ 276,886	(1.2)%
	%**	49.7 %	49.7 %	47.2 %	50.1 %	

* Denotes % change from fiscal 2022 to fiscal 2023

** Denotes % of services revenue

Quarter ended July 29, 2023 as compared to the quarter ended July 30, 2022

- **Gross profit** increased by \$108.2 million. Gross margin increased by 270 basis points, primarily due to improved manufacturing efficiencies and lower product costs, partially offset by a higher concentration of lower margin “common” equipment and photonics sales.
- **Gross profit on products** increased by \$98.8 million. Product gross margin increased by 380 basis points, primarily due to improved manufacturing efficiencies and lower product costs, partially offset by a higher concentration of lower margin product mix as described above.
- **Gross profit on services** increased by \$9.4 million. Services gross margin remained relatively unchanged.

Nine months ended July 29, 2023 as compared to the nine months ended July 30, 2022

- **Gross profit** increased by \$265.8 million. Gross margin slightly increased by 50 basis points, primarily due to improved manufacturing efficiencies and lower product costs, partially offset by a higher concentration of lower margin “common” equipment and photonics sales, and lower services margins.
- **Gross profit on products** increased by \$269.3 million. Product gross margin increased by 150 basis points, primarily due to improved manufacturing efficiencies and lower product costs, partially offset by a higher concentration of lower margin product mix as described above.
- **Gross profit on services** decreased by \$3.4 million. Services gross margin decreased by 290 basis points, primarily due to lower maintenance support and training revenue, lower margin on certain installation and deployment projects, and losses incurred on certain Blue Planet software service projects. These decreases were partially offset by increased Platform Software services revenue.

Operating Expense

Currency Fluctuations

Approximately 51.8% and 50.1% of our operating expense was non-U.S. Dollar-denominated during the third quarter and first nine months of fiscal 2023, respectively, including expenses in Canadian Dollars, Indian Rupees, and Euros. During the third quarter of fiscal 2023, as compared to the third quarter of fiscal 2022, and during the first nine months of fiscal 2023, as compared to the first nine months of fiscal 2022, the U.S. Dollar primarily strengthened against these currencies. Consequently, our operating expense, net of hedging, reported in U.S. Dollars slightly decreased by approximately \$2.8 million, or 0.8%, and \$24.6 million, or 2.2%, respectively.

The component elements that comprise each of our operating expense categories in the table below are set forth in the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of our 2022 Annual Report. The table below sets forth the changes in operating expense for the periods indicated (in thousands, except percentage data):

	Quarter Ended			Nine Months Ended		
	July 29, 2023	July 30, 2022	%*	July 29, 2023	July 30, 2022	%*
Research and development	\$ 189,392	\$ 150,025	26.2 %	\$ 561,115	\$ 457,758	22.6 %
%**	17.7 %	17.3 %		17.2 %	17.2 %	
Selling and marketing	118,266	105,880	11.7 %	367,156	344,700	6.5 %
%**	11.1 %	12.2 %		11.4 %	13.0 %	
General and administrative	49,349	41,121	20.0 %	151,184	131,191	15.2 %
%**	4.6 %	4.7 %		4.6 %	4.9 %	
Significant asset impairments and restructuring costs	4,174	7,692	(45.7)%	16,625	20,203	(17.7)%
%**	0.4 %	0.9 %		0.5 %	0.8 %	
Amortization of intangible assets	9,487	8,919	6.4 %	26,773	26,757	0.1 %
%**	0.9 %	1.0 %		0.8 %	1.0 %	
Acquisition and integration costs	59	35	68.6 %	3,474	598	480.9 %
%**	— %	— %		0.1 %	— %	
Total operating expenses	\$ 370,727	\$ 313,672	18.2 %	\$ 1,126,327	\$ 981,207	14.8 %
%**	34.7 %	36.1 %		34.6 %	36.9 %	

* Denotes % change from fiscal 2022 to fiscal 2023

** Denotes % of total revenue

Quarter ended July 29, 2023 as compared to the quarter ended July 30, 2022

- **Research and development expense** benefited from \$2.9 million as a result of foreign exchange rates, net of hedging, primarily due to a stronger U.S. Dollar in relation to the Canadian Dollar and Indian Rupee. Including the effect of foreign exchange rates, net of hedging, research and development expenses increased by \$39.4 million. This increase primarily reflects increases in employee headcount and related compensation costs, professional services and technology and related costs. The increase in employee headcount was partially due to our acquisitions of Benu Networks, Inc. (“Benu”) and Tibit Communications, Inc. (“Tibit”).

- **Selling and marketing expense** increased by \$12.4 million. This increase primarily reflects increases in employee headcount and related compensation costs.
- **General and administrative expense** increased by \$8.2 million. This increase primarily reflects increases in employee headcount and related compensation costs.
- **Significant asset impairments and restructuring costs** reflects actions that we have taken with respect to our operations, global workforce, and facilities as part of a business optimization strategy to improve gross margin, constrain operating expense, redesign certain business processes, and restructure real estate facilities.
- **Amortization of intangible assets** reflects certain intangible assets having reached the end of their economic lives, partially offset by additional intangibles acquired in connection with our acquisitions of Benu and Tibit during the first quarter of fiscal 2023.
- **Acquisition and integration costs** remained relatively unchanged.

Nine months ended July 29, 2023 as compared to the nine months ended July 30, 2022

- **Research and development expense** benefited from \$16.6 million as a result of foreign exchange rates, net of hedging, primarily due to a stronger U.S. Dollar in relation to the Canadian Dollar and Indian Rupee. Including the effect of foreign exchange rates, net of hedging, research and development expenses increased by \$103.4 million. This increase primarily reflects increases in employee headcount and related compensation costs, professional services, and technology and related costs. The increase in employee headcount was partially due to our acquisitions of Benu and Tibit. This increase also reflects the effect of a \$4.4 million decrease in benefit from the Evolution of Networking Services through a Corridor in Quebec and Ontario for Research and Innovation (ENCQOR) project grant reimbursement program.
- **Selling and marketing expense** benefited from \$6.2 million as a result of foreign exchange rates, primarily due to a stronger U.S. Dollar in relation to the Euro and Canadian Dollar. Including the effect of foreign exchange rates, sales and marketing expense increased by \$22.5 million. This increase primarily reflects an increase in professional services, employee headcount and related compensation costs, and travel and entertainment costs.
- **General and administrative expense** benefited from \$1.9 million as a result of foreign exchange rates, primarily due to a stronger U.S. Dollar in relation to the Canadian Dollar and Euro. Including the effect of foreign exchange rates, general and administrative expense increased by \$20.0 million. This increase primarily reflects increases in employee headcount and related compensation costs, professional services, and bad debt expense.
- **Significant asset impairments and restructuring costs** reflects actions that we have taken with respect to our operations, global workforce, and facilities as part of a business optimization strategy to improve gross margin, constrain operating expense, redesign certain business processes, and restructure real estate facilities.
- **Amortization of intangible assets** reflects certain intangible assets having reached the end of their economic lives, partially offset by additional intangibles acquired in connection with our acquisitions of Benu and Tibit during the first quarter of fiscal 2023.
- **Acquisition and integration costs** increased by \$2.9 million and primarily reflect financial, legal, and accounting advisors and employee-related costs related to our acquisitions of Benu and Tibit.

For more information on our acquisitions, see Note 4 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

Other Items

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

	Quarter Ended			%*	Nine Months Ended			%*
	July 29, 2023	July 30, 2022			July 29, 2023	July 30, 2022		
Interest and other income, net	\$ 10,187	\$ 366		2,683.3 %	\$ 50,711	\$ 4,860		943.4 %
	***	1.0 %	— %		1.6 %	0.2 %		
Interest expense	\$ 24,060	\$ 12,642		90.3 %	\$ 63,819	\$ 33,275		91.8 %
	***	2.3 %	1.5 %		2.0 %	1.3 %		
Provision for income taxes	\$ 34,608	\$ 4,319		701.3 %	\$ 89,507	\$ 21,868		309.3 %
	***	3.2 %	0.5 %		2.7 %	0.8 %		

* Denotes % change from fiscal 2022 to fiscal 2023

** Denotes % of total revenue

Quarter ended July 29, 2023 as compared to the quarter ended July 30, 2022

- **Interest and other income, net** increased by \$9.8 million, primarily resulting from higher interest income on our investments.
- **Interest expense** increased by \$11.4 million, primarily due to higher interest rates on our floating rate debt, net of hedging activity, and additional outstanding indebtedness, including the 2030 Term Loan incurred in the first quarter of fiscal 2023. For more information on our short-term and long-term debt, see Note 16 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.
- **Provision for income taxes** increased by \$30.3 million, and the effective tax rate for the third quarter of fiscal 2023 was higher than the effective tax rate for the third quarter of fiscal 2022, both primarily due to the mandatory capitalization of research and development expenses in the third quarter of fiscal 2023, in response to changes in U.S. tax policy.

Nine months ended July 29, 2023 as compared to the nine months ended July 30, 2022

- **Interest and other income, net** increased by \$45.9 million, primarily resulting from the remeasurement of our previously held investment in Tibit to fair value, which resulted in a gain on our cost method equity investment of \$26.5 million, and higher interest income on our investments. These increases were partially offset by the impact of foreign exchange rates on assets and liabilities denominated in a currency other than the relevant functional currency, net of hedging activity. For more information on our acquisitions, see Note 4 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.
- **Interest expense** increased by \$30.5 million, primarily due to higher interest rates on our floating rate debt, net of hedging activity, and additional outstanding indebtedness, including our 2030 Notes issued in the first quarter of fiscal 2022 and the 2030 Term Loan incurred in the first quarter of fiscal 2023. For more information on our short-term and long-term debt, see Note 16 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.
- **Provision for income taxes** increased by \$67.6 million, and the effective tax rate for the first nine months of fiscal 2023 was higher than the effective tax rate for the first nine months of fiscal 2022, both primarily due to the mandatory capitalization of research and development expenses in the first nine months of fiscal 2023, in response to changes in U.S. tax policy.

Segment Profit (Loss)

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

	Quarter Ended			Nine Months Ended		
	July 29, 2023	July 30, 2022	%*	July 29, 2023	July 30, 2022	%*
Segment profit (loss):						
Networking Platforms	\$ 171,380	\$ 108,282	58.3 %	\$ 588,281	\$ 395,176	48.9 %
Platform Software and Services	\$ 49,691	\$ 39,646	25.3 %	\$ 136,028	\$ 132,698	2.5 %
Blue Planet Automation Software and Services	\$ (12,072)	\$ (10,139)	(19.1)%	\$ (30,044)	\$ (17,693)	(69.8)%
Global Services	\$ 50,550	\$ 52,965	(4.6)%	\$ 137,190	\$ 158,808	(13.6)%

* Denotes % change from fiscal 2022 to fiscal 2023

Quarter ended July 29, 2023 as compared to the quarter ended July 30, 2022

- **Networking Platforms segment** profit increased by \$63.1 million, primarily due to higher sales volume and higher gross margin as described above, partially offset by increased research and development costs.

- **Platform Software and Services segment** profit increased by \$10.0 million, primarily due to higher sales volume as described above, partially offset by increased research and development costs.
- **Blue Planet Automation Software and Services segment** loss increased by \$1.9 million, primarily due to lower sales volume as described above and increased research and development costs.
- **Global Services segment** profit decreased by \$2.4 million, primarily due to lower gross margin, partially offset by higher sales volume as described above.

Nine months ended July 29, 2023 as compared to the nine months ended July 30, 2022

- **Networking Platforms segment** profit increased by \$193.1 million, primarily due to higher sales volume and higher gross margin as described above, partially offset by increased research and development costs.
- **Platform Software and Services segment** profit increased by \$3.3 million, primarily due to higher software-related services sales volume as described above, partially offset by lower software sales volume, increased research and development costs, and lower gross margin on software-related services.
- **Blue Planet Automation Software and Services segment** loss increased by \$12.4 million, primarily due to lower gross margin on software-related services, lower sales volume, and increased research and development costs.
- **Global Services segment** profit decreased by \$21.6 million, primarily due to lower maintenance support and training revenue and lower gross margin on certain installation and deployment projects as described above.

Liquidity and Capital Resources

Overview. For the nine months ended July 29, 2023, we used \$27.1 million of cash in operating activities as our working capital requirements of approximately \$352.6 million exceeded our net income (adjusted for non-cash charges) of approximately \$325.5 million. For additional details, see “Cash Used In Operating Activities” below.

Despite our cash used in operations, our total cash, cash equivalents, and investments increased by \$97.1 million during the first nine months of fiscal 2023. This increase principally reflects proceeds from the issuance of the 2030 Term Loan, which provided \$492.5 million in cash, net of paid debt issuance costs, and proceeds from the issuance of equity under our employee stock purchase plan which provided \$31.3 million in cash during the nine months ended July 29, 2023. In addition to the cash used in operations, uses of cash also included the following items: (i) cash used for the acquisition of businesses of \$230.0 million; (ii) cash used to fund our investing activities for capital expenditures totaling \$83.4 million; (iii) cash used for stock repurchases under our stock repurchase program of \$57.7 million; and (iv) stock repurchases on vesting of our stock unit awards to employees relating to tax withholding of \$29.8 million.

See Notes 4, 16 and 20 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report for additional information on these transactions.

The following table sets forth changes in our cash, cash equivalents and investments in marketable debt securities for the periods indicated (in thousands):

	July 29, 2023	October 29, 2022	Increase (decrease)
Cash and cash equivalents	\$ 1,117,922	\$ 994,352	\$ 123,570
Short-term investments in marketable debt securities	141,843	153,989	(12,146)
Long-term investments in marketable debt securities	21,098	35,385	(14,287)
Total cash, cash equivalents, and investments in marketable debt securities	<u>\$ 1,280,863</u>	<u>\$ 1,183,726</u>	<u>\$ 97,137</u>

Principal Sources of Liquidity. Our principal sources of liquidity on hand include our cash, cash equivalents, and investments, which, as of July 29, 2023 totaled \$1.3 billion, 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 \$300.0 million with a maturity date of September 28, 2025, as modified on February 10, 2023. See Note 17 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report. 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 July 29, 2023, letters of credit totaling \$68.2 million were collateralized by our ABL Credit Facility. There were no borrowings outstanding under the ABL Credit Facility as of July 29, 2023.

Foreign Liquidity. Cash, cash equivalents, and short-term investments held by our foreign subsidiaries was \$287.8 million as of July 29, 2023. We intend to reinvest indefinitely our foreign earnings. If we were to repatriate the accumulated historical foreign earnings, the provisional amount of unrecognized deferred income tax liability related to foreign withholding taxes would be approximately \$36.0 million.

Stock Repurchase Authorization. On December 9, 2021, we announced that our Board of Directors authorized a program to repurchase up to \$1.0 billion of our common stock, which replaced in its entirety the previous stock repurchase program authorized in fiscal 2019. During the third quarter of fiscal 2023, we repurchased an additional \$61.2 million of our common stock under the stock repurchase program, and \$438.8 million remained under the current repurchase authorization as of July 29, 2023. The amount and timing of any further repurchases under our stock repurchase program 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. See Note 20 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

Liquidity Position. 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 currently anticipated working capital needs, capital expenditures, and other liquidity requirements associated with our operations through the next 12 months and the reasonably foreseeable future. We regularly evaluate our liquidity position, debt obligations, and anticipated cash needs to fund our operating or investment plans, and will continue to consider capital raising and other market opportunities that may be available to us. We regularly evaluate alternatives to manage our capital structure and market opportunities to enhance our liquidity and provide further operational and strategic flexibility.

Cash Used In Operating Activities

The following sections set forth the components of our \$27.1 million of cash used in operating activities during the first nine months of fiscal 2023:

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):

	Nine Months Ended July 29, 2023
Net income	\$ 163,628
Adjustments for non-cash charges:	
Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	69,213
Share-based compensation expenses	95,405
Amortization of intangible assets	36,274
Deferred taxes	(64,005)
Provision for inventory excess and obsolescence	18,767
Provision for warranty	18,860
Gain on cost method equity investments, net	(26,368)
Other	13,694
Net income (adjusted for non-cash charges)	\$ 325,468

Working Capital

We used \$352.6 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):

	Nine Months Ended July 29, 2023
Cash used in accounts receivable	\$ (80,399)
Cash used in inventories	(262,345)
Cash provided by prepaid expenses and other	72,062
Cash used in accounts payable, accruals, and other obligations	(133,880)
Cash provided by deferred revenue	57,547
Cash used in operating lease assets and liabilities, net	(5,593)
Total cash used for working capital	<u>\$ (352,608)</u>

As compared to the end of fiscal 2022:

- The \$80.4 million of cash used in accounts receivable during the first nine months of fiscal 2023 reflects increased sales volume at the end of the third quarter of fiscal 2023;
- The \$262.3 million of cash used in inventories during the first nine months of fiscal 2023 primarily related to increases in (i) raw materials to mitigate the impact on our business and customers from supply chain constraints in recent prior periods and a global market shortage of semiconductor components and (ii) finished goods inventories from planned fulfillment of customer advance orders for which some deliveries have since been rescheduled as described in “Overview” above;
- The \$72.1 million of cash provided by prepaid expense and other during the first nine months of fiscal 2023 primarily reflects lower contract assets for unbilled receivables, lower capitalized contract acquisition costs, and other non-trade receivables;
- The \$133.9 million of cash used in accounts payable, accruals, and other obligations during the first nine months of fiscal 2023 primarily reflects the timing of payments to suppliers;
- The \$57.5 million of cash provided by deferred revenue during the first nine months of fiscal 2023 represents an increase in advanced payments received on multi-year maintenance contracts from customers prior to revenue recognition; and
- The \$5.6 million of cash used in operating lease assets and liabilities, net, during the first nine months of fiscal 2023 represents cash paid for operating lease payments in excess of operating lease costs.

Our days sales outstanding (“DSOs”) decreased from 97 for the first nine months of fiscal 2022 to 94 for the first nine months of fiscal 2023. The calculation of DSOs includes accounts receivables, net and contract assets for unbilled receivables, net included in prepaid expenses and other. Our inventory turns decreased from 2.0 for the first nine months of fiscal 2022 to 1.7 for the first nine months of fiscal 2023 due to the increases in inventory as described in “Overview” above.

Cash Paid for Interest, Net

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

	Nine Months Ended July 29, 2023
Term Loan due September 28, 2025 ⁽¹⁾	\$ 31,913
Term Loan due January 31, 2030 ⁽²⁾	18,448
Senior Notes due January 31, 2030 ⁽³⁾	8,000
Interest rate swaps ⁽⁴⁾	(6,266)
ABL Credit Facility ⁽⁵⁾	1,532
Finance leases	3,082
Cash paid during period	<u>\$ 56,709</u>

⁽¹⁾ Interest on the 2025 Term Loan is payable periodically based on the interest period selected for borrowing. The 2025 Term Loan bore interest at LIBOR for the chosen borrowing period plus a spread of 1.75% subject to a minimum LIBOR rate of 0.00% through its amendment on January 19, 2023. The 2025 Term loan now bears interest at SOFR for the chosen borrowing

period plus a spread of 1.75% subject to a minimum SOFR rate of 0.00%. At the end of the third quarter of fiscal 2023, the interest rate on the 2025 Term Loan was 7.00%.

(2) Interest on the 2030 Term Loan is payable periodically based on the interest period selected for borrowing. The 2030 Term Loan bears interest at SOFR for the chosen borrowing period plus a spread of 2.50% subject to a minimum SOFR rate of 0.00%. At the end of the third quarter of fiscal 2023, the interest rate on the 2030 Term Loan was 7.75%.

(3) The 2030 Notes bear interest at a rate of 4.00% per annum and mature on January 31, 2030. Interest is payable on the 2030 Notes in arrears on January 31 and July 31 of each year.

(4) The interest rate swaps and the basis swap fix the SOFR rate for \$350.0 million of the 2025 Term Loan at 2.883% through September 2023. In addition, the 2028 interest rate swaps fix the SOFR rate for \$350.0 million of the 2030 Term Loan at 3.47% through January 2028.

(5) During the first nine months of fiscal 2023, we utilized the ABL Credit Facility to collateralize certain standby letters of credit and paid \$1.5 million in commitment fees, interest expense, and other administrative charges relating to the ABL Credit Facility.

For additional information about our debt, ABL Credit Facility and interest rate swaps, see Notes 15, 16 and 17 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

Contractual Obligations

Our contractual obligations have not changed materially since October 29, 2022, except for the items listed below. For a summary of our contractual obligations, see Item 7 of Part II of the 2022 Annual Report.

Purchase Order Obligations. As of July 29, 2023 we had \$1.7 billion in outstanding purchase order commitments to our contract manufacturers and component suppliers for inventory. In certain instances, we are permitted to cancel, reschedule, or adjust these orders. Consequently, only a portion of this amount relates to firm, non-cancelable, and unconditional obligations.

Debt. As of July 29, 2023, we had \$498.8 million outstanding principal associated with our 2030 Term Loan, with \$5.0 million payable within 12 months. Interest on the 2030 Term Loan and payments due under the interest rate swaps are variable and calculated using the rate in effect on the balance sheet date. Future interest payments associated with the 2030 Term Loan total \$246.8 million, with \$39.3 million payable within 12 months. For additional information about the 2030 Term Loan, see Note 16 to our Condensed Consolidated Financial Statements included in Item I of Part I of this report.

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 materially 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 29, 2022. For a discussion of our critical accounting policies and estimates, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7 of Part II of our 2022 Annual 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

We are exposed to market risk related to changes in interest rates and foreign currency exchange rates. For a discussion of quantitative and qualitative disclosures about market risk, see Item 7A of Part II of our 2022 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 23 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

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 2022 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 2022 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. Except as set forth below, there has been no material change to our Risk Factors from those presented in our 2022 Annual Report.

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. Historically, a significant portion of our quarterly revenue was generated from customer orders received during that same quarter (which we refer to as “book to revenue”) and was therefore less predictable and subject to fluctuation due to a quarterly shortfall in orders from expectations. During fiscal 2022, however, we generated a significant backlog of customer orders, and more recently, our revenue has been more significantly impacted by availability of supply, as well as customer delivery deferrals of existing backlog. During the first nine months of fiscal 2023, certain customers, including communications service providers and cable and multiservice operators in North America and Web-scale providers, that had earlier placed significant advanced orders, rescheduled deliveries for a portion of such orders, which can adversely impact revenue. As supply chain conditions have begun to improve, we have increased shipments and reduced lead times, which has eliminated the need for such advance orders from customers, and our backlog has decreased in recent quarters. We expect our backlog to continue to reduce. As that happens, we expect our reliance upon securing quarterly book to revenue orders to grow and those orders to represent a more typical composition of our quarterly revenue over time. However, within these dynamics, our results for a particular period can be difficult to predict. These dynamics, as well as a range of factors, including those set forth below, can materially adversely affect quarterly revenue, gross margin, and operating results:

- 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;

- the timing of revenue recognition on sales, particularly relating to large orders;
- availability of components and manufacturing capacity;
- 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;
- long- and short-term changing behaviors or customer needs that impact demand for our products and services or the products and services of our 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 or efforts to withdraw from or materially modify international trade agreements;
- factors beyond our control such as natural disasters, climate change, acts of war or terrorism, and public health emergencies, such as the COVID-19 pandemic;
- the financial stability of our customers and suppliers;
- consolidation activity among our customers, suppliers, and competitors;
- installation service availability and readiness of customer sites;
- 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.

Our backlog may not be an accurate indicator of our level and timing of future revenues.

As a result of order volumes growth in prior periods, together with supply chain constraints, our backlog grew from \$1.2 billion at the end of fiscal 2020 to \$4.2 billion at the end of fiscal 2022. However, our order volumes began to moderate in the fourth quarter of fiscal 2022. We expect order volumes to normalize over time and we do not expect the very high level of orders we experienced in earlier periods in fiscal 2021 and fiscal 2022 to continue in the long-term. As supply chain conditions and lead times improve, we expect our backlog to reduce, which was the case in the first nine months of fiscal 2023. Backlog may be fulfilled several quarters following receipt of a purchase order, either due to customer schedules or delays caused by supply chain constraints. Generally, our customers may cancel, delay delivery or change their orders with limited advance notice, or they may decide not to accept our products and services, although instances of both cancellation and non-acceptance have been rare historically. Backlog also includes certain service obligations that may relate to a multi-year support period. As a result, backlog should not necessarily be viewed as an accurate indicator of future revenue for any particular period.

Accurately matching necessary inventory levels to customer demand within the current environment is challenging, and we may incur additional costs or be required to write off significant inventory that would adversely impact our results of operations.

From the second quarter of fiscal 2021 through the third quarter of fiscal 2022, we received unprecedented orders for our products and services, and matching necessary inventory to fulfill that demand within the current supply and demand environment is challenging. We have taken and continue to take a number of steps to mitigate these challenges, including extending our purchase commitments and placing non-cancellable, advanced orders with or through suppliers, particularly for long lead time components. As of July 29, 2023 we had \$1.7 billion in outstanding purchase order commitments to our contract manufacturers and component suppliers for inventory. We have also been expanding our manufacturing capacity and have been accumulating raw materials inventory of components that are available, in some cases with expanded lead times, in an effort to prepare us to be able to produce finished goods more quickly when supply constraints ease for certain common components, including integrated circuit components, for which delivery continues to be delayed. As a result of this strategy, our inventory has increased from \$374.3 million at the end of fiscal 2021 to \$1.2 billion at the end of the third quarter of fiscal 2023. These

inventory practices, and their associated costs, have had, and we expect them to continue to have, an adverse impact on our cash from operations.

These inventory practices, particularly when considered in the context of our backlog, further introduce obsolescence risk that can impact our results of operations and financial condition. During the first nine months of fiscal 2023, certain customers, including communications service providers and cable and multiservice operators in North America and Web-scale providers, that had earlier placed significant advanced orders, rescheduled deliveries for a portion of such orders. Accordingly, our inventory needs for a particular period can fluctuate and be difficult to predict. If our customers were to cancel or delay orders for extended periods, as a result of increased lead times or otherwise, inventory could become obsolete and we could be required to write off or write down the inventory associated with those orders. In addition, if customers were to cancel or delay existing or forecasted orders for which we have significant outstanding commitments to our contract manufacturers or suppliers, we may be required to purchase inventory under these commitments that we are unable to sell. If we are required to write off or write down a significant amount of inventory, our results of operations for the applicable period would be materially adversely affected. Our inability to effectively manage the matching of inventory with customer demand within the current environment could adversely impact our results of operations and financial condition, and could result in loss of revenue, increased costs, or delays that could adversely impact customer satisfaction.

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, including those 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;
- the impact of wage inflation and labor shortages on cost;
- the impact of supply chain constraints on our contract manufacturers' costs and business models;
- risks associated with the ability of our contract manufacturers to perform to our manufacturing needs;
- 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 pandemics or widespread health epidemics such as the COVID-19 pandemic;
- risks associated with data security breaches, interdiction, or cyber-attacks targeting our third-party manufacturers, including manufacturing disruptions or unauthorized access to information;
- changes in 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.

If our contract manufacturers are unable or unwilling to manufacture our products or components of our products, or if we experience a disruption in manufacturing, 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. 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. These and other risks associated with our contract manufacturers' businesses, financial condition, and the geographies in which they operate could impair our ability to fulfill orders, harm our sales and impact our reputation with customers in ways that adversely impact our business and results of operations.

Outstanding indebtedness under our senior secured credit facilities and senior unsecured notes may adversely affect our liquidity and results of operations and could limit our business.

We are a party to credit agreements relating to a \$300.0 million senior secured asset-based revolving credit facility, an outstanding senior secured term loan with approximately \$670.5 million due 2025, an outstanding senior secured term loan with approximately \$498.8 million due 2030, and an outstanding senior unsecured indenture pursuant to which we issued \$400.0 million in aggregate principal amount of 4.00% senior notes due 2030. The agreements governing these credit facilities contain

certain covenants that limit our ability, among other things, to incur additional debt, create liens and encumbrances, pay cash dividends, redeem or repurchase stock, enter into certain acquisition transactions or transactions with affiliates, repay certain indebtedness, make investments, or dispose of assets. The agreements also include customary remedies, including the right of the lenders to take action with respect to the collateral securing the loans, that would apply should we default or otherwise be unable to satisfy our debt obligations.

Our indebtedness could have important negative consequences, including:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing, particularly in unfavorable capital and credit market conditions;
- debt service and repayment obligations that may adversely impact our results of operations and reduce the availability of cash resources for other business purposes;
- limiting our flexibility in planning for, or reacting to, changes in our business and the markets; and
- placing us at a possible competitive disadvantage to competitors that have better access to capital resources.

We may also enter into additional debt transactions or credit facilities, including equipment loans, working capital lines of credit, senior notes, and other long-term debt, which may increase our indebtedness and result in additional restrictions on our business. In addition, major debt rating agencies regularly evaluate our debt based on a number of factors. There can be no assurance that we will be able to maintain our existing debt ratings, and failure to do so could adversely affect our cost of funds, liquidity and access to capital markets.

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 third quarter of fiscal 2023:

Period	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share ⁽¹⁾	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽¹⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in thousands) ⁽¹⁾
April 30, 2023 to May 27, 2023	—	\$ —	—	\$ 500,000
May 28, 2023 to June 24, 2023	452,109	\$ 42.58	452,109	\$ 480,750
June 25, 2023 to July 29, 2023	989,326	\$ 42.44	989,326	\$ 438,764
	<u>1,441,435</u>	<u>\$ 42.48</u>	<u>1,441,435</u>	

⁽¹⁾ On December 9, 2021, we announced that our Board of Directors authorized a program to repurchase up to \$1.0 billion of our common stock, which replaced in its entirety our previous stock repurchase program. The program may be modified, suspended, or discontinued at any time. During the third quarter of fiscal 2023, we repurchased \$61.2 million of our common stock under the stock repurchase program, and we had \$438.8 million remaining under the current repurchase authorization as of July 29, 2023.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Rule 10b5-1 Trading Arrangements

During the quarter ended July 29, 2023, none of our directors or officers (as defined in Exchange Act Rule 16a-1(f)) adopted or terminated a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement as defined in Item 408 of Regulation S-K.

Item 6. Exhibits

10.1	<u>Form of Employee Restricted Stock Unit Agreement for Ciena Corporation 2017 Omnibus Incentive Plan*</u>
10.2	<u>Form of Performance Stock Unit Agreement for Ciena Corporation 2017 Omnibus Incentive Plan*</u>
10.3	<u>Form of Market Stock Unit Agreement for Ciena Corporation 2017 Omnibus Incentive Plan*</u>
10.4	<u>Ciena Corporation Amended and Restated Incentive Bonus Plan, as amended August 22, 2023*</u>
31.1	<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>
31.2	<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>
32.1	<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>
32.2	<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>
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

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: September 6, 2023

By: /s/ Gary B. Smith
Gary B. Smith
President, Chief Executive Officer
and Director
(Duly Authorized Officer)

Date: September 6, 2023

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

**CIENA CORPORATION
2017 OMNIBUS INCENTIVE PLAN**

RESTRICTED STOCK UNIT AGREEMENT

Ciena Corporation, a Delaware corporation, (the “Company”), hereby grants restricted stock units (“Restricted Stock Units”) relating to shares of its common stock, \$0.01 par value (the “Stock”), to the individual named below as the Grantee, subject to the vesting and other terms and conditions set forth in this Restricted Stock Unit Agreement, including the attached terms and conditions and any appendix attached hereto (with supplemental or distinct terms or notices applicable for non-U.S. employees) (together, the “Agreement”). This grant is subject to the terms and conditions set forth in (i) this Agreement, (ii) the Ciena Corporation 2017 Omnibus Incentive Plan (as it may be amended from time to time, the “Plan”), and (iii) the grant details for this award contained in Grantee’s account with the Company’s selected broker. Capitalized terms not defined in this Agreement are defined in the Plan and have the meaning set forth in the Plan.

Grant Date: _____

Grant Number: _____

Name of Grantee: _____

Grantee’s Employee Identification Number: _____

Number of Restricted Stock Units Covered by Grant: _____

Vesting Schedule: _____

[One-fourth of the number of Restricted Stock Units subject to this Award will vest on the first March 20, June 20, September 20, or December 20 following the first anniversary of the Grant Date and, one-sixteenth of the number of Restricted Stock Units subject to this Award will vest on each March 20, June 20, September 20, and December 20 thereafter, provided you remain in Service on each applicable vesting date, unless otherwise provided in this Agreement.]

[OR]

[One-sixteenth of the number of Restricted Stock Units subject to this Award will vest on March 20, June 20, September 20 and December 20 of each calendar year following the Grant Date, provided that (i) the initial vesting date above shall be at least 30 days from the Grant Date, and (ii) you must remain in Service on each applicable vesting date unless otherwise provided in this Agreement.]

By accepting this grant (whether by signing this Agreement or accepting the grant electronically via the website of the Company’s selected broker), you agree to the terms and conditions in this Agreement and in the Plan and agree that the Plan will control in the event any provision of this Agreement should appear to be inconsistent unless otherwise stated herein.

Grantee: _____

(Signature)

Ciena Corporation: _____

Name: Sheela Kosaraju

Title: Senior Vice President, General Counsel and Assistant Secretary

CIENA CORPORATION
2017 OMNIBUS INCENTIVE PLAN

RESTRICTED STOCK UNIT AGREEMENT
TERMS AND CONDITIONS

Restricted Stock Unit Transferability

This grant is an award of the number of Restricted Stock Units set forth on the first page of this Agreement (or, in the case of electronic delivery, as set forth in the grant details for this Award set forth in the Company's selected broker's website), subject to the vesting conditions described in this Agreement. Your Restricted Stock Units may not be transferred, assigned, pledged, or hypothecated, whether by operation of Applicable Law or otherwise, nor may the Restricted Stock Units be made subject to execution, attachment, or similar process.

Vesting

Your Restricted Stock Units will vest as indicated on the first page of this Agreement (or, in the case of electronic delivery, in accordance with the grant details for this award set forth the Company's selected broker's website), provided you meet any applicable vesting requirements set forth in this Agreement. Any resulting fractional shares shall be rounded up to the nearest whole share; provided, that you may not vest in more than the number of Restricted Stock Units set forth on the cover sheet of this Agreement. Except as provided in this Agreement, or in any other agreement between you and the Company, no additional Restricted Stock Units will vest after your Service has terminated.

Share Delivery; Vested Restricted Stock Units; Tax-Related Items

Shares of Stock underlying the vested portion of the Restricted Stock Units will be delivered to you by the Company as soon as practicable following the applicable vesting date for those shares of Stock, but in no event beyond 2½ months after the end of the calendar year in which the shares would have been otherwise delivered or otherwise in accordance with the terms of any deferral election validly made under the Ciena Corporation Deferred Compensation Plan or any successor plan. Upon settlement of the Restricted Stock Units, a brokerage account in your name will be credited with shares of Stock representing the number of shares that vested under this grant (the "Vested Shares") net of any Tax-Related Items (as defined below), as applicable. If the vesting date is not a trading day, the Vested Shares will be delivered on the next trading day (or as soon as practicable thereafter).

Regardless of any action the Company or the Affiliate to whom you provide Services (the “Employer”) takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to the Restricted Stock Units and/or your participation in the Plan and legally applicable or deemed to be applicable to you (“Tax-Related Items”), you acknowledge that the ultimate liability for all Tax-Related Items is and remains your responsibility and may exceed the amount actually withheld by the Company or the Employer, if any. You further acknowledge that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Restricted Stock Units, including, but not limited to, the grant or vesting of the Restricted Stock Units, the issuance of shares of Stock upon settlement of the Restricted Stock Units, the subsequent sale of shares of Stock acquired pursuant to such issuance and the receipt of any dividends and/or any dividend equivalents; and (2) do not commit to and are under no obligation to structure the terms of the award or any aspect of the Restricted Stock Units to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. Further, if you have become subject to tax in more than one jurisdiction, you acknowledge that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

By accepting this award, you authorize the Company and/or the Employer, or their respective agents, at their discretion, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by one or a combination of the following: (a) requiring your payment in cash or other immediately available funds to the Company and/or the Employer; (b) withholding from your wages or other cash compensation paid to you by the Company and/or the Employer; (c) withholding from proceeds of the sale of Vested Shares either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization without further consent) (an “Automatic Sale”); (d) withholding shares of Stock to be issued upon vesting of the Restricted Stock Units; or (e) any other method of withholding determined by the Company and permitted by applicable law.

You further acknowledge that, in the event of an Automatic Sale, this irrevocable written instruction is intended to constitute an instruction pursuant to Rule 10b5-1 of the Exchange Act with the Automatic Sale intended to comply with these requirements. As such, all provisions hereof shall be interpreted consistent with Rule 10b5-1 and shall be automatically modified to the extent necessary to comply therewith. The Company shall be responsible for the payment of any brokerage commissions relating to any Automatic Sale.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates in your jurisdiction(s) to the extent permitted by the Plan, in which case you may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent in Stock. If the obligation for Tax-Related Items is satisfied by withholding in shares of Stock, for tax purposes, you are deemed to have been issued the full number of shares of Stock subject to the Vested Shares, notwithstanding that a number of the shares of Stock are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of your participation in the Plan.

The Company may refuse to issue or deliver the shares of Stock or the proceeds of the sale of shares of Stock, if you fail to comply with your obligations in connection with the Tax-Related Items.

Forfeiture of Unvested Restricted Stock Units

Except as specifically provided in this Agreement or as may be provided in other agreements between you and the Company, no additional Restricted Stock Units will vest after your Service with the Company, the Employer, or any Affiliate has terminated for any reason, and you will forfeit to the Company all of the Restricted Stock Units that have not yet vested or with respect to which all applicable restrictions and conditions have not lapsed upon such date of termination of your Service.

Deferral of Compensation

Delivery of shares underlying any award of Restricted Stock Units and treatment hereunder shall be subject to any deferral election validly made by eligible participants under the Ciena Corporation Deferred Compensation Plan or any successor plan.

Death

If your Service terminates because of your death prior to your Retirement, the unvested Restricted Stock Units granted under this Agreement will automatically vest as to the number of Restricted Stock Units that would have vested had you remained in Service for the 12-month period immediately following your death.

Disability

If your Service terminates because of your Disability prior to your Retirement, the unvested Restricted Stock Units granted under this Agreement will automatically vest as to the number of Restricted Stock Units that would have vested had you remained in Service for the 12-month period immediately following your termination on account of Disability.

Retirement (Applicable to U.S., U.K., and Canada employees at time of Grant only)

If you are a resident of the U.S., U.K., or Canada on the Grant Date and your Service terminates because of your Retirement, the unvested Restricted Stock Units granted under this Agreement and outstanding as of the date of your Retirement will (i) for eligible Grantees who are not Executive Officers or Senior Vice Presidents who report directly to the CEO, vest with respect to 100% of the underlying Stock on the first scheduled vesting date following the date of your Retirement; or (ii) for eligible Grantees who are Executive Officers or Senior Vice Presidents who report directly to the CEO, continue to vest as indicated on the first page of this Agreement (or, in the case of electronic delivery, in accordance with the grant details for this award set forth the Company's selected broker's website); in each case notwithstanding such termination of Service.

For purposes of this Agreement, "Retirement" means your voluntary termination of Service following:

- (i) your completion of 10 years of Service (which need not have been consecutive), including up to six years of prior employment or service to any entity acquired by the Company or its Affiliates (provided you have completed four years of Service following the most recent of such acquisitions); and
- (ii) your attainment of age 60;

provided, however, that in order to receive any vesting benefit under this section, you must provide the Company with 12 months (the "Notice Period") irrevocable advance written notice of your termination of Service, which notice can only be delivered after meeting the above eligibility requirements (the "Notice Requirement").

If your Service terminates for any reason after you have submitted notice of Retirement to the Company pursuant to the preceding sentence but prior to the last day of the Notice Period for any reason other than (A) by the Company without Cause (as defined in the Executive Severance Benefit Plan, or if you are not a participant in such plan, as defined in the Plan) or (B) due to your death or Disability, you will forfeit to the Company all of the Restricted Stock Units that have not yet vested or with respect to which all applicable restrictions and conditions have not lapsed upon such termination of your Service. If at any time after you have submitted notice of Retirement your Service is terminated by the Company without Cause, or your Service terminates because of your death or Disability, then the Notice Requirement will be deemed to have been satisfied.

You understand and agree that you will no longer be eligible to receive additional equity grants following submission of your notice of Retirement to the Company.

Termination For Cause

If your Service is terminated for Cause, then you shall immediately forfeit all rights to your Restricted Stock Units, and this award shall immediately terminate, effective as of the date of termination.

Leaves of Absence

For purposes of this grant, your Service does not terminate when you go on a bona fide leave of absence approved by the Company, if the terms of your leave provide for continued Service crediting, or when continued Service crediting is required by Applicable Law. The Company will determine, in its sole discretion, and in accordance with applicable laws, whether and when a leave of absence constitutes a termination of Service under the Plan.

Retention Rights

Neither your Restricted Stock Units nor this Agreement give you the right to be retained by the Company, the Employer, or any Affiliate in any capacity, and your Service may be terminated at any time and for any reason.

Shareholder Rights

You have no rights as a shareholder unless and until the shares of Stock relating to the Restricted Stock Units have been issued to you (or an appropriate book entry has been made). Except as described in the Plan or herein, no adjustments are made for dividends or other rights if the applicable record date occurs before your shares of Stock are issued (or an appropriate book entry has been made).

If the Company pays a dividend on its shares of Stock, you will, however, be entitled to receive a cash payment equal to the per-share dividend paid on the shares of Stock times the number of Restricted Stock Units that you hold as of the record date for the dividend; provided, however, such Dividend Equivalent Rights shall not vest or become payable unless and until the Restricted Stock Units to which the Dividend Equivalent Rights correspond become vested and nonforfeitable pursuant to this Agreement or the Plan.

Section 409A

The Restricted Stock Units are intended to be exempt from, or compliant with, Section 409A of the Code and any ambiguities herein will be interpreted in accordance with that intent. Each payment under this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). Notwithstanding the foregoing or any provision of the Plan or this Agreement, if any provision of the Plan or this Agreement contravenes Section 409A of the Code or could cause you to incur any tax, interest or penalties under Section 409A of the Code, the Company may, in its sole reasonable discretion and without your consent, modify such provision to (i) comply with, or avoid being subject to, Section 409A of the Code, or to avoid the incurrence of taxes, interest and penalties under Section 409A of the Code, and (ii) maintain, to the maximum extent practicable, the original intent and economic benefit to you of the applicable provision without materially increasing the cost to the Company or contravening the provisions of Section 409A of the Code. This Section does not create an obligation on the part of the Company to modify the Plan or this Agreement and does not guarantee that the Restricted Stock Units or the Shares underlying the Restricted Stock Units will not be subject to interest and penalties under Section 409A of the Code.

Nature of Grant

Notwithstanding anything to the contrary in the Plan or this Agreement, to the extent that you are a “specified employee” (within the meaning of the Company’s established methodology for determining “specified employees” for purposes of Section 409A of the Code), payment or distribution of any amounts with respect to any Restricted Stock Unit that is subject to Section 409A of the Code will be made as soon as practicable following the first business day of the seventh month following your “separation from service” (within the meaning of Section 409A of the Code) from the Company and its Affiliates, or, if earlier, the date of your death.

In accepting the award and the Restricted Stock Units, you acknowledge, understand, and agree that:

- (1) the Plan is established voluntarily by the Company, it is discretionary in nature, and it may be modified, amended, suspended, or terminated by the Company at any time;
 - (2) the grant of the Restricted Stock Units is voluntary and occasional and does not create any contractual or other right to receive future grants of Restricted Stock Units, or benefits in lieu of Restricted Stock Units, even if Restricted Stock Units have been granted in the past;
 - (3) all decisions with respect to future Restricted Stock Unit grants, if any, will be at the sole discretion of the Company;
 - (4) your participation in the Plan is voluntary;
 - (5) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not intended to replace any pension rights;
 - (6) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not part of normal or expected compensation for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end of Service payments, bonuses, holiday pay, long-service awards, pension or retirement or welfare benefits, or similar payments, except if and as explicitly required by applicable law;
 - (7) the Restricted Stock Unit grant and your participation in the Plan will not be interpreted to form or amend a Service contract or relationship with the Company, the Employer, or any Affiliate;
 - (8) the future value of the underlying shares of Stock is unknown and cannot be predicted with certainty;
-

(9) no claim or entitlement to compensation or damages shall arise from forfeiture of the Restricted Stock Units resulting from termination of your Service relationship with the Company or the Employer except as otherwise set forth in this Agreement (whether or not in breach of contract or local employment laws in the country where you reside, even if otherwise applicable to your employment benefits from the Employer, and/or later found to be invalid), and in consideration of the grant of the Restricted Stock Units, you irrevocably agree never to institute any claim against the Company, the Employer, or any Affiliate, waive your ability, if any, to bring any such claim, and release the Company, the Employer, and any Affiliate from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by accepting this award of Restricted Stock Units, you shall be deemed irrevocably to have agreed not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claims;

(10) except as otherwise set forth in this Agreement, in the event of termination of your Service relationship (whether or not in breach of contract or local employment laws in the country where you reside, even if otherwise applicable to your employment benefits from the Employer, and/or later found to be invalid), your right to vest in the Restricted Stock Units under the Plan, if any, will terminate effective as of the date that you are no longer actively providing Services to the Company, the Employer, or any Affiliate as a Service Provider and will not be extended by any notice period mandated under local law (e.g., active Service as a Service Provider would not include a period of "garden leave" or similar period); the Committee shall have the exclusive discretion to determine when you are no longer actively providing Services for purposes of your Restricted Stock Units grant;

(11) the Restricted Stock Units and the benefits evidenced by this Agreement do not create any entitlement, not otherwise specifically provided for in the Plan or by the Company in its discretion, to have the Restricted Stock Units or any such benefits transferred to, or assumed by, another company, nor to be exchanged, cashed out, or substituted for, in connection with any corporate transaction affecting the Stock (including a Corporate Transaction);

(12) unless otherwise agreed with the Company, the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of same, are not granted as consideration for, or in connection with, the service you may provide as a director of an Affiliate of the Company; and

(13) the following provisions apply only if you are providing Services outside the United States:

(A) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not part of normal or expected compensation or salary for any purpose and in no event should be considered as compensation for, or relating in any way to, past Services for the Company, the Employer, or

any Affiliate; and

(B) you acknowledge and agree that neither the Company, the Employer, nor any Affiliate shall be liable for any foreign exchange rate fluctuation between the Employer's local currency and the United States dollar that may affect the value of any proceeds from the sale of shares of Stock acquired under the Plan.

Forfeiture; Recoupment

This Award shall be subject to mandatory repayment by the Grantee to the Company (i) to the extent set forth in the Plan or this Award Agreement or (ii) to the extent the Grantee is, or in the future becomes, subject to (A) any Company or Affiliate "clawback" or recoupment policy that is adopted by the Company, including to comply with the requirements of Applicable Law, or (B) any Applicable Law that imposes mandatory recoupment, under circumstances set forth in such Applicable Law.

Data Privacy

*(a) **Declaration of Consent.** If you would like to participate in the Plan, you understand that you need to review the following information about the processing of your personal data by or on behalf of the Company, the Employer, and/or any Affiliate as described in this Agreement and any other Plan materials (the "Personal Data") and declare your consent. As regards the processing of your Personal Data in connection with the Plan and the Agreement, you understand that the Company is the controller of your Personal Data.*

*(b) **Data Processing and Legal Basis.** The Company collects, uses, and otherwise processes Personal Data about you for the purposes of allocating shares of Stock and implementing, administering, and managing the Plan. You understand that this Personal Data may include, without limitation, your name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company or its Affiliates, details of all Restricted Stock Units or any other entitlement to shares of stock awarded, canceled, purchased, vested, unvested or outstanding in your favor. The legal basis for the processing of the Personal Data will be your consent.*

*(c) **Stock Plan Administration Service Provider.** You understand that the Company transfers your Personal Data, or parts thereof, to E*TRADE Financial Corporate Services, Inc. (and its affiliated companies), an independent service provider based in the United States, which assists the Company with the implementation, administration, and management of the Plan. In the future, the Company may select a different service provider and share your Personal Data with such different service provider that serves the Company in a similar manner. You understand and acknowledge that the Company's service provider will open an account for you to receive and trade shares purchased under the Plan and that you will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of your ability to participate in the Plan.*

(d) International Data Transfers. You understand that the Company and any third parties assisting in the implementation, administration, and management of the Plan, such as the Company's service providers, are based in the United States as of the date hereof. If you are located outside the United States, you understand and acknowledge that your country has enacted data privacy laws that are different from the laws of the United States. The Company's legal basis for the transfer of your Personal Data is your consent.

(e) Data Retention. You understand that the Company will use your Personal Data only as long as is necessary to implement, administer, and manage your participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, you understand and acknowledge that the Company's legal basis for the processing of your Personal Data would be compliance with the relevant laws or regulations or the pursuit by the Company of respective legitimate interests not outweighed by your interests, rights, or freedoms. When the Company no longer needs your Personal Data for any of the above purposes, you understand the Company will remove it from its systems.

(f) Voluntariness and Consequences of Denial/Withdrawal of Consent. You understand that your participation in the Plan and your grant of consent is purely voluntary. You may deny or later withdraw your consent at any time, with future effect, and for any or no reason. If you deny or later withdraw your consent, the Company can no longer offer participation in the Plan or offer other awards to you or administer or maintain such awards, and you would no longer be able to participate in the Plan. You further understand that denial or withdrawal of your consent would not affect your status or salary as an employee or your career and that you would merely forfeit the opportunities associated with the Plan.

(g) Data Subject Rights. You understand that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where you are based and subject to the conditions set out in the applicable law, you may have, without limitation, the right to (i) inquire whether and about what kind of Personal Data the Company holds about you and how it is processed,

and to access or request copies of such Personal Data; (ii) request the correction or supplementation of Personal Data about you that is inaccurate, incomplete, or out-of-date in light of the purposes underlying the processing; (iii) request the erasure of Personal Data that is (A) no longer necessary for the purposes underlying the processing, (B) processed based on withdrawn consent, (C) processed for legitimate interests that, in the context of your objection, do not prove to be compelling, or (D) processed in non-compliance with applicable legal requirements; (iv) request the Company to restrict the processing of your Personal Data in certain situations where you feel its processing is inappropriate; (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests; and (vi) request

portability of your Personal Data that you have actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or your employment or service contract and is carried out by automated means. In case of concerns, you understand that you may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of or to exercise any of your rights, you understand that you should contact your local human resources representative or Ciena's stock administration department.

By signing this Agreement or, in case this information is presented electronically, by clicking the "Accept" or similar button implemented into the relevant web page or platform, you declare, without limitation, your consent to the data processing operations described in this Agreement. You understand that you may withdraw your consent at any time with future effect for any or no reason as described in this section.

No Advice Regarding Grant

The Company is not providing any tax, legal, or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the Stock underlying your Restricted Stock Units. You are hereby advised to consult with your own personal tax, legal, and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

Applicable Law and Venue

The Restricted Stock Units and the provisions of this Agreement are governed by, and subject to, the laws of the State of Delaware, without regard to the conflict of law provisions.

For purposes of litigating any dispute that arises under this award or the Agreement, the parties hereby submit to and consent to the jurisdiction of the State of Delaware, and agree that such litigation shall be conducted in the state courts of Delaware, or the federal courts for the District of Delaware, and no other courts, where this grant is made and/or to be performed. ***You agree to waive your rights to a jury trial for any claim or cause of action based upon or arising out of this Agreement or the Plan.***

Language

You acknowledge that you are sufficiently proficient in the English language, or have consulted with an advisor who is sufficiently proficient in English, so as to allow you to understand the terms and conditions of this Agreement. Further, if you have received this Agreement, or any other document related to this Award and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control. You acknowledge that you are sufficiently proficient in English to understand the terms and conditions of this Agreement.

Electronic Delivery and Acceptance

The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means or request your consent to participate in the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Company, the Company's designated broker, or their respective third parties. If you fail to submit a written rejection of this award to the Company's Stock Administration Department prior to the date on which this award initially vests, this award shall be deemed accepted by you and the terms of this award and the Plan shall apply to the same extent as if you had accepted your award electronically via the website of the Company's selected broker.

Severability; Integration

The provisions of this Agreement are severable, and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable. This Agreement contains the entire agreement with regard to the Restricted Stock Units awarded hereby; provided that in the event you are eligible to receive vesting benefits pursuant to an individual agreement with the Company that are more favorable than the vesting benefits provided hereunder, you will receive the vesting benefits under such agreement.

Waiver

You acknowledge that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach of this Agreement.

Country-Specific Provisions: Appendix A

Notwithstanding any provisions in this Agreement, this award of Restricted Stock Units shall be subject to any additional terms and conditions set forth in Appendix A to this Agreement for your country. Moreover, if you relocate to one of the countries included in Appendix A, the terms and conditions for such country will apply to you, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons.

Foreign Account / Assets Reporting and Exchange Controls

Depending upon the country to which laws you are subject, you may have certain foreign asset and/or account reporting requirements and exchange controls which may affect your ability to acquire or hold shares of Stock under the Plan or cash received from participating in the Plan (including from any dividends received or sale proceeds arising from the sale of shares of Stock) in a brokerage or bank account outside your country of residence. Your country may require that you report such accounts, assets or transactions to the applicable authorities in your country. You may be required to repatriate sale proceeds or other funds received as a result of your participation in the Plan to your country through a designated bank or broker within a certain time after receipt. You are responsible for knowledge of and compliance with any such regulations and should speak with your own personal tax, legal and financial advisors regarding the same.

Insider Trading / Market Abuse Laws

You acknowledge that, depending on your country, you may be subject to insider trading restrictions and/or market abuse laws, which may affect your ability to acquire or sell shares of Stock or rights to shares of Stock (e.g., Restricted Stock Units) under the Plan during such times as you are considered to have “inside information” regarding the Company (as defined by the laws in your country). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Company. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you should consult with your own personal legal and financial advisors on this matter.

Imposition of Other Requirements

The Company reserves the right to impose other requirements on your participation in the Plan, on the award, on the Restricted Stock Units, and on any shares of Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

This Agreement is not a stock certificate or a negotiable instrument.

**APPENDIX A
TO
RESTRICTED STOCK UNIT AGREEMENT
FOR GRANTEES LOCATED OUTSIDE THE UNITED STATES**

Terms and Conditions

This Appendix A includes additional terms and conditions that govern the Restricted Stock Units granted to Grantees who reside in the countries listed herein. These terms and conditions are in addition to or, if so indicated, in replacement of the terms and conditions set forth in the Agreement. Any capitalized term used in this Appendix A without definition shall have the meaning ascribed to such term in the Plan or the main body of this Agreement, as applicable.

Notifications

This Appendix A also includes information regarding exchange control, foreign asset and/or account, securities and other laws in effect in the respective countries as of August 2023. Such laws are often complex and change frequently. As a result, the Company strongly recommends that you not rely on the information herein as the only source of information relating to the consequences of your participation in the Plan because the information may be out of date at the time your Restricted Stock Units vest or you sell shares of Stock. In addition, the information is general in nature and might not apply to your particular situation, and the Company is not in a position to assure you of any particular result. Accordingly, you are advised to seek appropriate professional advice as to how the relevant laws in your country may apply to your situation.

Finally, note that if you are a citizen or resident of a country other than the one in which you are currently working and/or residing, or are considered a resident of another country for local law purposes or if you transfer employment and/or residency to another country after the Grant Date, the information contained herein may not be applicable to you in the same manner. In addition, the Company shall, in its sole discretion, determine to what extent the additional terms and conditions included herein will apply to you under these circumstances.

ARGENTINA

Terms and Conditions

Acknowledgment of Nature of Grant. The following provision supplements the Nature of Grant section of the Agreement:

In accepting the grant of the Award, you acknowledge and agree that the grant of the Award is made by the Company (not the Employer) in its sole discretion and that the value of any Awards or shares of Stock acquired under the Plan shall not constitute salary or wages for any purpose under Argentine labor law, including the calculation of (i) any labor benefits including, but not limited to, vacation pay, thirteenth salary, compensation in lieu of notice, annual bonus, disability, and leave of absence payments, or (ii) any termination or severance indemnities.

If, notwithstanding the foregoing, any benefits under the Plan are considered for purposes of calculating any termination or severance indemnities, you acknowledge and agree that such benefits shall not accrue more frequently than on an annual basis.

Notifications

Securities Law Information. Neither the Restricted Stock Units nor the underlying shares of Stock are publicly

offered or listed on any stock exchange in Argentina. The offer is private and not subject to the supervision of any Argentine governmental authority.

Exchange Control Information. Exchange control regulations in Argentina are subject to frequent change. You are solely responsible for complying with any exchange control obligations that you may have in connection with participation in the Plan and should consult with your personal legal advisor regarding same.

AUSTRALIA

Notifications

Securities Law Information. This offer is being made under Division 1A, Part 7.12 of the Corporations Act 2001 (Cth).

Please note that if you offer shares of Stock for sale to a person or entity resident in Australia, the offer may be subject to disclosure requirements under Australian law. You should obtain legal advice regarding any relevant disclosure obligations prior to making any such offer.

Tax Information. Subdivision 83A-C of the Income Tax Assessment Act, 1997, applies to Restricted Stock Units granted under the Plan, such that the Restricted Stock Units are intended to be subject to deferred taxation.

AUSTRIA

Notifications

Exchange Control Information. You understand that if you hold shares of Stock acquired under the Plan outside of Austria, you will be required to submit reports to the Austrian National Bank on a quarterly basis if the value of the shares of Stock as of any given quarter meets or exceeds €5,000,000. If quarterly reporting is required, the reports must be filed on or before the 15th day of the month following the last day of the respective quarter.

When shares of Stock are sold or a dividend is paid on the shares of Stock, you understand that you may have exchange control obligations if you hold the cash proceeds outside Austria. If the transaction volume of all of your accounts abroad meets or exceeds €10,000,000, you understand that you must report the movements and balances of all accounts on a monthly basis, as of the last day of the month, on or before the 15th day of the following month.

BELGIUM

Notifications

Foreign Account / Assets Reporting Information. If you are a Belgian resident, you are required to report any taxable income attributable to the grant of the Restricted Stock Units on your annual tax return. In addition, you are required to report any security (e.g., shares of Stock acquired under the Plan) or bank accounts (including brokerage accounts) opened and maintained outside Belgium on your annual tax return. You also are required to complete a separate report providing the Central Contact Point of the National Bank of Belgium with details regarding any such account, including the account number, the name of the bank in which such account is held and the country in which such account is located the first time you report the foreign security and/or bank account on your annual tax return. The forms to complete this report are available on the website of the National Bank of Belgium.

BRAZIL

Terms and Conditions

Compliance with the Law. In accepting the grant of the Restricted Stock Units, you acknowledge your agreement to comply with applicable Brazilian laws and to pay any and all applicable tax associated with the vesting of the Restricted Stock Units and the sale of any shares of Stock acquired under the Plan and the receipt of any dividends.

Acknowledgment of Nature of Grant. The following provision supplements the Nature of Grant section of the Agreement:

By participating in the Plan, you acknowledge, understand and agree that (i) you are making an investment decision and (ii) the value of the shares of Stock is not fixed and may increase or decrease in value without compensation to you.

Notifications

Exchange Control Information. If you hold assets and rights outside Brazil with an aggregate value exceeding a certain threshold, you will be required to prepare and submit to the Central Bank of Brazil an annual declaration of such assets and rights, including: (i) bank deposits; (ii) loans; (iii) financing transactions; (iv) leases; (v) direct investments; (vi) portfolio investments, including shares of Stock acquired under the Plan; (vii) financial derivatives investments; and (viii) other investments, including real estate and other assets. Please note that foreign individuals holding Brazilian visas are considered Brazilian residents for purposes of this reporting requirement and must declare at least the assets held abroad that were acquired subsequent to the date of admittance as a resident of Brazil. Individuals holding assets and rights outside Brazil valued at less than the relevant threshold are not required to submit a declaration.

CANADA

Terms and Conditions

Restricted Stock Units Payable Only in Shares of Stock. Notwithstanding any discretion in the Plan or the Agreement to the contrary, Restricted Stock Units granted in Canada shall be paid in shares of Stock only and do not provide any right for you to receive a cash payment.

Canadian Securities Laws

You acknowledge and confirm that your participation in the Plan and entering into of this Agreement is voluntary and not induced by expectation of (a) employment or continued employment, if you are an employee, (b) employment or appointment or continued employment or appointment, if you are an officer, or (c) engagement to provide services or continued engagement to provide services, if you are a consultant. Furthermore, if you are a consultant you also acknowledge and confirm that you are engaged to provide services to the Company or an Affiliate under a written contract with the Company or an Affiliate and spend or will spend a significant amount of time and attention on the business and affairs of the Company or an Affiliate.

Termination Date

Notwithstanding the terms of the Plan or Agreement, for the purposes of determining the date your Service with the Company, the Employer, or any Affiliate terminates (whether for cause or not, or due to death, disability or otherwise) and your entitlements thereafter, termination of Service shall mean the date at the end of the applicable statutory notice period (if any), but shall not include any period of notice at common law.

The following provisions will apply if you are a resident of Quebec:

Language Consent. The parties acknowledge that it is their express wish that the Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention, ainsi que de tous documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.

Data Privacy. This provision supplements the Data Privacy section of the Agreement:

You hereby authorize the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. You further authorize the Company, the Employer, any Affiliate and the administrator of the Plan to disclose and discuss the Plan with their advisors. You further authorize the Company, the Employer, any Affiliate and the administrator of the Plan to record such information and to keep such information in your employee file. Please note that the governments or law enforcement agencies of a foreign jurisdiction where the Company processes, stores or transfers data may be able to access your data through the laws of that jurisdiction.

Notifications

Securities Law Information. You are permitted to sell shares of Stock acquired through the Plan through the designated broker appointed under the Plan, if any, provided the resale of shares of Stock acquired under the Plan takes place outside of Canada through the facilities of a stock exchange on which the Stock is listed. Currently, the Stock is listed on the New York Stock Exchange.

Foreign Account / Assets Reporting Information. Foreign property, including Restricted Stock Units, shares of Stock acquired under the Plan and other rights to receive shares (e.g., Restricted Stock Units) of a non-Canadian company held by a Canadian resident must generally be reported annually on a Form T1135 (Foreign Income Verification Statement) if the total cost of the foreign property exceeds C\$100,000 at any time during the year. Thus, such Restricted Stock Units must be reported - generally at a nil cost - if the C\$100,000 cost threshold is exceeded because other foreign property is held by you. When shares of Stock are acquired, their cost generally is the adjusted cost base ("ACB") of the shares. The ACB would ordinarily equal the fair market value of the shares at the time of acquisition, but if you own other shares of the same company, this ACB may have to be averaged with the ACB of the other shares. You should consult with your personal tax advisor to determine your reporting requirements.

COLOMBIA

Terms and Conditions

Acknowledgment of Nature of Grant. The following provision supplements the Nature of Grant section of the Agreement:

You acknowledge that pursuant to Article 128 of the Colombian Labor Code, the Plan and related benefits do not constitute a component of your "salary" for any legal purpose. To this extent, they will not be included and/or considered for purposes of calculating any and all labor benefits, such as legal/fringe benefits, vacations, indemnities, payroll taxes, social insurance contributions and/or any other labor-related amount which may be payable.

Notifications

Exchange Control Information. Investments in assets located abroad (including shares of Stock) are subject to registration with the Central Bank (Banco de la República) if your aggregate investments held abroad (as of December 31 of the applicable calendar year) equal or exceed US\$500,000. Further, when shares of Stock (or other investments) held abroad are sold, you may either choose to keep the resulting sums abroad, or to repatriate them to Colombia. If you choose to repatriate funds to Colombia and have not registered the investment with Banco de la República, you will need to file with Banco de la República Form No. 5 upon conversion of funds into local currency, which should be duly completed to reflect the nature of the transaction. If you have registered the investment with Banco de la República, then you will need to file with Banco de la República Form No. 4 upon conversion of funds into local currency, which should be duly completed to reflect the nature of the transaction. You should obtain proper legal advice in order to ensure compliance with applicable Colombian regulations.

DENMARK

Terms and Conditions

Stock Options Act. You acknowledge that you received an Employer Statement in Danish which sets forth the terms of your Restricted Stock Units under the Act on Stock Options.

FRANCE

Terms and Conditions

Tax Information. The Restricted Stock Units are not intended to be French tax-qualified Awards.

Language Consent. By signing and returning this Agreement, you confirm having read and understood the documents relating to the Plan which were provided to you in the English language. You accept the terms of those documents accordingly.

En signant et renvoyant ce Contrat vous confirmez ainsi avoir lu et compris les documents relatifs au Plan qui vous ont été communiqués en langue anglaise. Vous en acceptez les termes en connaissance de cause.

Notifications

Foreign Account / Assets Reporting Information. You may hold shares of Stock acquired under the Plan outside of France provided that you declare all foreign accounts, whether open, current, or closed in your income tax return. Failure to comply could trigger significant penalties.

GERMANY

Notifications

Foreign Account / Assets Reporting Information. If your acquisition of shares of Stock under the Plan leads to a “qualified participation” at any point during the calendar year, you will need to report the acquisition of shares of Stock when you file your tax return for the relevant year. A qualified participation is attained if (i) the shares held exceed 1% of the Company’s total Stock and the value of the shares acquired exceeds €150,000 or (ii) the shares held exceed 10% of the Company’s total Stock. You should consult with your personal tax advisor to ensure you comply with applicable reporting obligations.

GREECE

There are no country-specific provisions.

HONG KONG

Terms and Conditions

Sale of Shares. Shares of Stock received at vesting are accepted as a personal investment. If the Award vests within six months of the Grant Date, you agree that you will not dispose of the shares of Stock acquired prior to the six-month anniversary of the Grant Date.

Securities Law Information. Warning: The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of the Agreement or the Plan, you should obtain independent professional advice. Neither the grant of the Restricted Stock Units nor the issuance of shares of Stock upon vesting constitutes a public offering of securities under Hong Kong law and are available only to employees, directors or consultants of the Company, the Employer or an Affiliate. The Agreement, the Plan and other incidental communication materials (i) have not been prepared in accordance with and are not intended to constitute a “prospectus” for a public offering of securities under the applicable securities legislation in Hong Kong and (ii) are intended only for the personal use of each eligible employee, director or consultant of the Company, the Employer or an Affiliate and may not be distributed to any other person.

Notifications

Nature of Scheme. The Company specifically intends that the Plan will not be an occupational retirement scheme for purposes of the Occupational Retirement Schemes Ordinance (“ORSO”). Notwithstanding the foregoing, if the Plan is deemed to constitute an occupational retirement scheme for the purposes of ORSO, the grant of the Restricted Stock Units shall be void.

INDIA

Notifications

Exchange Control Information. You understand that you must repatriate any cash dividends paid on shares of Stock acquired under the Plan and any proceeds from the sale of such shares to India within a certain period of time after receipt of the proceeds. You will receive a foreign inward remittance certificate (“FIRC”) from the bank where you deposit the foreign currency. You should maintain the FIRC as evidence of the repatriation of funds in the event the Reserve Bank of India or your Employer requests proof of repatriation. You may be required to provide information regarding funds received from participation in the Plan to the Company and/or the Employer to enable them to comply with their filing requirements under exchange control laws in India. You are personally responsible for complying with exchange control laws in India, and neither the Company nor the Employer will be liable for any fines or penalties resulting from your failure to comply with applicable laws.

Foreign Asset / Account Reporting. You are required to declare the following items in your annual tax return: (i) any foreign assets held by you (including shares of Stock acquired under the Plan), and (ii) any foreign bank accounts for which you have signing authority. It is your responsibility to comply with applicable tax laws in India. You should consult with your personal tax advisor to ensure that you are properly reporting your foreign assets and bank accounts.

INDONESIA

Terms and Conditions

Language Consent. By accepting the Award, you (i) confirm having read and understood the documents relating to the Award (i.e., the Plan and the Agreement) which were provided in the English language, (ii) accept the terms of those documents accordingly, and (iii) agree not to challenge the validity of this document based on Law No. 24 of 2009 on National Flag, Language, Coat of Arms and National Anthem or the implementing Presidential Regulation (when issued).

Persetujuan Bahasa. Dengan menerima Pemberian, anda (i) memberikan konfirmasi bahwa anda telah membaca dan memahami dokumen-dokumen berkaitan dengan Pemberian ini (yaitu, Program dan Perjanjian) yang disediakan dalam Bahasa Inggris, (ii) menerima persyaratan di dalam dokumen-dokumen tersebut, dan (iii) setuju untuk tidak mengajukan keberatan atas keberlakuan dari dokumen ini berdasarkan Undang-Undang No. 24 Tahun 2009 tentang Bendera, Bahasa dan Lambang Negara serta Lagu Kebangsaan ataupun Peraturan Presiden sebagai pelaksanaannya (ketika diterbitkan).

Notifications

Exchange Control Information. For foreign currency transactions exceeding US\$25,000, the document(s) underlying that transaction will have to be submitted to the relevant local bank. If Indonesian residents repatriate funds (e.g., proceeds from the sale of shares of Stock acquired under the Plan) into Indonesia, the Indonesian bank through which the transaction is made will submit a report of the transaction to the Bank of Indonesia. For transactions of US\$10,000 or more (or its equivalent in other currency), a more detailed description of the transaction must be included in the report and Indonesian residents may be required to provide information about the transaction to the bank in order to complete the transaction.

In addition, if there is a change of position (i.e., sale of shares) in any foreign assets you holds (including shares of Stock acquired under the Plan), Indonesian residents must report this change to the Bank of Indonesia no later than the 15th day of the month following the change in position.

Foreign Account / Assets Reporting Information. Indonesian residents have the obligation to report worldwide assets (including foreign accounts and shares of Stock acquired under the Plan) in their annual individual income tax return.

IRELAND

Notifications

Director Notification Information. If you are a director, shadow director, or secretary of an Irish Affiliate, pursuant to the Companies Act 2014, you must (a) notify that Affiliate in writing if you receive or dispose of an interest exceeding in the aggregate 1% of the share capital of the Company (e.g., Restricted Stock Units, shares of Stock or debenture), (b) if you become aware of the event giving rise to the notification requirement, or (c) if you become a director or secretary if such an interest exceeding 1% in the aggregate of the share capital of the Company exists at the time. This notification requirement also applies with respect to the interests of a spouse, civil partner, or minor children (whose interests will be attributed to the director, shadow director, or secretary). You should consult your personal legal advisor to ensure compliance with the applicable requirements.

ISRAEL

Terms and Conditions

The following provisions apply to Grantees who are in Israel on the Grant Date.

Trustee Arrangement. You understand and agree that the grant of Restricted Stock Units is offered subject to and in accordance with the terms of the Plan, the Israeli Subplan to the Plan (the “Subplan”), a copy of which is attached to the end of this Appendix A, under the 102 Capital Gains Track (as defined in the Subplan), the Trust Agreement among the trustee appointed by the Company or its Israeli Subsidiary, and the Agreement, including this Appendix A. You understand that the rights and the Restricted Stock Units granted under the Agreement are subject to the terms and provisions of Section 102(b)(2) of the Israel Tax Ordinance and its related rules and hereby accept such rights and the Restricted Stock Units subject to such terms and provisions. You acknowledge that your holding, sale and transfer of shares of Stock to be issued upon settlement, as well as any additional rights are therefore subject to various restrictions and limitations that are imposed by such section and its related rules, of which you are aware and with which you agree to comply.

Nature of Award. By accepting the Restricted Stock Units, you understand and agree that the grant of Restricted Stock Units is offered subject to and in accordance with the Subplan and is intended to be a 102 Capital Gains Track Grant (as defined in the Subplan). Notwithstanding the foregoing, the Company does not undertake to maintain the qualified status of the Restricted Stock Units and you acknowledge that you will not be entitled to damages of any kind if the Restricted Stock Units become disqualified and no longer qualify as a 102 Capital Gains Track Grant. Notwithstanding any provision of the Award Agreement, in the event of any inconsistencies between the Subplan, the Agreement and/or the Plan, the terms of the Subplan will govern. Further, to the extent requested by the Company or the Employer, you agree to execute any letter or other agreement in connection with the grant of the Restricted Stock Units or any future grants under the Subplan. If you fail to comply with such request, the Restricted Stock Units may not qualify as a 102 Capital Gains Track Grant.

Confirmation Letter. In connection with the grants made under the Israeli Subplan to the Plan, you must acknowledge having read and specifically accepted the terms and conditions of the Section 102 Capital Gains Award Confirmation Letter provided on the following page.

Vesting. You understand and agree that you will not require the Trustee to release or sell the shares of Stock during the Required Holding Period (as defined in the Subplan), unless permitted under Israeli tax law.

Restriction on Transfer. The Trustee shall not alienate, sell, exchange, transfer, assign, pledge, or otherwise encumber the Restricted Stock Units or the shares of Stock for you except as permitted under the Subplan and the terms of Section 102, or in the case of death, your heirs, except by will or by laws of descent and distribution.

The following provisions apply to Participants who transfer into Israel after the Grant Date.

Mandatory Sale Restriction. To facilitate compliance with local tax requirements, you agree to the sale of any shares of Stock to be issued to you upon vesting. The sale will occur (i) immediately upon vesting, (ii) following your termination of Service, or (iii) within any other time frame as the Company determines to be necessary to comply with local tax requirements. You further agree that the Company is authorized to instruct its designated broker to assist with the mandatory sale of such shares of Stock (on your behalf pursuant to this authorization) and you expressly authorize the Company’s designated broker to complete the sale of such shares of Stock. You acknowledge that the Company’s designated broker is under no obligation to arrange for the sale of the shares of Stock at any particular price. Upon the sale of the shares of Stock, the Company agrees to pay you the cash proceeds from the sale, less any brokerage fees or commissions and subject to any obligation to satisfy the Tax-Related Items.

You further agree that any shares of Stock to be issued to you shall be deposited directly into an account with the Company's designated broker. The deposited shares of Stock shall not be transferable (either electronically or in certificate form) from the brokerage account. This limitation shall apply both to transfers to different accounts with the same broker and to transfers to other brokerage firms. The limitation shall apply to all shares of Stock issued to you under the Plan, whether or not you remain in Service.

Notifications

Securities Law Information. This grant does not constitute a public offering under the Securities Law, 1968.

Confirmation Letter- 102 Capital Gains Awards

You undertake and confirm the following, pursuant to the Capital Gain Track under Section 102(b)(2) or 102(b)(3) of the Israeli Income Tax Ordinance and any regulations and rules promulgated thereunder ("Section 102"), with respect to any Restricted Stock Units granted pursuant to this Agreement under the Plan.

1. You understand and accept the provisions of Section 102 in general, and the tax arrangement under the Capital Gain Track in particular, and its tax consequences, as they apply to the Restricted Stock Units.
2. You agree that the Restricted Stock Units and any shares of Stock or rights that may be issued upon vesting of the Restricted Stock Units (or otherwise in relation to the Restricted Stock Units), will be held by a trustee appointed pursuant to Section 102 (the "Trustee") for at least the duration of the Holding Period, as defined in Section 102, and you hereby confirm that you shall not release from trust and/or sell such Restricted Stock Units, shares of Stock or rights, before the end of the Holding Period. You understand that any release of such Restricted Stock Units, shares of Stock or rights from trust, or any sale of any of them prior to the termination of the Holding Period, will result in taxation at marginal tax rates, in addition to deductions of appropriate social security, health tax contributions or other compulsory payments.
3. You understand that the grant of the Restricted Stock Units is subject to the receipt of all required approvals from the Israeli Tax Authority and compliance with the requirements of Section 102.
4. You agree to be bound by the provisions of the Company's trust agreement with the Trustee, ESOP Management and Trust Services Ltd., which holds the Restricted Stock Units for your benefit.
5. You hereby confirm that you have: (i) read and understood this letter; (ii) received all the clarifications and explanations that you requested; and (iii) had the opportunity to consult with your advisers before accepting the Restricted Stock Units.

Acceptance by Grantee

You acknowledge that, as a condition of accepting the award of Restricted Stock Units and/or participating in the Plan, by electronically accepting the Restricted Stock Units, you agree to be bound by the terms of this letter.

ITALY

Terms and Conditions

Plan Document Acknowledgment. By accepting the Restricted Stock Units, you acknowledge that you have received and reviewed a copy of the Plan, the Agreement and this Appendix A in their entirety and fully accept all provisions thereof. You further acknowledge that you have read and specifically and expressly approve the following provisions of the Agreement: Restricted Stock Unit Transferability; Vesting; Share Delivery; Vested Restricted

Stock Units; Tax-Related Items; Forfeiture of Unvested Restricted Stock Units; Retention Rights; Shareholder Rights; Nature of Grant; Applicable Law and Venue; Language; Electronic Delivery and Acceptance; Severability; Imposition of Other Requirements and the Data Privacy section included in this Appendix A.

Notifications

Foreign Account / Assets Reporting Information. If you are an Italian resident and hold investments or financial assets outside of Italy (e.g., cash, Restricted Stock Units, shares of Stock) during any fiscal year which may generate income taxable in Italy (or if you are the beneficial owner of such an investment or asset even if you do not directly hold the investment or asset), you are required to report such investments or assets on your annual tax return for such fiscal year (on UNICO Form, RW Schedule, or on a special form if you are not required to file a tax return).

JAPAN

Notifications

Foreign Account / Assets Reporting Information. You are required to report details of any assets held outside of Japan as of December 31st (including shares of Stock acquired under the Plan), to the extent such assets have a total net fair market value exceeding ¥50 million. Such report will be due by March 15th each year. You should consult with your personal tax advisor as to whether the reporting obligation applies to you and whether you will be required to report details of your outstanding Restricted Stock Units, as well as shares of Stock, in the report.

KOREA

Notifications

Sale of Shares. Korean residents that sell foreign securities (such as the shares of Stock) through non-Korean brokers or deposit funds resulting from the sale of shares in an account with an overseas financial institution may be subject to penalties. If you wish to sell shares of Stock acquired under the Plan, you should transfer the shares to a domestic investment broker in Korea and sell the shares through such broker. You are solely responsible for engaging the domestic broker. Non-compliance with the requirement to sell shares of Stock through a domestic broker can result in significant penalties. Because regulations may change without notice, you should consult with a legal advisor to ensure compliance with any regulations applicable to any aspect of your participation in the Plan.

Foreign Asset / Account Reporting. Korean residents must declare all foreign financial accounts (e.g., non-Korean bank accounts, brokerage accounts holding shares of Stock, etc.) in countries that have not entered into an “inter-governmental agreement for automatic exchange of tax information” with Korea to the Korean tax authority and file a report with respect to such accounts if the value of such accounts exceeds KRW 500 million (or an equivalent amount in foreign currency). You should consult your personal tax advisor regarding reporting requirements in Korea, including whether or not there is an applicable inter-governmental agreement between Korea and any other country where you may hold shares of Stock or cash acquired in connection with the Plan.

MALAYSIA

Notifications

Director Notification Obligation. If you are a director of the Company’s Malaysian Affiliate, you are subject to certain notification requirements under the Malaysian Companies Act. Among these requirements is an obligation to notify the Malaysian Subsidiary in writing when you receives or disposes of an interest (e.g., Restricted Stock Units or shares of Stock) in the Company or any related company. Such notifications must be made within fourteen (14) days of receiving or disposing of any interest in the Company or any related company.

MEXICO

Terms and Conditions

Acknowledgement of the Agreement. By accepting the Restricted Stock Units, you acknowledge that you have received a copy of the Plan and the Agreement, including this Appendix A, which you have reviewed. You further acknowledge that you accept all the provisions of the Plan and the Agreement, including this Appendix A. You also acknowledge that you have read and specifically and expressly approve the terms and conditions set forth in the “Nature of Grant” section of the agreement, which clearly provide as follows:

- (1) Your participation in the Plan does not constitute an acquired right;
- (2) The Plan and your participation in the Plan are offered by the Company on a wholly discretionary basis;
- (3) Your participation in the Plan is voluntary; and
- (4) The Company and its Affiliates are not responsible for any decrease in the value of any shares of Stock acquired at vesting of the Restricted Stock Units.

Labor Law Acknowledgement and Policy Statement. By accepting the Restricted Stock Units, you acknowledge that Ciena Corporation, with registered offices at 7035 Ridge Road, Hanover, Maryland 21076, U.S.A., is solely responsible for the administration of the Plan. You further acknowledge that your participation in the Plan, the grant of Restricted Stock Units and any acquisition of shares of Stock under the Plan do not constitute a Service relationship between you and the Company because you are participating in the Plan on a wholly commercial basis and your sole employer is Ciena Communications Mexico S.A. de C.V. or Ciena Mexico S.A. de C.V. (“Ciena-Mexico”). Based on the foregoing, you expressly acknowledge that the Plan and the benefits that you may derive from participation in the Plan do not establish any rights between you and Ciena-Mexico, and do not form part of the employment conditions and/or benefits provided by Ciena-Mexico, and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of the Service relationship between you and the Employer.

You further understand that your participation in the Plan is the result of a unilateral and discretionary decision of the Company, therefore, the Company reserves the absolute right to amend and/or discontinue your participation in the Plan at any time, without any liability to you.

Finally, you hereby declare that you do not reserve any action or right to bring any claim against the Company or any Affiliate for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and that you therefore grant a full and broad release to the Company, its Affiliates, branches, representation offices, shareholders, officers, agents and legal representatives, with respect to any claim that may arise.

Spanish Translation

Términos y Condiciones.

Reconocimiento del Contrato. Al aceptar las Acciones usted reconoce que ha recibido una copia del Plan y del Contrato, incluyendo el presente Anexo A, el cuál ha sido revisado por usted. Asimismo usted acepta todas y cada una de las condiciones del Plan y del Contrato, así como del presente Anexo A. Usted también acepta que ha leído y aprobado en todos y cada uno de sus términos lo establecido en el apartado de "Naturaleza del Otorgamiento" del Contrato, el cuál claramente establece que:

- (1) Su participación en el Plan no constituye un derecho adquirido;
-

(2) El Plan y su participación en el mismo son ofrecidos por la Empresa sobre una base enteramente discrecional;

(3) Su participación en el Plan es voluntaria; y

(4) La Empresa y sus Afiliadas no son responsables por cualquier descenso en el valor de las Acciones adquiridas al momento de maduración de dichas Acciones.

Reconocimiento de la Ley Laboral y Condiciones de la Política. Al aceptar las Acciones, usted reconoce que Ciena Corporation, con oficinas registradas en 7035 Ridge Road, Hanover, Maryland 21076, E.E.U.U., es la única responsable de la administración del Plan. Asimismo usted reconoce que su participación en el Plan, el otorgamiento de Acciones y cualquier adquisición de Capital bajo el Plan no constituye una relación de Servicios entre usted y la Empresa, ya que usted está participando en el Plan sobre una base netamente comercial, y su único y exclusivo patrón lo es Ciena Communications México, S.A. de C.V. ó Ciena México, S.A. de C.V. ("Ciena-México").

En relación con lo anterior, usted expresamente reconoce que el Plan y los beneficios que deriven de su participación en el mismo no establecen o constituyen ningún derecho entre usted y Ciena-México, y tampoco forman parte de sus condiciones de trabajo y/o beneficios o prestaciones otorgadas por Ciena-México, y cualquier modificación al Plan o la terminación del mismo no generarán cambios o impedimentos a los términos y condiciones de la relación de Servicios entre usted y su Patrón.

Asimismo usted acepta que su participación en el Plan es el resultado de una decisión unilateral y discrecional de la Empresa, por lo tanto la Empresa se reserva el derecho para modificar y/o discontinuar su participación en el Plan en cualquier momento, y sin que lo anterior le ocasione un perjuicio a usted.

Finalmente, usted declara y acepta que no se reserva acción o derecho alguno que ejercitar con posterioridad en contra de la Empresa o cualquier Afiliada por alguna compensación o daños y perjuicios relacionado con alguna cláusula del Plan o de los beneficios derivados del mismo, por lo que en este acto usted otorga el más amplio finiquito que en derecho proceda en favor de la Empresa, sus Afiliadas, sucursales, oficinas de representación, accionistas, agentes y representantes legales, en relación con cualquier posible contingencia que pudiera derivarse del presente.

Notifications

Securities Law Information. The Restricted Stock Units and any shares of Stock acquired under the Plan have not been registered with the National Register of Securities maintained by the Mexican National Banking and Securities Commission and cannot be offered or sold publicly in Mexico. In addition, the Plan, the Agreement and any other document relating to the Restricted Stock Units may not be publicly distributed in Mexico. These materials are addressed to you because of your existing relationship with the Company or an Affiliate, and these materials should not be reproduced or copied in any form. The offer contained in these materials does not constitute a public offering of securities, but rather constitutes a private placement of securities addressed specifically to individuals who are present employees of Ciena-Mexico made in accordance with the provisions of the Mexican Securities Market Law, and any rights under such offering shall not be assigned or transferred.

NETHERLANDS

There are no country-specific provisions.

NEW ZEALAND

Notifications

Securities Law Information. Warning: This is an offer of rights to receive shares of Stock underlying the Restricted Stock Units. Restricted Stock Units give employees a stake in the ownership of the Company. You may receive a return if dividends are paid on the shares of Stock.

If the Company runs into financial difficulties and is wound up, you will be paid only after all creditors and holders of preferred shares have been paid. You may lose some or all of your investment.

New Zealand law normally requires people who offer financial products to give information to investors before they invest. This information is designed to help investors to make an informed decision. The usual rules do not apply to this offer because it is made under an employee share scheme. As a result, you may not be given all the information usually required. You will also have fewer other legal protections for this investment.

You should ask questions, read all documents carefully, and seek independent financial advice before committing himself or herself.

In addition, you are hereby notified that the documents listed below are available for review on the Company's "Investor Relations" website at <http://investor.ciena.com>, in your online E*TRADE account, as applicable:

- (i) this Agreement, which together with the Plan sets forth the terms and conditions of participation in the Plan;
- (ii) a copy of the Company's most recent annual report (*i.e.*, Form 10-K);
- (iii) a copy of the Company's most recent published financial statements;
- (iv) a copy of the Plan; and
- (v) a copy of the Plan Prospectus.

A copy of the above documents will be sent to you free of charge on written request to Human Resources.

As noted above, you should carefully read the materials provided before making a decision whether to participate in the Plan. In addition, you should contact your tax advisor for specific information concerning your personal tax situation with regard to Plan participation.

NORWAY

There are no country-specific provisions.

POLAND

Notifications

Exchange Control Information. Polish residents are obligated to transfer funds via bank accounts if the transferred amount in a particular transaction exceeds PLN 15,000. Polish residents are required to store the documents connected with foreign exchange transactions for a period of five years, as measured from the end of the year in which such transaction occurred.

Polish residents holding foreign securities (including shares of Stock) and/or maintaining accounts abroad must report information to the National Bank of Poland. Polish residents holding foreign securities will be required to file quarterly reports with information on transactions and balances regarding foreign securities if the value (calculated individually or together with other assets/liabilities possessed abroad) exceeds PLN 7 million. The reports must be filed on special forms available on the website of the National Bank of Poland. You are responsible for complying with all applicable exchange control regulations.

PORTUGAL

Terms and Conditions

Language Consent. You hereby expressly declare that you have full knowledge of the English language and have read, understood and fully accepted and agreed with the terms and conditions established in the Plan and the Agreement.

Conhecimento da Lingua. Você pelo presente instrumento, declara expressamente que tem pleno conhecimento da língua inglesa e que leu, compreendeu e livremente aceitou e concordou com os termos e condições estabelecidas no Plano e no Acordo.

SAUDI ARABIA

Notifications

Securities Law Information. This Appendix A, the Agreement and any other Plan materials related to the grant of Restricted Stock Units under the Plan, may not be distributed in the Kingdom except to such persons as are permitted under the Offers of Securities Regulations issued by the Capital Market Authority.

The Capital Market Authority does not make any representation as to the accuracy or completeness of the Agreement including this Appendix A, the Plan or any other document relating to the offer of Restricted Stock Units under the Plan, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of the Agreement including this Appendix A, the Plan or any other document relating to the offer of Restricted Stock Units under the Plan. You are hereby advised to conduct your own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of the Agreement including this Appendix A or any other document relating to the offer of Restricted Stock Units under the Plan, you should consult an authorized financial advisor.

SINGAPORE

Terms and Conditions

Restrictions on Sale and Transferability. You hereby agree that any shares of Stock acquired pursuant to the Restricted Stock Units will not be offered for sale in Singapore prior to the six-month anniversary of the Grant Date, unless such sale or offer is made pursuant to the exemption under Part XIII Division I Subdivision (4) (other than section 280) of the Securities and Futures Act (Chap. 289, 2006 Ed.) (“SFA”).

Notifications

Securities Law Information. The grant of the Restricted Stock Units is being made pursuant to the “Qualifying Person” exemption” under section 273(1)(f) of the SFA on which basis it is exempt from the prospectus and registration requirements under the SFA and the grant of the Restricted Stock Units is not made to you with a view to the shares of Stock being subsequently offered for sale to any other party. The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore.

Director Notification Requirement. The directors, associate directors or shadow directors of a Singapore Affiliate are subject to certain notification requirements under the Singapore Companies Act. Specifically, such directors must notify the Singapore Affiliate in writing of an interest (e.g., Restricted Stock Units, shares of Stock, etc.) in the Company or any related company within two business days of (i) its acquisition or disposal, (ii) any change in a previously-disclosed interest (e.g., upon vesting of Restricted Stock Units or when shares of Stock acquired under the Plan are subsequently sold), or (iii) becoming a director.

SPAIN

Terms and Conditions

Acknowledgment of Nature of Grant. The following provision supplements the Nature of Grant section of the Agreement:

In accepting the Restricted Stock Units, you consent to participate in the Plan and acknowledge that you have received a copy of the Plan, the Agreement and this Appendix A.

You understand that the Company has unilaterally, gratuitously and in its sole discretion decided to grant Restricted Stock Units under the Plan to individuals who may be Service Providers of the Company or any Affiliate throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any Affiliate. Consequently, you understand that the Restricted Stock Units are granted on the assumption and condition that the Restricted Stock Units and any shares of Stock issued upon vesting of the Restricted Stock Units are not part of any employment contract (either with the Company or any Affiliate) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. Further, you understand that the Restricted Stock Units would not be granted to you but for the assumptions and conditions referred to herein; thus, you acknowledge and freely accept that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the grant of the Restricted Stock Units and any right to the Restricted Stock Units shall be null and void.

You understand and agree that, as a condition of the grant of the Restricted Stock Units, the termination of your status as a Service Provider for any reason (including the reasons below) will automatically result in the loss of the Restricted Stock Units to the extent the Restricted Stock Units have not vested as of the date you are no longer actively providing Service to the Company or the Employer. In particular, you understand and agree that any unvested Restricted Stock Units as of the date you are no longer actively providing Service will be forfeited without entitlement to the underlying shares of Stock or to any amount of indemnification in the event of a termination of your status as a Service Provider by reason of, but not limited to, resignation, retirement, disciplinary dismissal adjudged to be with cause, disciplinary dismissal adjudged or recognized to be without cause (i.e., subject to a “*despido improcedente*”), individual or collective dismissal adjudged or recognized to be without cause, individual or collective dismissal on objective grounds, whether adjudged or recognized to be with or without cause, material modification of the terms of employment under Article 41 of the Workers’ Statute, relocation under Article 40 of the Workers’ Statute, Article 50 of the Workers’ Statute, unilateral withdrawal by the Employer and under Article 10.3 of the Royal Decree 1382/1985. You acknowledge that you have read and specifically accept the conditions referred to in the following provisions of the Agreement: Vesting, Share Delivery; Vested Restricted Stock Units, Tax-Related Items and Nature of Grant.

Notifications

Exchange Control Information. To participate in the Plan, you agree to comply with exchange control regulations in Spain. If you hold 10% or more of the share capital of the Company or such other amount that would entitle you to join the Board, the acquisition of shares of Stock under the Plan must be declared for statistical purposes to the Dirección General de Comercio e Inversiones (the “DGCI”). Because you will not acquire the shares of Stock through the use of a Spanish financial institution, you agree to make the declaration by filing a D-6 form with the

DGCI. Generally, the D-6 form must be filed each January while the shares of Stock are owned. In addition, the sale of shares of Stock must also be declared on D-6 form filed with the DGCI in January, unless the sale proceeds exceed the applicable threshold (currently €1,502,530), in which case, the filing is due within one month after the sale.

In addition, you may be required to electronically declare to the Bank of Spain any foreign accounts (including brokerage accounts held abroad), any foreign instruments (including shares of Stock acquired under the Plan), and any transactions with non-Spanish residents (including any payments of shares of Stock made pursuant to the Plan), depending on the balances in such accounts together with the value of such instruments as of December 31 of the relevant year, or the volume of transactions with non-Spanish residents during the relevant year.

Foreign Account / Assets Reporting Information. To the extent that you hold rights or assets (e.g., cash or shares of Stock held in a bank or brokerage account) outside of Spain with a value in excess of €50,000 per type of right or asset (e.g., shares of Stock, cash, etc.) as of December 31 each year, you are required to report information on such rights and assets on your tax return for such year. After such rights or assets are initially reported, the reporting obligation will only apply for subsequent years if the value of any previously-reported rights or assets increases by more than €20,000 or if you transfer or dispose of any previously-reported rights or assets. The reporting must be completed by March 31. Failure to comply with this reporting requirement may result in penalties. Accordingly, you are advised to consult with your personal tax and legal advisors to ensure that you are properly complying with your reporting obligations.

SWEDEN

Terms and Conditions

Authorization to Withhold. This provision supplements the Share Delivery; Vested Restricted Stock Units, Tax-Related Items section of the Agreement:

Without limiting the authority of the Company and/or the Employer to satisfy their withholding obligations for Tax-Related Items as set forth in the Share Delivery; Vested Restricted Stock Units, Tax-Related Items section of the Agreement, by participating in the Plan, you authorize the Company to withhold shares or arrange for the sale of shares of Stock otherwise deliverable to you upon vesting/settlement of the Restricted Stock Units to satisfy Tax-Related Items, regardless of whether the Company and/or the Employer have an obligation to withhold such Tax-Related Items.

SWITZERLAND

Notifications

Securities Law Information. Neither this document nor any other materials relating to the Plan (i) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services (“FinSA”), (ii) may be publicly distributed or otherwise made publicly available in Switzerland to any person other than an employee of the Company or one of its Affiliates or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority.

THAILAND

Notifications

Exchange Control Information. If the proceeds from the sale of shares of Stock and any cash dividends received in relation to the shares of Stock realized in a single transaction exceed U.S.\$1,000,000, you must immediately

repatriate such proceeds to Thailand and then convert such proceeds to Thai Baht within 360 days of repatriation. In addition, you will be required to provide details of the transaction (*i.e.*, identification information and purpose of the transaction) to the receiving bank. You should consult your personal advisor before remitting proceeds into Thailand. You is responsible for ensuring compliance with all exchange control laws in Thailand.

UNITED ARAB EMIRATES

Notifications

Securities Law Information. The Restricted Stock Units are only being offered to employees and are in the nature of providing equity incentives to employees of the Company's Affiliates in the United Arab Emirates. Any documents related to the Restricted Stock Units, including the Plan, the Agreement and other grant documents ("Restricted Stock Unit Documents"), are intended for distribution only to such employees and must not be delivered to, or relied on by, any other person. Neither the Ministry of Economy nor the Dubai Department of Economic Development have approved the Plan or the Agreement nor taken steps to verify the information set out therein, and have no responsibility for such documents. You, as a prospective stockholder, should conduct your own due diligence on the securities. If you do not understand the contents of the Restricted Stock Unit Documents, you should consult an authorized financial advisor.

UNITED KINGDOM

Terms and Conditions

Restricted Stock Units Payable Only in Shares of Stock. Notwithstanding any discretion in the Plan or the Agreement to the contrary, Restricted Stock Units granted in the United Kingdom shall be paid in shares of Stock only and do not provide any right for you to receive a cash payment.

Taxes. This section supplements the Share Delivery; Vested Restricted Stock Units, Tax-Related Items section of the Agreement:

Without limitation to the provisions contained in the Share Delivery; Vested Restricted Stock Units, Tax-Related Items section of the Agreement, you agree that you are liable for all Tax-Related Items and hereby covenant to pay all such Tax-Related Items as and when requested by the Company or the Employer or by Her Majesty's Revenue and Customs ("HMRC") (or any other tax authority or any other relevant authority). You also agree to indemnify and keep indemnified the Company and the Employer against any Tax-Related Items that they are required to pay or withhold on your behalf or have paid or will pay to HMRC (or any other tax authority or any other relevant authority).

Joint Election. As a condition of your participation in the Plan and of the vesting of the Restricted Stock Units, you agree to accept any liability for secondary Class 1 National Insurance Contributions which may be payable by the Company and/or the Employer with respect to the vesting of the Restricted Stock Units or otherwise payable in connection with the shares of Stock and the right to acquire shares of Stock ("Employer NICs").

Without limitation to the foregoing, you agree to execute a joint election with the Company or the Employer, the form of such joint election being formally approved by HMRC (the "Joint Election"), and any other required consents or elections as provided to you by the Company or the Employer. You further agree to execute such other joint elections as may be required between you and any successor to the Company or the Employer.

If you do not enter into a Joint Election, or if the Joint Election is revoked at any time by HMRC, the Restricted Stock Units shall cease vesting and become null and void, and no shares of Stock shall be acquired under the Plan, without any liability to the Company, the Employer and/or any Affiliate.

You further agree that the Company and/or the Employer may collect the Employer NICs by any of the means set forth in the Share Delivery; Vested Restricted Stock Units, Tax-Related Items section of the Agreement, as supplemented above.

**CIENA CORPORATION
2017 OMNIBUS INCENTIVE PLAN**

PERFORMANCE STOCK UNIT AGREEMENT

Ciena Corporation, a Delaware corporation, (the “Company”), hereby grants performance stock units relating to shares of its common stock, \$0.01 par value (the “Stock”), to the individual named below as the Grantee, subject to the performance and vesting and other terms and conditions set forth in this Performance Stock Unit Agreement, including the attached terms and conditions and any appendix attached hereto (together, the “Agreement”). This grant is subject to the terms and conditions set forth in (i) this Agreement, (ii) the Ciena Corporation 2017 Omnibus Incentive Plan (as it may be amended from time to time, the “Plan”), and (iii) the grant details for this award contained in Grantee’s account with the Company’s selected broker. Capitalized terms not defined in this Agreement are defined in the Plan, and have the meaning set forth in the Plan.

Grant Date: _____

Grant Number: _____

Name of Grantee: _____

Grantee's Employee Identification Number: _____

Number of Performance Stock Units Covered by Grant: _____

By accepting this grant (whether by signing this Agreement or accepting the grant electronically via the website of the Company’s selected broker), you agree to the terms and conditions in this Agreement and in the Plan and agree that the Plan will control in the event any provision of this Agreement should appear to be inconsistent unless otherwise stated herein.

Grantee: _____
(Signature)

Ciena Corporation: _____
Name: Sheela Kosaraju
Title: Senior Vice President, General Counsel and Assistant Secretary

CIENA CORPORATION
2017 OMNIBUS INCENTIVE PLAN

PERFORMANCE STOCK UNIT AGREEMENT
TERMS AND CONDITIONS

Performance Stock Unit Transferability

This grant is an award of the number of performance stock units set forth on the first page of this Agreement (or, in the case of electronic delivery, as set forth in the grant details for this Award set forth in the Company's selected broker's website), subject to the performance and vesting conditions described in this Agreement ("Restricted Stock Units"). Your Restricted Stock Units may not be transferred, assigned, pledged or hypothecated, whether by operation of Applicable Law or otherwise, nor may the Restricted Stock Units be made subject to execution, attachment or similar process.

Performance Earning

All or a portion of your Restricted Stock Units may be earned during the Company's fiscal year 20[] (the "Performance Period") based on the Company's achievement of the performance goals set forth in Appendix A to this Agreement.

The number of Restricted Stock Units issuable under this award may be increased by up to 100% of the grant amount if and to the extent that the goals in Appendix A are exceeded in accordance with the embedded tables set forth therein.

Any portion of your Restricted Stock Units that is not earned by the end of the Performance Period will be forfeited.

Non-GAAP Adjustments; Extraordinary Items or Events

In addition to any adjustments actually or typically used by the Company in determining any Adjusted or Non-GAAP measure that is a performance goal under this Award, as applicable, the following items shall be disregarded in determining achievement of the performance goal in order to reasonably and equitably reflect the intent and purpose of the Plan and the Award: extraordinary items or events that have or would have an unanticipated impact, any adjustments necessary to take into account the effect of corporate transactions (including acquisitions, dispositions and incurrence of debt); unusual write-offs or write downs of balance sheet items or similar impairment of assets; unusual expense or charges; and other unusual or nonrecurring items.

Vesting

If Restricted Stock Units are earned during the Performance Period, the aggregate number of such earned Restricted Stock Units shall vest in two equal installments (each approximately one-half of the aggregate earned Restricted Stock Units) on December 20, 20[] and December 20, 20[] (each a "Vesting Date"), provided you remain in Service through the Vesting Date unless otherwise indicated in this Agreement.

Any resulting fractional shares shall be rounded up to the nearest whole share; provided, that you may not vest in more than the number of Performance Stock Units set forth on the cover sheet of this Agreement (as adjusted for the maximum level of performance earning described above). Except as otherwise set forth in this Agreement, any earned but unvested Restricted Stock Units will be forfeited in their entirety in the event that you cease to be employed by the Company for any reason prior to a Vesting Date.

Share Delivery Pursuant to Vested Restricted Stock Units; Tax-Related Items

Shares of Stock underlying the vested portion of the Restricted Stock Units will be delivered to you by the Company as soon as practicable following the applicable vesting date for those shares of Stock, but in no event beyond 2½ months after the end of the calendar year in which the shares would have been otherwise delivered or otherwise in accordance with the terms of any deferral election validly made under the Ciena Corporation Deferred Compensation Plan or any successor plan. Upon settlement of the Restricted Stock Units, a brokerage account in your name will be credited with shares of Stock representing the number of shares that vested under this grant (the "Vested Shares") net of any Tax-Related Items (as defined below), as applicable. If the vesting date is not a trading day, Vested Shares will be delivered on the next trading day (or as soon as practicable thereafter).

Regardless of any action the Company or the Affiliate to whom you provide Services (the "Employer") takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to the Restricted Stock Units and/or your participation in the Plan and legally applicable or deemed to be applicable to you ("Tax-Related Items"), you acknowledge that the ultimate liability for all Tax-Related Items is and remains your responsibility and may exceed the amount actually withheld by the Company or the Employer, if any. You further acknowledge that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Restricted Stock Units, including, but not limited to, the grant or vesting of the Restricted Stock Units, the issuance of shares of Stock upon settlement of the Restricted Stock Units, the subsequent sale of shares of Stock acquired pursuant to such issuance and the receipt of any dividends and/or any dividend equivalents; and (2) do not commit to and are under no obligation to structure the terms of the award or any aspect of the Restricted Stock Units to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. Further, if you have become subject to tax in more than one jurisdiction, you acknowledge that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

By accepting this award, you authorize the Company and/or the Employer, or their respective agents, at their discretion, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by one or a combination of the following: (a) requiring your payment in cash or other immediately available funds to the Company and/or the Employer; (b) withholding from your wages or other cash compensation paid to you by the Company and/or the Employer; (c) withholding from proceeds of the sale of Vested Shares either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization without further consent) (an "Automatic Sale"); (d) withholding shares of Stock to be issued upon vesting of the Restricted Stock Units; or (e) any other method of withholding determined by the Company and permitted by applicable law.

You further acknowledge that, in the event of an Automatic Sale, this irrevocable written instruction is intended to constitute an instruction pursuant to Rule 10b5-1 of the Exchange Act with the Automatic Sale intended to comply with these requirements. As such, all provisions hereof shall be interpreted consistent with Rule 10b5-1 and shall be automatically modified to the extent necessary to comply therewith. The Company shall be responsible for the payment of any brokerage commissions relating to any Automatic Sale.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates in your jurisdiction(s) to the extent permitted by the Plan, in which case you may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent in Stock. If the obligation for Tax-Related Items is satisfied by withholding in shares of Stock, for tax purposes, you are deemed to have been issued the full number of shares of Stock subject to the Vested Shares, notwithstanding that a number of the shares of Stock are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of your participation in the Plan.

The Company may refuse to issue or deliver the shares of Stock or the proceeds of the sale of shares of Stock, if you fail to comply with your obligations in connection with the Tax-Related Items.

Forfeiture of Unvested Restricted Stock Units

Except as specifically provided in this Agreement or as may be provided in other agreements between you and the Company, no additional Restricted Stock Units will vest after your Service has terminated for any reason and you will forfeit to the Company all of the Restricted Stock Units that have not yet vested or with respect to which all applicable restrictions and conditions have not lapsed upon such date of termination of your Service.

Deferral of Compensation

Delivery of shares underlying any award of Restricted Stock Units and treatment hereunder shall be subject to any deferral election validly made by eligible participants under the Ciena Corporation Deferred Compensation Plan or any successor plan.

Death

If your Service terminates because of your death prior to your Retirement, (i) any Restricted Stock Units earned, but not yet vested, under this Agreement will automatically vest as to the number of Restricted Stock Units earned prior to the date of death and (ii) any Restricted Stock Units subject to performance conditions or open performance periods that remain unearned under this Agreement will automatically vest, on a pro-rated basis, based on the number of days of the relevant performance period for which you were employed, with performance for such award assumed at the applicable target level

Disability

If your Service terminates because of your Disability prior to your Retirement, (i) any Restricted Stock Units earned, but not yet vested, under this Agreement will automatically vest as to the number of Restricted Stock Units earned prior to the date of Disability and (ii) any Restricted Stock Units subject to performance conditions or open performance periods that remain unearned under this Agreement will automatically vest, on a pro-rated basis, based on the number of days of the relevant performance period for which you were employed, with performance for such award assumed at the applicable target level.

Retirement (Applicable to U.S., U.K., and Canada employees at time of Grant only)

If you are a resident of the U.S., U.K., or Canada on the Grant Date and your Service terminates because of your Retirement prior to the completion of the Performance Period, any unearned Restricted Stock Units granted under this Agreement will remain outstanding notwithstanding such termination of Service and will continue to be eligible to be earned based on the Company's achievement of the performance goals set forth in Appendix A during the Performance Period; provided that the number of Restricted Stock Units earned will be pro-rated to reflect the number of calendar days in the Performance Period during which you were in Service. If your service terminates because of your Retirement prior to any Vesting Date, any Restricted Stock Units earned during the Performance Period (including any Restricted Stock Units earned pursuant to the preceding sentence), pro-rated as described in the preceding sentence, will continue to vest on the schedule indicated above under "Vesting".

For purposes of this Agreement, "Retirement" means your voluntary termination of Service following:

(i) your completion of 10 years of Service (which need not have been consecutive), including up to six years of prior employment or service to any entity acquired by the Company or its Affiliates (provided you have completed four years of Service following the most recent of such acquisitions); and

(ii) your attainment of age 60;

provided, however, that in order to receive any vesting benefit under this section, you must provide the Company with 12 months (the “Notice Period”) irrevocable advance written notice of your termination of Service, which notice can only be delivered after meeting the above eligibility requirements (the “Notice Requirement”).

If your Service terminates for any reason after you have submitted notice of Retirement to the Company pursuant to the preceding sentence but prior to the last day of the Notice Period for any reason other than (A) by the Company without Cause (as defined in the Executive Severance Benefit Plan, or if you are not a participant in such plan, as defined in the Plan) or (B) due to your death or Disability, you will forfeit to the Company all of the Restricted Stock Units that have not yet vested or with respect to which all applicable restrictions and conditions have not lapsed upon such termination of Service. If at any time after you have submitted notice of Retirement your Service is terminated by the Company without Cause, or your Service terminates because of your death or Disability, then the Notice Requirement will be deemed to have been satisfied.

You understand and agree that you will no longer be eligible to receive additional equity grants following submission of your notice of Retirement to the Company

Termination For Cause

If your Service is terminated for Cause, then you shall immediately forfeit all rights to your Restricted Stock Units, whether or not previously earned, and this award shall immediately terminate, effective as of the date of termination.

Leaves of Absence

For purposes of this grant, your Service does not terminate when you go on a bona fide leave of absence approved by the Company, if the terms of your leave provide for continued Service crediting, or when continued Service crediting is required by Applicable Law. The Company will determine, in its sole discretion, and in accordance with applicable laws, whether and when a leave of absence constitutes a termination of Service under the Plan.

Retention Rights

Neither your Restricted Stock Units nor this Agreement give you the right to be retained by the Company, the Employer or any Affiliate in any capacity and your Service may be terminated at any time and for any reason.

Shareholder Rights

You have no rights as a shareholder unless and until the shares of Stock relating to the Restricted Stock Units have been issued to you (or an appropriate book entry has been made). Except as described in the Plan or herein, no adjustments are made for dividends or other rights if the applicable record date occurs before your shares of Stock are issued (or an appropriate book entry has been made).

If the Company pays a dividend on its Stock, you will, however, be entitled to receive a cash payment equal to the per-share dividend paid on the Stock times the number of Restricted Stock Units that you hold as of the record date for the dividend; provided, however, such Dividend Equivalents Rights shall not vest or become payable unless and until the Restricted Stock Units to which the Dividend Equivalent Rights correspond become vested and nonforfeitable pursuant to this Agreement or the Plan.

Section 409A

The Restricted Stock Units are intended to be exempt from, or compliant with, Section 409A of the Code and any ambiguities herein will be interpreted in accordance with that intent. Each payment under this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). Notwithstanding the foregoing or any provision of the Plan or this Agreement, if any provision of the Plan or this Agreement contravenes Section 409A of the Code or could cause you to incur any tax, interest or penalties under Section 409A of the Code, the Company may, in its sole reasonable discretion and without your consent, modify such provision to (i) comply with, or avoid being subject to, Section 409A of the Code, or to avoid the incurrence of taxes, interest and penalties under Section 409A of the Code, and (ii) maintain, to the maximum extent practicable, the original intent and economic benefit to you of the applicable provision without materially increasing the cost to the Company or contravening the provisions of Section 409A of the Code. This Section does not create an obligation on the part of the Company to modify the Plan or this Agreement and does not guarantee that the Restricted Stock Units or the Shares underlying the Restricted Stock Units will not be subject to interest and penalties under Section 409A of the Code.

Notwithstanding anything to the contrary in the Plan or this Agreement, to the extent that you are a “specified employee” (within the meaning of the Company’s established methodology for determining “specified employees” for purposes of Section 409A of the Code), payment or distribution of any amounts with respect to any Restricted Stock Unit that is subject to Section 409A of the Code will be made as soon as practicable following the first business day of the seventh month following your “separation from service” (within the meaning of Section 409A of the Code) from the Company and its Affiliates, or, if earlier, the date of your death.

Nature of Grant

In accepting the award and the Restricted Stock Units, you acknowledge, understand and agree that:

- (1) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time;
 - (2) the grant of the Restricted Stock Units is voluntary and occasional and does not create any contractual or other right to receive future grants of Restricted Stock Units, or benefits in lieu of Restricted Stock Units, even if Restricted Stock Units have been granted in the past;
 - (3) all decisions with respect to future Restricted Stock Unit grants, if any, will be at the sole discretion of the Company;
 - (4) your participation in the Plan is voluntary;
 - (5) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not intended to replace any pension rights;
 - (6) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not part of normal or expected compensation for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end of Service payments, bonuses, holiday pay, long-service awards, pension or retirement or welfare benefits or similar payments, except if and as explicitly required by applicable law;
 - (7) the Restricted Stock Unit grant and your participation in the Plan will not be interpreted to form or amend a Service contract or relationship with the Company, the Employer or any Affiliate;
 - (8) the future value of the underlying shares of Stock is unknown and cannot be predicted with certainty;
 - (9) no claim or entitlement to compensation or damages shall arise from forfeiture of the Restricted Stock Units resulting from termination of your Service relationship with the Company or the Employer except as otherwise set forth in this Agreement (whether or not in breach of contract or local employment laws in the country where you reside, even if otherwise applicable to your employment benefits from the Employer, and/or later found to be invalid), and in consideration of the grant of the Restricted Stock Units, you irrevocably agree never to institute any claim against the Company, the Employer or any Affiliate, waive your ability, if any, to bring any such claim, and release the Company, the Employer and any Affiliate from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by accepting this award of Restricted Stock Units, you shall be deemed irrevocably to have agreed not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claims;
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(10) except as otherwise set forth in this Agreement, in the event of termination of your Service relationship (whether or not in breach of contract or local employment laws in the country where you reside, even if otherwise applicable to your employment benefits from the Employer, and/or later found to be invalid), your right to vest in the Restricted Stock Units under the Plan, if any, will terminate effective as of the date that you are no longer actively providing Services to the Company, the Employer or any Affiliate as a Service Provider and will not be extended by any notice period mandated under local law (e.g., active Service as a Service Provider would not include a period of “garden leave” or similar period); the Committee shall have the exclusive discretion to determine when you are no longer actively providing Services for purposes of your Restricted Stock Units grant;

(11) the Restricted Stock Units and the benefits evidenced by this Agreement do not create any entitlement, not otherwise specifically provided for in the Plan or by the Company in its discretion, to have the Restricted Stock Units or any such benefits transferred to, or assumed by, another company, nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Stock (including a Corporate Transaction);

(12) unless otherwise agreed with the Company, the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of same, are not granted as consideration for, or in connection with, the service you may provide as a director of an Affiliate of the Company; and

(13) the following provisions apply only if you are providing Services outside the United States:

(A) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not part of normal or expected compensation or salary for any purpose and in no event should be considered as compensation for, or relating in any way to, past Services for the Company, the Employer or any Affiliate; and

(B) you acknowledge and agree that neither the Company, the Employer nor any Affiliate shall be liable for any foreign exchange rate fluctuation between the Employer’s local currency and the United States dollar that may affect the value of any proceeds from the sale of shares of Stock acquired under the Plan.

Forfeiture; Recoupment

This Award shall be subject to mandatory repayment by the Grantee to the Company (i) to the extent set forth in the Plan or this Award Agreement or (ii) to the extent the Grantee is, or in the future becomes, subject to (A) any Company or Affiliate “clawback” or recoupment policy that is adopted by the Company, including to comply with the requirements of Applicable Law, or (B) any Applicable Law that imposes mandatory recoupment, under circumstances set forth in such Applicable Law.

Data Privacy

(a) **Declaration of Consent.** *If you would like to participate in the Plan, you understand that you need to review the following information about the processing of your personal data by or on behalf of the Company, the Employer, and/or any Affiliate as described in this Agreement and any other Plan materials (the “Personal Data”) and declare your consent. As regards the processing of your Personal Data in connection with the Plan and the Agreement, you understand that the Company is the controller of your Personal Data.*

(b) **Data Processing and Legal Basis.** *The Company collects, uses, and otherwise processes Personal Data about you for the purposes of allocating shares of Stock and implementing, administering, and managing the Plan. You understand that this Personal Data may include, without limitation, your name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company or its Affiliates, details of all Restricted Stock Units or any other entitlement to shares of stock awarded, canceled, purchased, vested, unvested or outstanding in your favor. The legal basis for the processing of the Personal Data will be your consent.*

(c) **Stock Plan Administration Service Provider.** *You understand that the Company transfers your Personal Data, or parts thereof, to E*TRADE Financial Corporate Services, Inc. (and its affiliated companies), an independent service provider based in the United States, which assists the Company with the implementation, administration, and management of the Plan. In the future, the Company may select a different service provider and share your Personal Data with such different service provider that serves the Company in a similar manner. You understand and acknowledge that the Company’s service provider will open an account for you to receive and trade shares purchased under the Plan and that you will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of your ability to participate in the Plan.*

(d) International Data Transfers. You understand that the Company and any third parties assisting in the implementation, administration, and management of the Plan, such as the Company's service providers, are based in the United States as of the date hereof. If you are located outside the United States, you understand and acknowledge that your country has enacted data privacy laws that are different from the laws of the United States. The Company's legal basis for the transfer of your Personal Data is your consent.

(e) Data Retention. You understand that the Company will use your Personal Data only as long as is necessary to implement, administer, and manage your participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, you understand and acknowledge that the Company's legal basis for the processing of your Personal Data would be compliance with the relevant laws or regulations or the pursuit by the Company of respective legitimate interests not outweighed by your interests, rights, or freedoms. When the Company no longer needs your Personal Data for any of the above purposes, you understand the Company will remove it from its systems.

(f) Voluntariness and Consequences of Denial/Withdrawal of Consent. You understand that your participation in the Plan and your grant of consent is purely voluntary. You may deny or later withdraw your consent at any time, with future effect, and for any or no reason. If you deny or later withdraw your consent, the Company can no longer offer participation in the Plan or offer other awards to you or administer or maintain such awards, and you would no longer be able to participate in the Plan. You further understand that denial or withdrawal of your consent would not affect your status or salary as an employee or your career and that you would merely forfeit the opportunities associated with the Plan.

(g) Data Subject Rights. You understand that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where you are based and subject to the conditions set out in the applicable law, you may have, without limitation, the right to (i) inquire whether and about what kind of Personal Data the Company holds about you and how it is processed, and to access or request copies of such Personal Data; (ii) request the correction or supplementation of Personal Data about you that is inaccurate, incomplete, or out-of-date in light of the purposes underlying the processing; (iii) request the erasure of Personal Data that is (A) no longer necessary for the purposes underlying the processing, (B) processed based on withdrawn consent, (C) processed for legitimate interests that, in the context of your objection, do not prove to be compelling, or (D) processed in non-compliance with applicable legal requirements; (iv) request the Company to restrict the processing of your Personal Data in certain situations where you feel its processing is inappropriate; (v)

object, in certain circumstances, to the processing of Personal Data for legitimate interests; and (vi) request portability of your Personal Data that you have actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or your employment or service contract and is carried out by automated means. In case of concerns, you understand that you may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of or to exercise any of your rights, you understand that you should contact your local human resources representative or Ciena's stock administration department.

By signing this Agreement or, in case this information is presented electronically, by clicking the "Accept" or similar button implemented into the relevant web page or platform, you declare, without limitation, your consent to the data processing operations described in this Agreement. You understand that you may withdraw your consent at any time with future effect for any or no reason as described in this section.

No Advice Regarding Grant

The Company is not providing any tax, legal, or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the Stock underlying your Restricted Stock Units. You are hereby advised to consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

Applicable Law and Venue

The Restricted Stock Units and the provisions of this Agreement are governed by, and subject to, the laws of the State of Delaware, without regard to the conflict of law provisions.

For purposes of litigating any dispute that arises under this award or the Agreement, the parties hereby submit to and consent to the jurisdiction of the State of Delaware, and agree that such litigation shall be conducted in the state courts of Delaware, or the federal courts for the District of Delaware, and no other courts, where this grant is made and/or to be performed. *You agree to waive your rights to a jury trial for any claim or cause of action based upon or arising out of this Agreement or the Plan.*

Language

You acknowledge that you are sufficiently proficient in the English language, or have consulted with an advisor who is sufficiently proficient in English, so as to allow you to understand the terms and conditions of this Agreement. Further, if you have received this Agreement or any other document related to this Award and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

Electronic Delivery and Acceptance

The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means or request your consent to participate in the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Company, the Company's designated broker, or their respective third parties. If you fail to submit a written rejection of this award to the Company's Stock Administration Department prior to the date on which this award initially vests, this award shall be deemed accepted by you and the terms of this award and the Plan shall apply to the same extent as if you had accepted your award electronically via the website of the Company's selected broker.

Severability; Integration

The provisions of this Agreement are severable, and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable. This Agreement contains the entire agreement with regard to the Restricted Stock Units awarded hereby; provided that in the event you are eligible to receive vesting benefits pursuant to an individual agreement with the Company that are more favorable than the vesting benefits provided hereunder, you will receive the vesting benefits under such agreement.

Waiver

You acknowledge that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach of this Agreement.

Foreign Account / Assets Reporting and Exchange Controls

Depending upon the country to which laws you are subject, you may have certain foreign asset and/or account reporting requirements and exchange controls which may affect your ability to acquire or hold shares of Stock under the Plan or cash received from participating in the Plan (including from any dividends received or sale proceeds arising from the sale of shares of Stock) in a brokerage or bank account outside your country of residence. Your country may require that you report such accounts, assets or transactions to the applicable authorities in your country. You may be required to repatriate sale proceeds or other funds received as a result of your participation in the Plan to your country through a designated bank or broker within a certain time after receipt. You are responsible for knowledge of and compliance with any such regulations and should speak with your own personal tax, legal and financial advisors regarding the same.

Insider Trading / Market Abuse Laws

You acknowledge that, depending on your country, you may be subject to insider trading restrictions and/or market abuse laws, which may affect your ability to acquire or sell shares of Stock or rights to shares of Stock (e.g., Restricted Stock Units) under the Plan during such times as you are considered to have “inside information” regarding the Company (as defined by the laws in your country). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Company. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you should consult with your own personal legal and financial advisors on this matter.

Imposition of Other Requirements

The Company reserves the right to impose other requirements on your participation in the Plan, on the award, on the Restricted Stock Units, and on any shares of Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

Canadian Residents

With respect to Canadian residents only:

Restricted Stock Units Payable Only in Shares of Stock. Notwithstanding any discretion in the Plan or the Agreement to the contrary, Restricted Stock Units granted in Canada shall be paid in shares of Stock only and do not provide any right for you to receive a cash payment.

Canadian Securities Laws

You acknowledge and confirm that your participation in the Plan and entering into of this Agreement is voluntary and not induced by expectation of (a) employment or continued employment, if you are an employee, (b) employment or appointment or continued employment or appointment, if you are an officer, or (c) engagement to provide services or continued engagement to provide services, if you are a consultant. Furthermore, if you are a consultant you also acknowledge and confirm that you are engaged to provide services to the Company or an Affiliate under a written contract with the Company or an Affiliate and spend or will spend a significant amount of time and attention on the business and affairs of the Company or an Affiliate.

Termination Date

Notwithstanding the terms of the Plan or Agreement, for the purposes of determining the date your Service with the Company, the Employer, or any Affiliate terminates (whether for cause or not, or due to death, disability or otherwise) and your entitlements thereafter, termination of Service shall mean the date at the end of the applicable statutory notice period (if any), but shall not include any period of notice at common law.

The following provisions will apply if you are a resident of Quebec:

Language Consent. The parties acknowledge that it is their express wish that the Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention, ainsi que de tous documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.

Data Privacy. This provision supplements the Data Privacy section of the Agreement:

You hereby authorize the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. You further authorize the Company, the Employer, any Affiliate and the administrator of the Plan to disclose and discuss the Plan with their advisors. You further authorize the Company, the Employer, any Affiliate and the administrator of the Plan to record such information and to keep such information in your employee file. Please note that the governments or law enforcement agencies of a foreign jurisdiction where the Company processes, stores or transfers data may be able to access your data through the laws of that jurisdiction.

Notifications

Securities Law Information. You are permitted to sell shares of Stock acquired through the Plan through the designated broker appointed under the Plan, if any, provided the resale of shares of Stock acquired under the Plan takes place outside of Canada through the facilities of a stock exchange on which the Stock is listed. Currently, the Stock is listed on the New York Stock Exchange.

Foreign Account / Assets Reporting Information. Foreign property, including Restricted Stock Units, shares of Stock acquired under the Plan and other rights to receive shares (e.g., Restricted Stock Units) of a non-Canadian company held by a Canadian resident must generally be reported annually on a Form T1135 (Foreign Income Verification Statement) if the total cost of the foreign property exceeds C\$100,000 at any time during the year. Thus, such Restricted Stock Units must be reported - generally at a nil cost - if the C\$100,000 cost threshold is exceeded because other foreign property is held by you. When shares of Stock are acquired, their cost generally is the adjusted cost base ("ACB") of the shares. The ACB would ordinarily equal the fair market value of the shares at the time of acquisition, but if you own other shares of the same company, this ACB may have to be averaged with the ACB of the other shares. You should consult with your personal tax advisor to determine your reporting requirements.

United Kingdom Residents

With respect to United Kingdom residents only:

Taxes. This section supplements the Share Delivery Pursuant to Vested Restricted Stock Units; Tax-Related Items section above:

Without limitation to the provisions contained in the Share Delivery Pursuant to Vested Restricted Stock Units; Tax-Related Items section of this Agreement, you agree that you are liable for all Tax-Related Items and hereby covenant to pay all such Tax-Related Items as and when requested by the Company or the Employer or by Her Majesty's Revenue and Customs ("HMRC") (or any other tax authority or any other relevant authority). You also agree to indemnify and keep indemnified the Company and the Employer against any Tax-Related Items that they are required to pay or withhold on your behalf or have paid or will pay to HMRC (or any other tax authority or any other relevant authority).

Joint Election. As a condition of your participation in the Plan and of the vesting of the Restricted Stock Units, you agree to accept any liability for secondary Class 1 National Insurance Contributions which may be payable by the Company and/or the Employer with respect to the vesting of the Restricted Stock Units or otherwise payable in connection with the shares of Stock and the right to acquire shares of Stock ("Employer NICs").

Without limitation to the foregoing, you agree to execute a joint election with the Company or the Employer, the form of such joint election being formally approved by HMRC (the "Joint Election"), and any other required consents or elections as provided to you by the Company or the Employer. You further agree to execute such other joint elections as may be required between you and any successor to the Company or the Employer.

If you do not enter into a Joint Election, or if the Joint Election is revoked at any time by HMRC, the Restricted Stock Units shall cease vesting and become null and void, and no shares of Stock shall be acquired under the Plan, without any liability to the Company, the Employer and/or any Affiliate.

You further agree that the Company and/or the Employer may collect the Employer NICs by any of the means set forth in the Share Delivery Pursuant to Vested Restricted Stock Units; Tax-Related Items section of this Agreement, as supplemented above.

This Agreement is not a stock certificate or a negotiable instrument.

CIENA CORPORATION
2017 OMNIBUS INCENTIVE PLAN

MARKET STOCK UNIT AGREEMENT

Ciena Corporation, a Delaware corporation, (the “Company”), hereby grants market stock units relating to shares of its common stock, \$0.01 par value (the “Stock”), to the individual named below as the Grantee, subject to the performance and vesting and other terms and conditions set forth in this Market Stock Unit Agreement, including the attached terms and conditions and any appendix attached hereto (together, the “Agreement”). This grant is subject to the terms and conditions set forth in (i) this Agreement, (ii) the Ciena Corporation 2017 Omnibus Incentive Plan (as it may be amended from time to time, the “Plan”) and (iii) the grant details for this award contained in Grantee’s account with the Company’s selected broker. Capitalized terms not defined in this Agreement are defined in the Plan, and have the meaning set forth in the Plan.

Grant Date: _____

Grant Number: _____

Name of Grantee: _____

Grantee's Employee Identification Number: _____

Number of Market Stock Units Covered by Grant: _____

By accepting this grant (whether by signing this Agreement or accepting the grant electronically via the website of the Company’s selected broker), you agree to the terms and conditions in this Agreement and in the Plan and agree that the Plan will control in the event any provision of this Agreement should appear to be inconsistent unless otherwise stated herein.

Grantee: _____

(Signature)

Ciena Corporation: _____

Name: Sheela Kosaraju

Title: Senior Vice President, General Counsel and Assistant Secretary

CIENA CORPORATION
2017 OMNIBUS INCENTIVE PLAN

MARKET STOCK UNIT AGREEMENT
TERMS AND CONDITIONS

Market Stock Unit Transferability

This grant is an award of the number of market stock units set forth on the first page of this Agreement (or, in the case of electronic delivery, as set forth in the grant details for this Award set forth in the Company's selected broker's website), subject to the performance and vesting conditions described in this Agreement ("Restricted Stock Units"). Your Restricted Stock Units may not be transferred, assigned, pledged or hypothecated, whether by operation of Applicable Law or otherwise, nor may the Restricted Stock Units be made subject to execution, attachment or similar process.

Performance Earning

Your Restricted Stock Units may be earned during the three-year period beginning with the Company's fiscal year 20[] and continuing through the Company's fiscal year 20[] (the "Performance Period") based on the Company's achievement of the performance goal set forth in Appendix A to this Agreement.

The number of Restricted Stock Units issuable under this award will be determined in accordance with the performance goal set forth in Appendix A and, specifically, the detail and the embedded table set forth therein.

Any portion of your Restricted Stock Units that is not earned by the end of the Performance Period will be forfeited.

Vesting

If Restricted Stock Units are earned during the Performance Period, the aggregate number of such earned Restricted Stock Units shall vest on December 20, 20[] (the "Vesting Date"), provided you remain in Service through the Vesting Date unless otherwise indicated in this Agreement. Any resulting fractional shares shall be rounded up to the nearest whole share; provided, that you may not vest in more than 200% of the number of Market Stock Units set forth on the first page of this Agreement. Except as otherwise set forth in this Agreement, any earned but unvested Restricted Stock Units will be forfeited in their entirety in the event that you cease to be employed by the Company for any reason prior to the Vesting Date.

**Share Delivery Pursuant to Vested
Restricted Stock Units;
Tax-Related Items**

Shares of Stock underlying the vested portion of the Restricted Stock Units will be delivered to you by the Company as soon as practicable following the Vesting Date, but in no event beyond 2½ months after the end of the calendar year in which the shares would have been otherwise delivered or otherwise in accordance with the terms of any deferral election validly made under the Ciena Corporation Deferred Compensation Plan or any successor plan. Upon settlement of the Restricted Stock Units, a brokerage account in your name will be credited with shares of Stock representing the number of shares that vested under this grant (the “Vested Shares”) net of any Tax-Related Items (as defined below), as applicable. If the vesting date is not a trading day, Vested Shares will be delivered on the next trading day (or as soon as practicable thereafter).

Regardless of any action the Company or the Affiliate to whom you provide Services (the “Employer”) takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to the Restricted Stock Units and/or your participation in the Plan and legally applicable or deemed to be applicable to you (“Tax-Related Items”), you acknowledge that the ultimate liability for all Tax-Related Items is and remains your responsibility and may exceed the amount actually withheld by the Company or the Employer, if any. You further acknowledge that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Restricted Stock Units, including, but not limited to, the grant or vesting of the Restricted Stock Units, the issuance of shares of Stock upon settlement of the Restricted Stock Units, the subsequent sale of shares of Stock acquired pursuant to such issuance and the receipt of any dividends and/or any dividend equivalents; and (2) do not commit to and are under no obligation to structure the terms of the award or any aspect of the Restricted Stock Units to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result (each as determined by the Company in its sole discretion). Further, if you have become subject to tax in more than one jurisdiction, you acknowledge that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

By accepting this award, you authorize the Company and/or the Employer, or their respective agents, at their discretion, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by one or a combination of the following: (a) requiring your payment in cash or other immediately available funds to the Company and/or the Employer; (b) withholding from your wages or other cash compensation paid to you by the Company and/or the Employer; (c) withholding from proceeds of the sale of Vested Shares either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization without further consent) (an “Automatic Sale”); (d) withholding shares of Stock to be issued upon vesting of the Restricted Stock Units; or (e) any other method of withholding determined by the Company and permitted by applicable law.

You further acknowledge that, in the event of an Automatic

Sale, this irrevocable written instruction is intended to constitute an instruction pursuant to Rule 10b5-1 of the Exchange Act with the Automatic Sale intended to comply with these requirements. As such, all provisions hereof shall be interpreted consistent with Rule 10b5-1 and shall be automatically modified to the extent necessary to comply therewith. The Company shall be responsible for the payment of any brokerage commissions relating to any Automatic Sale.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates in your jurisdiction(s) to the extent permitted by the Plan, in which case you may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent in Stock. If the obligation for Tax-Related Items is satisfied by withholding in shares of Stock, for tax purposes, you are deemed to have been issued the full number of shares of Stock subject to the Vested Shares, notwithstanding that a number of the shares of Stock are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of your participation in the Plan.

The Company may refuse to issue or deliver the shares of Stock or the proceeds of the sale of shares of Stock, if you fail to comply with your obligations in connection with the Tax-Related Items.

Forfeiture of Unvested Restricted Stock Units

Except as specifically provided in this Agreement or as may be provided in other agreements between you and the Company, no additional Restricted Stock Units will vest after your Service has terminated for any reason and you will forfeit to the Company all of the Restricted Stock Units that have not yet vested or with respect to which all applicable restrictions and conditions have not lapsed upon such date of termination of your Service.

Deferral of Compensation

Delivery of shares underlying any award of Restricted Stock Units and treatment hereunder shall be subject to any deferral election validly made by eligible participants under the Ciena Corporation Deferred Compensation Plan or any successor plan.

Death

If your Service terminates because of your death prior to your Retirement, (i) any Restricted Stock Units earned, but not yet vested, under this Agreement will automatically vest as to the number of Restricted Stock Units earned prior to the date of death and (ii) any Restricted Stock Units subject to

performance conditions or open performance periods that remain unearned under this Agreement will automatically vest, on a pro-rated basis, based on the number of days of the relevant performance period for which you were employed, with performance for such award assumed at the applicable target level.

Disability

If your Service terminates because of your Disability prior to your Retirement, (i) any Restricted Stock Units earned, but not yet vested under this Agreement will automatically vest as to the number of Restricted Stock Units earned prior to the date of Disability and (ii) any Restricted Stock Units subject to performance conditions or open performance periods that remain unearned under this Agreement will automatically vest, on a pro-rated basis, based on the number of days of the relevant performance period for which you were employed, with performance for such award assumed at the applicable target level.

Retirement (Applicable to U.S., U.K., and Canada employees at time of Grant only)

If you are a resident of the U.S., U.K., or Canada on the Grant Date and your Service terminates because of your Retirement prior to the completion of the Performance Period, any unearned Restricted Stock Units granted under this Agreement will remain outstanding notwithstanding such termination of Service and will continue to be eligible to be earned based on the Company's actual achievement of the performance goal set forth in Appendix A during the Performance Period, with the amount earned by you to be prorated based on the number of calendar days in the Performance Period during which you were actually in Service, with a minimum proration of 50% of the calendar days in the Performance Period. If your service terminates because of your Retirement prior to the Vesting Date, any Restricted Stock Units earned during the Performance Period (including any Restricted Stock Units earned pursuant to the preceding sentence) will continue to vest on the schedule indicated above under "Vesting".

For purposes of this Agreement, "Retirement" means your voluntary termination of Service following:

(i) your completion of 10 years of Service (which need not have been consecutive), including up to six years of prior employment or service to any entity acquired by the Company or its Affiliates (provided you have completed four years of Service following the most recent of such acquisitions); and

(ii) your attainment of age 60;

provided, however, that in order to receive any vesting benefit under this section, you must provide the Company with 12 months (the "Notice Period") irrevocable advance written notice of your termination of Service, which notice can only be delivered after meeting the above eligibility requirements (the "Notice Requirement").

If your Service terminates for any reason after you have submitted notice of Retirement to the Company pursuant to the preceding sentence but prior to the last day of the Notice Period for any reason other than (A) by the Company without Cause (as defined in the Executive Severance Benefit Plan, or if you are not a participant in such plan, as defined in the Plan) or (B) due to your death or Disability, you will forfeit to the Company all of the Restricted Stock Units that have not yet vested or with respect to which all applicable restrictions and conditions have not lapsed upon such termination of Service. If at any time after you have submitted notice of Retirement your Service is terminated by the Company without Cause, or your Service terminates because of your death or Disability, then the Notice Requirement will be deemed to have been satisfied.

You understand and agree that you will no longer be eligible to receive additional equity grants following submission of your notice of Retirement to the Company.

Termination For Cause

If your Service is terminated for Cause, then you shall immediately forfeit all rights to your Restricted Stock Units, whether or not previously earned, and this award shall immediately terminate, effective as of the date of termination.

Leaves of Absence

For purposes of this grant, your Service does not terminate when you go on a *bona fide* leave of absence approved by the Company, if the terms of your leave provide for continued Service crediting, or when continued Service crediting is required by Applicable Law. The Company will determine, in its sole discretion, and in accordance with applicable laws, whether and when a leave of absence constitutes a termination of Service under the Plan.

Retention Rights

Neither your Restricted Stock Units nor this Agreement give you the right to be retained by the Company, the Employer or any Affiliate in any capacity and your Service may be terminated at any time and for any reason.

Shareholder Rights

You have no rights as a shareholder unless and until the shares of Stock relating to the Restricted Stock Units have been issued to you (or an appropriate book entry has been made). Except as described in the Plan or herein, no adjustments are made for dividends or other rights if the applicable record date occurs before your shares of Stock are issued (or an appropriate book entry has been made).

If the Company pays a dividend on its Stock, you will, however, be entitled to receive a cash payment equal to the per-share dividend paid on the Stock times the number of Restricted Stock Units that you hold as of the record date for the dividend; provided, however, such Dividend Equivalents Rights shall not vest or become payable unless and until the Restricted Stock Units to which the Dividend Equivalent Rights correspond become vested and nonforfeitable pursuant to this Agreement or the Plan.

Section 409A

The Restricted Stock Units are intended to be exempt from, or compliant with, Section 409A of the Code and any ambiguities herein will be interpreted in accordance with that intent. Each payment under this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). Notwithstanding the foregoing or any provision of the Plan or this Agreement, if any provision of the Plan or this Agreement contravenes Section 409A of the Code or could cause you to incur any tax, interest or penalties under Section 409A of the Code, the Company may, in its sole reasonable discretion and without your consent, modify such provision to (i) comply with, or avoid being subject to, Section 409A of the Code, or to avoid the incurrence of taxes, interest and penalties under Section 409A of the Code, and (ii) maintain, to the maximum extent practicable, the original intent and economic benefit to you of the applicable provision without materially increasing the cost to the Company or contravening the provisions of Section 409A of the Code. This Section does not create an obligation on the part of the Company to modify the Plan or this Agreement and does not guarantee that the Restricted Stock Units or the Shares underlying the Restricted Stock

Units will not be subject to interest and penalties under Section 409A of the Code.

Notwithstanding anything to the contrary in the Plan or this Agreement, to the extent that you are a “specified employee” (within the meaning of the Company’s established methodology for determining “specified employees” for purposes of Section 409A of the Code), payment or distribution of any amounts with respect to any Restricted Stock Unit that is subject to Section 409A of the Code will be made as soon as practicable following the first business day of the seventh month following your “separation from service” (within the meaning of Section 409A of the Code) from the Company and its Affiliates, or, if earlier, the date of your death.

Nature of Grant

In accepting the award and the Restricted Stock Units, you acknowledge, understand and agree that:

- (1) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time;
- (2) the grant of the Restricted Stock Units is voluntary and occasional and does not create any contractual or other right to receive future grants of Restricted Stock Units, or benefits in lieu of Restricted Stock Units, even if Restricted Stock Units have been granted in the past;
- (3) all decisions with respect to future Restricted Stock Unit grants, if any, will be at the sole discretion of the Company;
- (4) your participation in the Plan is voluntary;
- (5) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not intended to replace any pension rights;
- (6) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not part of normal or expected compensation for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end of Service payments, bonuses, holiday pay, long-service awards, pension or retirement or welfare benefits or similar payments, except if and as explicitly required by applicable law;

(7) the Restricted Stock Unit grant and your participation in the Plan will not be interpreted to form or amend a Service contract or relationship with the Company, the Employer or any Affiliate;

(8) the future value of the underlying shares of Stock is unknown and cannot be predicted with certainty;

(9) no claim or entitlement to compensation or damages shall arise from forfeiture of the Restricted Stock Units resulting from termination of your Service relationship with the Company or the Employer except as otherwise set forth in this Agreement (whether or not in breach of contract or local employment laws in the country where you reside, even if otherwise applicable to your employment benefits from the Employer, and/or later found to be invalid), and in consideration of the grant of the Restricted Stock Units, you irrevocably agree never to institute any claim against the Company, the Employer or any Affiliate, waive your ability, if any, to bring any such claim, and release the Company, the Employer and any Affiliate from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by accepting this award of Restricted Stock Units, you shall be deemed irrevocably to have agreed not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claims;

(10) except as otherwise set forth in this Agreement, in the event of termination of your Service relationship (whether or not in breach of contract or local employment laws in the country where you reside, even if otherwise applicable to your employment benefits from the Employer, and/or later found to be invalid), your right to vest in the Restricted Stock Units under the Plan, if any, will terminate effective as of the date that you are no longer actively providing Services to the Company, the Employer or any Affiliate as a Service Provider and will not be extended by any notice period mandated under local law (e.g., active Service as a Service Provider would not include a period of “garden leave” or similar period); the Committee shall have the exclusive discretion to determine when you are no longer actively providing Services for purposes of your Restricted Stock Units grant;

(11) the Restricted Stock Units and the benefits evidenced by this Agreement do not create any entitlement, not otherwise specifically provided for in the Plan or by the Company in its discretion, to have the Restricted Stock Units or any such benefits transferred to, or assumed by, another company, nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Stock (including a Corporate Transaction);

(12) unless otherwise agreed with the Company, the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of same, are not granted as consideration for, or in connection with, the service you may provide as a director of an Affiliate of the Company; and

(13) the following provisions apply only if you are providing Services outside the United States:

(A) the Restricted Stock Units and the shares of Stock subject to the Restricted Stock Units, and the income from and value of such Restricted Stock Units, are not part of normal or expected compensation or salary for any purpose and in no event should be considered as compensation for, or relating in any way to, past Services for the Company, the Employer or any Affiliate; and

(B) you acknowledge and agree that neither the Company, the Employer nor any Affiliate shall be liable for any foreign exchange rate fluctuation between the Employer's local currency and the United States dollar that may affect the value of any proceeds from the sale of shares of Stock acquired under the Plan.

Forfeiture; Recoupment

This Award shall be subject to mandatory repayment by the Grantee to the Company (i) to the extent set forth in the Plan or this Award Agreement or (ii) to the extent the Grantee is, or in the future becomes, subject to (A) any Company or Affiliate "clawback" or recoupment policy that is adopted by the Company, including to comply with the requirements of Applicable Law, or (B) any Applicable Law that imposes mandatory recoupment, under circumstances set forth in such Applicable Law.

Data Privacy

*(a) **Declaration of Consent.** If you would like to participate in the Plan, you understand that you need to review the following information about the processing of your personal data by or on behalf of the Company, the Employer, and/or any Affiliate as described in this Agreement and any other Plan materials (the "Personal Data") and declare your consent. As regards the processing of your Personal Data in connection with the Plan and the Agreement, you understand that the Company is the controller of your Personal Data.*

*(b) **Data Processing and Legal Basis.** The Company collects, uses, and otherwise processes Personal Data about you for the purposes of allocating shares of Stock and implementing, administering, and managing the Plan. You understand that this Personal Data may include, without limitation, your name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g.,*

resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company or its Affiliates, details of all Restricted Stock Units or any other entitlement to shares of stock awarded, canceled, purchased, vested, unvested or outstanding in your favor. The legal basis for the processing of the Personal Data will be your consent.

(c) Stock Plan Administration Service Provider. You understand that the Company transfers your Personal Data, or parts thereof, to E*TRADE Financial Corporate Services, Inc. (and its affiliated companies), an independent service provider based in the United States, which assists the Company with the implementation, administration, and management of the Plan. In the future, the Company may select a different service provider and share your Personal Data with such different service provider that serves the Company in a similar manner. You understand and acknowledge that the Company's service provider will open an account for you to receive and trade shares purchased under the Plan and that you will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of your ability to participate in the Plan.

(d) International Data Transfers. You understand that the Company and any third parties assisting in the implementation, administration, and management of the Plan, such as the Company's service providers, are based in the United States as of the date hereof. If you are located outside the United States, you understand and acknowledge that your country has enacted data privacy laws that are different from the laws of the United States. The Company's legal basis for the transfer of your Personal Data is your consent.

(e) Data Retention. You understand that the Company will use your Personal Data only as long as is necessary to implement, administer, and manage your participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, you understand and acknowledge that the Company's legal basis for the processing of your Personal Data would be compliance with the relevant laws or regulations or the pursuit by the Company of respective legitimate interests not outweighed by your interests, rights, or freedoms. When the Company no longer needs your Personal Data for any of the above purposes, you understand the Company will remove it from its systems.

(f) Voluntariness and Consequences of Denial/Withdrawal of Consent. You understand that your participation in the Plan and your grant of consent is purely voluntary. You may deny or later withdraw your consent at any time, with future effect, and for any or no reason. If you deny or later withdraw your consent, the Company can no longer offer participation in the Plan or offer other awards to you or administer or maintain such awards, and you would no longer be able to participate in the Plan. You further understand that denial or withdrawal of your consent would not affect your status or salary as an employee or your career and that you would merely forfeit the opportunities associated with the Plan.

(g) Data Subject Rights. You understand that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where you are based and subject to the conditions set out in the applicable law, you may have, without limitation, the right to (i) inquire whether and about what kind of Personal Data the Company holds about you and how it is processed, and to access or request copies of such Personal Data; (ii) request the correction or supplementation of Personal Data about you that is inaccurate, incomplete, or out-of-date in light of the purposes underlying the processing; (iii) request the erasure of Personal Data that is (A) no longer necessary for the purposes underlying the processing, (B) processed based on withdrawn consent, (C) processed for legitimate interests that, in the context of your objection, do not prove to be compelling, or (D) processed in non-compliance with applicable legal requirements; (iv) request the Company to restrict the processing of your Personal Data in certain situations where you feel its processing is inappropriate; (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests; and (vi) request portability of your Personal Data that you have actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or your employment or service contract and is carried out by automated means. In case of concerns, you understand that you may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of or to exercise any of your rights, you understand that you should contact your local human resources representative or Ciena's stock administration department.

By signing this Agreement or, in case this information is presented electronically, by clicking the “Accept” or similar button implemented into the relevant web page or platform, you declare, without limitation, your consent to the data processing operations described in this Agreement. You understand that you may withdraw your consent at any time with future effect for any or no reason as described in this section.

No Advice Regarding Grant

The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the Stock underlying your Restricted Stock Units. You are hereby advised to consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

Applicable Law and Venue

The Restricted Stock Units and the provisions of this Agreement are governed by, and subject to, the laws of the State of Delaware, without regard to the conflict of law provisions.

For purposes of litigating any dispute that arises under this award or the Agreement, the parties hereby submit to and consent to the jurisdiction of the State of Delaware, and agree that such litigation shall be conducted in the state courts of Delaware, or the federal courts for the District of Delaware, and no other courts, where this grant is made and/or to be performed. ***You agree to waive your rights to a jury trial for any claim or cause of action based upon or arising out of this Agreement or the Plan.***

Language

You acknowledge that you are sufficiently proficient in the English language, or have consulted with an advisor who is sufficiently proficient in English, so as to allow you to understand the terms and conditions of this Agreement. Further, if you have received this Agreement or any other document related to this Award and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

Electronic Delivery and Acceptance

The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means or request your consent to participate in the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Company, the Company's designated broker, or their respective third parties. If you fail to submit a written rejection of this award to the Company's Stock Administration Department prior to the date on which this award initially vests, this award shall be deemed accepted by you and the terms of this award and the Plan shall apply to the same extent as if you had accepted your award electronically via the website of the Company's selected broker.

Severability; Integration

The provisions of this Agreement are severable, and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable. This Agreement contains the entire agreement with regard to the Restricted Stock Units awarded hereby; provided that in the event you are eligible to receive vesting benefits pursuant to an individual agreement with the Company that are more favorable than the vesting benefits provided hereunder, you will receive the vesting benefits under such agreement.

Waiver

You acknowledge that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach of this Agreement.

Foreign Account / Assets Reporting and Exchange Controls

Depending upon the country to which laws you are subject, you may have certain foreign asset and/or account reporting requirements and exchange controls which may affect your ability to acquire or hold shares of Stock under the Plan or cash received from participating in the Plan (including from any dividends received or sale proceeds arising from the sale of shares of Stock) in a brokerage or bank account outside your country of residence. Your country may require that you report such accounts, assets or transactions to the applicable authorities in your country. You may be required to repatriate sale proceeds or other funds received as a result of your participation in the Plan to your country through a designated bank or broker within a certain time after receipt. You are responsible for knowledge of and compliance with any such regulations and should speak with your own personal tax, legal and financial advisors regarding the same.

Insider Trading / Market Abuse Laws

You acknowledge that, depending on your country, you may be subject to insider trading restrictions and/or market abuse laws, which may affect your ability to acquire or sell shares of Stock or rights to shares of Stock (e.g., Restricted Stock Units) under the Plan during such times as you are considered to have “inside information” regarding the Company (as defined by the laws in your country). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Company. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you should consult with your own personal legal and financial advisors on this matter.

Imposition of Other Requirements

The Company reserves the right to impose other requirements on your participation in the Plan, on the award, on the Restricted Stock Units, and on any shares of Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

Canadian Residents

With respect to Canadian residents only:

Restricted Stock Units Payable Only in Shares of Stock. Notwithstanding any discretion in the Plan or the Agreement to the contrary, Restricted Stock Units granted in Canada shall be paid in shares of Stock only and do not provide any right for you to receive a cash payment.

Canadian Securities Laws

You acknowledge and confirm that your participation in the Plan and entering into of this Agreement is voluntary and not induced by expectation of (a) employment or continued employment, if you are an employee, (b) employment or appointment or continued employment or appointment, if you are an officer, or (c) engagement to provide services or continued engagement to provide services, if you are a consultant. Furthermore, if you are a consultant you also acknowledge and confirm that you are engaged to provide services to the Company or an Affiliate under a written contract with the Company or an Affiliate and spend or will spend a significant amount of time and attention on the business and affairs of the Company or an Affiliate.

Termination Date

Notwithstanding the terms of the Plan or Agreement, for the purposes of determining the date your Service with the Company, the Employer, or any Affiliate terminates (whether for cause or not, or due to death, disability or otherwise) and

your entitlements thereafter, termination of Service shall mean the date at the end of the applicable statutory notice period (if any), but shall not include any period of notice at common law.

The following provisions will apply if you are a resident of Quebec:

Language Consent. The parties acknowledge that it is their express wish that the Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention, ainsi que de tous documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.

Data Privacy. This provision supplements the Data Privacy section of the Agreement:

You hereby authorize the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. You further authorize the Company, the Employer, any Affiliate and the administrator of the Plan to disclose and discuss the Plan with their advisors. You further authorize the Company, the Employer, any Affiliate and the administrator of the Plan to record such information and to keep such information in your employee file. Please note that the governments or law enforcement agencies of a foreign jurisdiction where the Company processes, stores or transfers data may be able to access your data through the laws of that jurisdiction.

Notifications

Securities Law Information. You are permitted to sell shares of Stock acquired through the Plan through the designated broker appointed under the Plan, if any, provided the resale of shares of Stock acquired under the Plan takes place outside of Canada through the facilities of a stock exchange on which the Stock is listed. Currently, the Stock is listed on the New York Stock Exchange.

Foreign Account / Assets Reporting Information. Foreign property, including Restricted Stock Units, shares of Stock acquired under the Plan and other rights to receive shares (e.g., Restricted Stock Units) of a non-Canadian company held by a Canadian resident must generally be reported annually on a Form T1135 (Foreign Income Verification Statement) if the total cost of the foreign property exceeds C\$100,000 at any time during the year. Thus, such Restricted Stock Units must be reported - generally at a nil cost - if the C\$100,000 cost threshold is exceeded because other foreign property is held by you. When shares of Stock are acquired, their cost generally is the adjusted cost base (“ACB”) of the shares. The ACB would ordinarily equal the fair market value of the shares at the time of acquisition, but if you own other shares of the same company, this ACB may have to be averaged with the ACB of the other shares. You should consult with your personal tax advisor to determine your reporting requirements.

United Kingdom Residents

With respect to United Kingdom residents only:

Taxes. This section supplements the Share Delivery Pursuant to Vested Restricted Stock Units; Tax-Related Items section above:

Without limitation to the provisions contained in the Share Delivery Pursuant to Vested Restricted Stock Units; Tax-Related Items section of this Agreement, you agree that you are liable for all Tax-Related Items and hereby covenant to pay all such Tax-Related Items as and when requested by the Company or the Employer or by Her Majesty’s Revenue and Customs (“HMRC”) (or any other tax authority or any other relevant authority). You also agree to indemnify and keep indemnified the Company and the Employer against any Tax-Related Items that they are required to pay or withhold on your behalf or have paid or will pay to HMRC (or any other tax authority or any other relevant authority).

Joint Election. As a condition of your participation in the Plan and of the vesting of the Restricted Stock Units, you agree to accept any liability for secondary Class 1 National Insurance Contributions which may be payable by the Company and/or the Employer with respect to the vesting of the Restricted Stock Units or otherwise payable in connection with the shares of Stock and the right to acquire shares of Stock (“Employer NICs”).

Without limitation to the foregoing, you agree to execute a joint election with the Company or the Employer, the form of such joint election being formally approved by HMRC (the “Joint Election”), and any other required consents or elections as provided to you by the Company or the Employer. You further agree to execute such other joint elections as may be required between you and any successor to the Company or the Employer.

If you do not enter into a Joint Election, or if the Joint Election is revoked at any time by HMRC, the Restricted Stock Units shall cease vesting and become null and void, and no shares of Stock shall be acquired under the Plan, without any liability to the Company, the Employer and/or any Affiliate.

You further agree that the Company and/or the Employer may collect the Employer NICs by any of the means set forth in the Share Delivery Pursuant to Vested Restricted Stock Units; Tax-Related Items section of this Agreement, as supplemented above.

This Agreement is not a stock certificate or a negotiable instrument.

CIENA CORPORATION INCENTIVE BONUS PLAN

(Amended and Restated as of August 22, 2023)

1. PURPOSE

The purpose of the Ciena Corporation Incentive Bonus Plan (the “*Plan*”), as amended and restated herein, is to foster the Company’s profitable growth and to promote a “pay-for-performance” culture by rewarding employees for achieving results critical to the Company’s short-term and long-term success, as measured by the accomplishment of assigned performance goals at the corporate, functional and/or individual levels.

2. DEFINITIONS

2.1 “*Actual Bonus Payable*” means the amount, if any, actually paid to a Participant for a Bonus Period, which amount may be equal to, greater than or less than the Target Bonus, as determined in the sole discretion of the relevant manager of such Participant (as approved by Company management, up to the functional senior vice president), based upon the Participant’s achievement of assigned Individual Performance Goals for the Bonus Period.

2.2 “*Base Salary*” means the annual base salary payable to a Participant at the rate in effect as of the first day of the last fiscal quarter of a Bonus Period (or upon an earlier termination of service, as of immediately prior to such transfer or termination of service). Base Salary shall not be reduced for any salary reduction contributions (i) to deferred arrangements under Section 401(k) of the Code, (ii) to a cafeteria plan under Section 125 of the Code, or (iii) to a nonqualified deferred compensation plan. Base Salary shall not take into account any bonuses, reimbursed expenses, credits or benefits (including benefits under any plan of deferred compensation), or any additional cash compensation or compensation payable in a form other than cash. For purposes of the Plan, the term “Code” shall mean the Internal Revenue Code of 1986, as now in effect or later amended, including, as applicable, such regulations and guidance promulgated thereunder.

2.3 “*Bonus Award*” means the award of an incentive cash bonus to a Participant under the Plan, with the actual amount awarded, if any, being the “Actual Bonus Payable.”

2.4 “*Bonus Period*” means any Company fiscal period with respect to which the Committee determines that a Bonus Award will be payable in accordance with the terms of the Plan.

2.5 “*CEO*” means the Chief Executive Officer of the Company.

2.6 “*Committee*” means the Compensation Committee of the Board of Directors of the Company.

2.7 “*Company*” means Ciena Corporation and any successor thereto.

2.8 “*Corporate Performance Goals*” means specific financial or non-financial measures of performance of the Company or a business unit, division or organization of the Company as determined by the Committee for each Bonus Period, which measures may consist of a range. The Committee may establish different Corporate Performance Goals for discrete business units, divisions or organizations within the Company (e.g., Blue Planet Software). The meeting of all or such portion of the Corporate

Performance Goals as required by the Committee is a condition for the payment of Bonus Awards for each Bonus Period.

2.9 “*Disability*” means, with respect to a Participant, such Participant’s inability to perform the essential duties of his or her position by reason of a medically determinable physical or mental impairment which is potentially permanent in character, or which can be expected to last for a continuous period of not less than 12 months.

2.10 “*Eligible Employee*” means, for each Bonus Period, except as set forth in Section 5.3, a person who:

(a) is regularly employed by the Company or a Subsidiary on a full-time or part-time basis;

(b) is employed by the Company or a Subsidiary on the last regular working day of the Bonus Period (including a person who is on authorized leave from the Company or a Subsidiary under applicable company policy on the last day of the Bonus Period);

(c) is not eligible for the payment of sales commissions or to participate under a similar cash incentive arrangement put forth by a Subsidiary; and

(d) has not engaged in conduct that the Committee determines to be against the best interests of the Company.

2.11 “*Executive Officer*” means an employee who serves or has served as an Executive Officer of the Company (as such term is defined under Rule 3b-7 of the Securities Exchange Act of 1934, as amended) during a Bonus Period.

2.12 “*Funded Bonus Pool*” means the aggregate amount of Bonus Awards actually to be paid for the relevant Bonus Period, if any.

2.13 “*General Release*” means a general release of all claims that a Participant may have against the Company or entities or persons affiliated with the Company, in a form prescribed by the Company.

2.14 “*Individual Performance Goals*” means specific measures of performance expected of each Participant as assigned and assessed by the relevant Company managers for each Bonus Period. The meeting of all or such portion of the Individual Performance Goals as required by the relevant Company manager in his or her discretion is a condition for Participant’s receipt of a Bonus Award for the applicable Bonus Period.

2.15 “*Participant*” means an Eligible Employee (or employee who otherwise satisfies the requirements of Section 5.3) who the Committee designates to be a Participant for the applicable Bonus Period in accordance with Article 3.

2.16 “*Retirement*” means a Participant’s voluntary cessation of employment following (a) attainment of age 60 and (b) his or her completion of 10 years of service which need not have been consecutive, including up to six years of prior employment or service to any entity acquired by the Company or its affiliates if Participant has completed at least four years of service with the Company following the most recent of such acquisitions.

2.17 “*Retirement Notice Requirement*” means the Participant’s irrevocable advance written notice of a termination of his or her service for the longer of (a) (i) at least three months prior to Retirement, or (ii) at least 12 months prior to Retirement in the case such Participant has also provided advance written notice of Retirement for an equity award under the Company’s 2017 Omnibus Incentive Plan; or (b) such longer notice period as is applicable pursuant to any non-U.S. jurisdiction, in each case which notice may only be delivered after a Participant becomes eligible for Retirement based on Section 2.16. Any employee who delivers a notice pursuant to the immediately preceding clause (a)(i) shall be required to remain employed until at least 30 days following the first day of the second fiscal quarter for the Retirement Notice Requirement to be satisfied. Notwithstanding anything herein to the contrary, if at any time after a Participant has submitted notice of Retirement, his or her employment is terminated by the Company other than due to cause or performance or due to his or her death or Disability, the Retirement Notice Requirement will be deemed satisfied.

2.18 “*Subsidiary*” means any corporation or other entity (a) in which the Company owns, directly or indirectly, stock possessing 50 percent or more of the total combined voting power of all classes of stock, (b) over which the Company has effective operating control, or (c) in which the Company has a material interest as determined by the Committee.

2.19 “*Target Bonus*” means each Participant’s targeted Bonus Award amount, expressed as a percentage of each Participant’s Base Salary corresponding to his or her position or salary grade level in effect as of the first day of the last fiscal quarter of a Bonus Period, based on an assumed achievement of 100% of the Corporate Performance Goal(s) established by the Committee for the applicable Bonus Period. Each Participant’s Target Bonus shall be prorated based on the percentage of days employed as an Eligible Employee during the relevant Bonus Period.

2.20 “*Total Target Bonus*” means the total targeted amount of Bonus Awards for each Bonus Period, as determined by the Committee.

3. DESIGNATION OF PARTICIPANTS

For each Bonus Period, the Committee shall designate the Participants under the Plan. Designation of a person as an Eligible Employee, or a Participant for any Bonus Period, shall not bind the Committee to designate such person as a Participant in any future Bonus Period and such person shall have no claim or entitlement to compensation arising from his or her not participating in the Plan in any prospective Bonus Periods.

4. ESTABLISHMENT OF PERFORMANCE GOALS

4.1 For each Bonus Period, the Committee shall establish in writing:

- The Total Target Bonus;
- The Corporate Performance Goal(s); and
- Any formulae for calculating the Funded Bonus Pool, including application of any performance factors or multipliers and any adjustments for over-achievement or under-achievement of the Corporate Performance Goal(s).

4.2 In determining whether, and to what extent, the Company has met the Corporate Performance Goal(s) for a Bonus Period, the Committee shall determine, in its discretion, the nature and

amount of any adjustments that should be made in order reasonably and equitably to reflect the intent and purpose of the Plan.

4.3 For each Bonus Period, the officers of the Company shall direct the relevant managers of Participants to establish Individual Performance Goals for each Participant.

5. DETERMINATION OF BONUS AWARDS

5.1 Evaluation of Performance Against Corporate Performance Goal(s). As soon as practicable after the end of each Bonus Period, the Committee shall determine whether and to what extent the Corporate Performance Goal(s) for the Bonus Period were achieved and, if so, at what level of achievement under the formulae established for the Bonus Period.

5.2 Approval of Funded Bonus Pool. If the Committee determines that one or more of the Corporate Performance Goals has been achieved, the Committee shall approve the amount of the Funded Bonus Pool in accordance with the relevant calculation for the Bonus Period and authorize the relevant officers of the Company to approve the payment of Bonus Awards corresponding to the level of achievement of the Individual Performance Goals for each Participant as set forth in Section 5.4 below and taking into consideration the percentage of days that each Participant was employed as an Eligible Employee during the relevant Bonus Period.

5.3 Changes in Work Status or Work Assignment During Bonus Period.

(a) *Certain Involuntary Terminations*. A Participant who is employed during the first full fiscal quarter of a fiscal year Bonus Period, and is involuntarily terminated by the Company any time thereafter during the Bonus Period as a result of a (i) bona fide reduction in force or (ii) bona fide role elimination where there is no reasonable expectation that such role, or a role at such level, will be reinstated by the Company in the next 12 months (provided, however, neither such termination shall include any termination for cause or related to performance), in each case, approved by Company officers, shall be eligible to receive a Bonus Award equal to 80% of such Participant's Target Bonus prorated to reflect the total percentage of days employed during the Bonus Period, even though he or she is not employed on the last regular working day of the Bonus Period; provided however, payment of the amounts described in this Section 5.3(a) shall be subject to the Participant's execution of a General Release that becomes effective on or before the 60th day following the date of Participant's termination from employment.

(b) *Death; Disability*. A Participant who ceases to be employed during the Bonus Period due to his or her death or Disability shall be eligible to receive a Bonus Award equal to 100% of such Participant's Target Bonus, pro-rated to reflect the total percentage of days employed during the Bonus Period, even though he or she is not employed on the last regular day of the Bonus Period. A Participant who ceases to be employed following the Bonus Period due to his or her death or Disability shall be eligible to receive a Bonus Award based on actual performance determined pursuant to Section 5.4 and to be paid at the same time with other Participants for such Bonus Period under Section 6.2.

(c) *Retirement*. A Participant who ceases to be employed during the Bonus Period due to his or her Retirement shall be eligible to receive a Bonus Award based on actual performance and pro-rated to reflect the total percentage of days employed during the Bonus Period, even though he or she is not employed on the last regular working day of the Bonus Period; provided, however, that payments of the amounts described in this Section 5.3(c) shall be subject to the Participant's satisfaction of the Retirement Notice Requirement.

(d) *Full-Time Employment Status.* A Participant who transfers between full-time and part-time employment status during a Bonus Period shall be eligible to receive a Bonus Award based on actual performance and prorated based on both the percentage of days employed and the applicable Base Salary while in full-time and part-time status, provided that he or she otherwise meets the definition of Eligible Employee.

(e) *Transfer To or From Sales Compensation Role.* An individual who either (i) transfers during a fiscal year Bonus Period from a role that is subject to the payment of sales commissions to a role that is not subject to the payment of sales commissions (and thus an Eligible Employee), or (ii) transfers from a role that is not subject to the payment of sales commissions (and thus an Eligible Employee) to a role that is subject to the payment of sales commissions, shall be eligible to receive a Bonus Award based on actual performance and prorated to reflect the percentage of days employed as an Eligible Employee during the Bonus Period.

(f) *Role Transfer Between Funded Bonus Pools.* A Participant who transfers during a fiscal year Bonus Period to a new role that is subject to different Corporate Performance Goals and/or a different calculation of Funded Bonus Pool than the previous role, shall be eligible to receive a Bonus Award prorated from the two Funded Bonus Pools based on the percentage of days worked in each role during the Bonus Period.

5.4 Determination of Actual Bonus Payable. Based upon the level of achievement of the Individual Performance Goals established for each Participant, as determined in the sole discretion of each Participant's relevant manager (as approved by Company management, up to the functional senior vice president), Participants shall be eligible to receive a Bonus Award to be paid from the Funded Bonus Pool, if any. The Actual Bonus Payable to any Participant, if any, shall be determined in the sole discretion of the Participant's manager (as approved by Company management, up to the functional senior vice president) and may be equal to, greater than or less than the Target Bonus for the Participant. Except as determined by the Committee, however, the aggregate Actual Bonus Payable to all Participants in a Bonus Period shall not exceed the Funded Bonus Pool. For the avoidance of doubt, and notwithstanding any Funded Bonus Pool for a Bonus Period, a Participant's Actual Bonus Payable for that Bonus Period may be zero, as determined in the sole discretion of the Participant's manager (as approved by Company management, up to the functional senior vice president) based upon the level of achievement of the Individual Performance Goals established for such Participant.

6. VESTING AND PAYMENT OF BONUS AWARDS

6.1 For any Bonus Period, if and to the extent awarded in accordance with Section 5, Bonus Awards shall be payable to a Participant who remains an Eligible Employee (or otherwise satisfies the requirements of Section 5.3), even if the Participant has ceased to be an employee of the Company or a Subsidiary on the payment date for the Bonus Award.

6.2 Except to the extent the Participant is or becomes ineligible to receive a Bonus Award, the Funded Bonus Pool (including any Bonus Awards payable thereunder in accordance with this Plan) shall be immediately and fully vested upon the Committee's authorization of the Funded Bonus Pool and payment of awards therefrom for the applicable Bonus Period. In general, Bonus Awards shall be paid to Participants within a reasonable time after the Committee's authorization of such awards, but in any event shall be paid no later than March 15 of the year following the end of the applicable Bonus Period except that any Bonus Award payable pursuant to Section 5.3(a) or Section 5.3(b) shall be paid no later than March 15 of the year following the end of the year in which the termination of employment occurs.

6.3 Bonus Awards shall be payable solely from the general assets of the Company and its Subsidiaries. No Participant shall have any right to, or interest in, any specific assets of the Company or any Subsidiary in respect of Bonus Awards.

7. RECOUPMENT OF BONUS AWARDS

7.1 In the event that the Company is required to prepare an accounting restatement due to the material non-compliance of the Company with any financial reporting requirement under the securities laws as a result of misconduct, then the individuals subject to automatic forfeiture under Section 304 of the Sarbanes-Oxley Act of 2002 and any Participant who knowingly engaged in the misconduct, was grossly negligent in engaging in the misconduct, knowingly failed to prevent the misconduct, or was grossly negligent in failing to prevent the misconduct, shall reimburse the Company the amount of any Bonus Awards paid under this Plan during the three-year period following the first public issuance or filing with the United States Securities and Exchange Commission (whichever first occurred) of the financial document that contained such material non-compliance.

7.2 Without limiting Section 7.1, any Bonus Awards paid under this Plan shall be subject to mandatory repayment by the Participant to the Company (i) to the extent set forth in this Plan or (ii) to the extent the Participant is, or in the future becomes, subject to (A) the Company's Executive Compensation Clawback Policy or any other Company or Subsidiary "clawback" or recoupment policy that is adopted by the Company, including to comply with the requirements of applicable laws, rules or regulations, or (B) any applicable law that imposes mandatory recoupment, under circumstances set forth in such applicable law.

8. NO ASSIGNMENT

Bonus Awards authorized under this Plan shall be paid only to Participants (or, in the event of a Participant's death, to the Participant's heirs) in accordance with the terms hereof. No Bonus Award, nor any part thereof, and no right or claim to any of the monies payable pursuant to this Plan shall be anticipated, assigned, or otherwise encumbered, nor be subject to attachment, garnishment, execution or levy of any kind, prior to the actual payment and delivery of said amount to the Participant and any attempted assignment or other encumbrance or attachment, garnishment, execution or levy shall be of no force or effect, except as otherwise provided by law. Notwithstanding the above, if a Participant is adjudged incompetent, the Committee may direct that any amounts payable be paid to the Participant's guardian or legal representative.

9. ADMINISTRATION AND AUTHORITY

9.1 Administration. Unless otherwise determined by the Company's Board of Directors, and except as otherwise provided herein, the Committee shall administer the Plan.

9.2 Powers. The Committee shall have all powers necessary to administer the Plan, including, without limitation, the sole powers and discretionary authority:

- to designate the Participants for each Bonus Period;
 - to establish the Total Target Bonus for each Bonus Period;
 - to establish the Corporate Performance Goal(s) for each Bonus Period and, as appropriate, the ranges and thresholds for the Corporate Performance Goal(s);
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- to establish any formulae for calculating the Funded Bonus Pool for each Bonus Period;
- to approve Target Bonus percentages for the CEO and the Executive Officers;
- to adopt, amend and rescind rules for the administration of the Plan and to prescribe any forms required to administer the Plan, including adopting any sub-plans to the Plan for the purposes of facilitating compliance with non-U.S. laws or easing the administration of the Plan; and
- to decide all questions and settle all controversies and disputes that may arise in connection with the Plan.

9.3 Actions of the Company. No Participant shall receive a Bonus Award under this Plan unless the Company has determined in its discretion that the Participant is entitled to the same. All determinations, interpretations, rules, and decisions of the Committee, the Company, the CEO or their delegates shall be conclusive and binding upon all persons having or claiming to have any interest or right under the Plan.

9.4 Delegation. The Committee shall have the power to delegate such specific duties and responsibilities under the Plan to the CEO or other officers of the Company as it may determine to be necessary or desirable. Any delegation by the Committee may allow further delegations by the CEO or applicable officer. The Committee may rescind any delegation at any time. Each person or entity to which a duty or responsibility has been delegated shall be responsible for the exercise of such duty or responsibility and shall not be responsible for any act or failure to act of any other person or entity. Notwithstanding the foregoing, nothing in this Section 9.4 shall permit the Committee to delegate any duties or responsibilities under the Plan to the CEO with respect to the Executive Officers. As necessary, the Company's People and Culture function shall establish procedures to ensure consistent application of Section 5.3 and shall be empowered and responsible for resolving any disputes related to classification of reductions in force or role elimination under Section 5.3(a).

10. MISCELLANEOUS

10.1 Employment and Plan Rights. The Plan shall not be deemed to give any Eligible Employee or Participant the right to be retained in the employ of the Company or any Subsidiary, nor shall the Plan interfere with the right of the Company or any Subsidiary to discharge any employee at any time, nor shall the Plan be deemed to give any employee any right to any Bonus Award until such award is authorized in accordance with Section 5. Moreover, Bonus Awards and the income from and value thereof are not intended to be and shall not be considered part of normal or expected compensation or salary for any purpose and in no event should be considered as compensation for, or relating in any way to, past services for the Company or any Subsidiary. The Committee (and its delegates) shall have the sole and exclusive authority to determine the date that an employee is no longer actively providing services to the Company for purposes of establishing status as an Eligible Employee. Unless otherwise expressly determined by the Committee or required by applicable law, the period of employment for purposes of establishing eligibility and/or proration of Bonus Awards pursuant to Section 5.3, shall not be extended by any notice period (e.g., the Participant's employment duration shall not include any period of "garden leave" or similar period mandated under employment or other laws in the applicable jurisdiction where Participant is employed or otherwise rendering services).

10.2 Non-US Participants. With respect to Participants located outside of the United States, Bonus Awards and the income from and value thereof are not intended to be and shall not be considered

part of normal or expected compensation or salary for any purpose and in no event should be considered as compensation for, or relating in any way to, past services for the Company or any Subsidiary. Without limiting the generality of Section 9, the Company is specifically authorized to exercise its discretion and to adopt for any reason, including administrative impracticability, rules, procedures and sub-plans with provisions that exclude, limit or modify the rights of any Participant outside the United States regarding eligibility to receive any payment pursuant to this Plan, including specifically payments in connection with such Participant's death, Disability, Retirement or other termination of employment. In no event shall any provision of this Plan, including specifically any Bonus Award or partial payment thereof contemplated by Section 5.3(a) or otherwise under Section 5.3, result in the duplication of any benefits or compensation otherwise legally required or otherwise owing in connection with a separation of service of any Participant located outside of the United States, with any such determination to be solely by the Company.

10.3 Amendment and Termination. The Company may amend or terminate the Plan, in full or in part, at any time and from time to time, provided that no such amendment or termination shall adversely affect the rights of any Participant to any Bonus Award previously earned or paid.

10.4 Nonalienation. No benefit payable at any time under this Plan shall be subject in any manner to alienation, sale, transfer, assignment, pledge, attachment, or encumbrance of any kind.

10.5 Tax Withholding. The Company shall withhold any applicable income or employment taxes that it determines in its discretion should be, or are otherwise required to be, withheld from any Bonus Awards provided under this Plan.

10.6 Limitation on Liability. By participation in this Plan, Participants acknowledge that neither the Company nor any Subsidiary shall be liable for any foreign exchange rate fluctuation between the applicable local currency and the United States dollar that may affect the value of any Bonus Award under the Plan.

10.7 Assignment to Successor. The Company shall assign its rights and obligations under this Plan to any successor organization resulting from a merger, acquisition or affiliation involving the Company, or resulting from a sale of substantially all of the Company's assets.

10.8 Controlling Law. This Plan shall in all respects be governed by, and construed in accordance with, the laws of the State of Delaware (without regard to the principles of conflicts of laws).

10.9 Deferral of Compensation; Savings Clause. Delivery of any Bonus Award and treatment under this Plan shall be subject to any deferral election validly made by eligible participants under the Ciena Corporation Deferred Compensation Plan or any successor plan. If the Participant is a "specified employee," as such term is defined pursuant to Section 409A of the Code and the regulations and guidance issued thereunder, and an amount payable under this Plan constitutes deferred compensation (within the meaning of Section 409A) the payment of which is required to be delayed pursuant to the six-month delay rule set forth in Section 409A in order to avoid taxes or penalties under Section 409A, then such payments shall not be made until the earlier of the Participant's death or six months and one day after the Participant's last day of employment.

10.10 Right of Set Off. The Company and any Subsidiary shall have the right to withhold and set off against any amount otherwise due and payable under this Plan to the extent permitted by applicable law. Unless otherwise determined by the Committee, the payment of any Bonus Award pursuant to Section 5.3(a) – Section 5.3(c), shall be deemed to be inclusive of (and correspondingly reduce) any notice, payment or benefits to which any Participant may be entitled under the federal

Worker Adjustment and Retraining Notification (“*WARN*”) Act or other applicable plant or facility closing or mass layoff law, or any other statutory or regulatory requirement to provide notice of employment termination or entitlement to severance payments in order to avoid the duplication of benefits.

10.11 Severability; Waiver. The provisions of this Plan are severable, and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable. Any waiver by the Company of non-compliance with any provision of this Plan shall not operate or be construed as a waiver of any other provision of this Plan.

CIENA CORPORATION

By:

Name: Sheela Kosaraju

Title: Senior Vice President & General Counsel

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: September 6, 2023

/s/ Gary B. Smith

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: September 6, 2023

/s/ James E. Moylan, Jr.

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 July 29, 2023 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

Gary B. Smith

President and Chief Executive Officer

September 6, 2023

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 July 29, 2023 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.

James E. Moylan, Jr.

Senior Vice President and Chief Financial Officer

September 6, 2023

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.