CIENA CORP
Form 10-Q
September 07, 2017

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
FORM 10-Q
(Mark one)
þ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended July 31, 2017
OR
o 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 or organization)	23-2725311 (I.R.S. Employer Identification No.)
7035 Ridge Road, Hanover, MD (Address of Principal Executive Offices)	21076 (Zip Code)

(410) 694-5700
(Registrant’s telephone number, including area code)
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 þ NO o
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES þ NO o
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 definition of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer þ	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o
			Emerging growth company o

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 o

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

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

Class	Outstanding at September 1, 2017
common stock, $0.01 par value	142,688,322

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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 July 31,		Nine Months Ended July 31,	
	2017	2016	2017	2016
Revenue:				
Products	$610,742	$553,450	$1,702,365	$1,535,017
Services	117,977	117,100	354,873	349,365
Total revenue	728,719	670,550	2,057,238	1,884,382
Cost of goods sold:				
Products	341,197	299,381	955,303	851,641
Services	59,446	62,684	181,834	189,713
Total cost of goods sold	400,643	362,065	1,137,137	1,041,354
Gross profit	328,076	308,485	920,101	843,028
Operating expenses:				
Research and development	117,729	116,697	356,221	339,346
Selling and marketing	86,739	83,732	260,292	252,878
General and administrative	35,569	34,336	106,423	100,681
Amortization of intangible assets	3,837	14,529	29,368	46,957
Acquisition and integration costs	—	1,029	—	4,613
Restructuring costs	2,203	1,138	8,874	2,057
Total operating expenses	246,077	251,461	761,178	746,532
Income from operations	81,999	57,024	158,923	96,496
Interest and other income (loss), net	(848)	(3,647)	(3,396)	(11,456)
Interest expense	(13,415)	(15,967)	(41,926)	(41,285)
Income before income taxes	67,736	37,410	113,601	43,755
Provision for income taxes	7,726	3,864	11,704	7,758
Net income	$60,010	$33,546	$101,897	$35,997
Basic net income per common share	$0.42	$0.24	$0.72	$0.26
Diluted net income per potential common share	$0.39	$0.23	$0.69	$0.26
Weighted average basic common shares outstanding	142,464	138,881	141,631	137,835
Weighted average dilutive potential common shares outstanding	172,112	169,349	164,431	139,053

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 July 31,		Nine Months Ended July 31,	
	2017	2016	2017	2016
Net income	$60,010	$33,546	$101,897	$35,997
Change in unrealized gain (loss) on available-for-sale securities, net of tax	(6)	169	(533)	425
Change in unrealized gain (loss) on foreign currency forward contracts, net of tax	2,380	(946)	2,906	518
Change in unrealized gain (loss) on forward starting interest rate swap, net of tax	(327)	(2,270)	4,570	(2,176)
Change in cumulative translation adjustments	13,644	(2,724)	11,891	1,969
Other comprehensive income (loss)	15,691	(5,771)	18,834	736
Total comprehensive income	$75,701	$27,775	$120,731	$36,733

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 31, 2017	October 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$559,540	$777,615
Short-term investments	234,743	275,248
Accounts receivable, net	653,242	576,235
Inventories	276,421	211,251
Prepaid expenses and other	199,189	172,843
Total current assets	1,923,135	2,013,192
Long-term investments	59,874	90,172
Equipment, building, furniture and fixtures, net	314,850	288,406
Goodwill	267,841	266,974
Other intangible assets, net	106,990	146,711
Other long-term assets	63,970	68,120
Total assets	$2,736,660	$2,873,575
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$258,358	$235,942
Accrued liabilities and other short-term obligations	284,629	310,353
Deferred revenue	110,629	109,009
Current portion of long-term debt	4,000	236,241
Total current liabilities	657,616	891,545
Long-term deferred revenue	86,898	73,854
Other long-term obligations	116,534	124,394
Long-term debt, net	931,302	1,017,441
Total liabilities	$1,792,350	$2,107,234
Commitments and contingencies (Note 21)		
Stockholders' equity:		
Preferred stock – par value $0.01; 20,000,000 shares authorized; zero shares issued and outstanding	—	—
Common stock – par value $0.01; 290,000,000 shares authorized; 142,672,784 and 139,767,627 shares issued and outstanding	1,427	1,398
Additional paid-in capital	6,772,687	6,715,478
Accumulated other comprehensive loss	(5,495)	(24,329)
Accumulated deficit	(5,824,309)	(5,926,206)
Total stockholders' equity	944,310	766,341
Total liabilities and stockholders' equity	$2,736,660	$2,873,575

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 31,	
	2017	2016
Cash flows provided by operating activities:		
Net income	$101,897	$35,997
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	55,873	46,624
Share-based compensation costs	36,843	41,832
Amortization of intangible assets	39,721	59,428
Provision for inventory excess and obsolescence	28,727	26,663
Provision for warranty	5,188	13,114
Other	21,076	15,706
Changes in assets and liabilities:		
Accounts receivable	(80,652)	(37,768)
Inventories	(93,896)	(56,267)
Prepaid expenses and other	(26,450)	16,687
Accounts payable, accruals and other obligations	(5,960)	(5,087)
Deferred revenue	13,978	(4,120)
Net cash provided by operating activities	96,345	152,809
Cash flows used in investing activities:		
Payments for equipment, furniture, fixtures and intellectual property	(76,004)	(81,161)
Purchase of available for sale securities	(189,802)	(340,168)
Proceeds from maturities of available for sale securities	260,003	160,606
Settlement of foreign currency forward contracts, net	(1,619)	(9,982)
Acquisition of business, net of cash acquired	—	(32,000)
Net cash used in investing activities	(7,422)	(302,705)
Cash flows provided by (used in) financing activities:		
Proceeds from issuance of term loan, net	—	248,750
Payment of long-term debt	(232,554)	(45,990)
Payment for modification of term loans	(93,625)	—
Payment of debt issuance costs	—	(3,980)
Payment of capital lease obligations	(2,650)	(5,359)
Proceeds from issuance of common stock	20,395	22,118
Net cash provided by (used in) financing activities	(308,434)	215,539
Effect of exchange rate changes on cash and cash equivalents	1,436	(1,696)
Net increase (decrease) in cash and cash equivalents	(218,075)	63,947
Cash and cash equivalents at beginning of period	777,615	790,971
Cash and cash equivalents at end of period	$559,540	$854,918
Supplemental disclosure of cash flow information		
Cash paid during the period for interest	$33,861	$31,787
Cash paid during the period for income taxes, net	$26,793	$9,947
Non-cash investing activities		
Purchase of equipment in accounts payable	$6,012	$10,204
Equipment acquired under capital lease	$—	$5,322

Building subject to capital lease	$50,370	$8,993
Construction in progress subject to build-to-suit lease	$—	$35,875

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

CIENA CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

(1) INTERIM FINANCIAL STATEMENTS
The interim financial statements included herein for Ciena Corporation and its wholly owned subsidiaries (“Ciena”) have been prepared by Ciena, without audit, pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (the "SEC"). In the opinion of management, the financial statements included in this report reflect all normal recurring adjustments that Ciena considers necessary for the fair statement of the results of operations for the interim periods covered and of the financial position of Ciena at the date of the interim balance sheets. Certain information and footnote disclosures normally included in the annual financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") have been condensed or omitted pursuant to such rules and regulations. The Condensed Consolidated Balance Sheet as of October 31, 2016 was derived from audited financial statements, but does not include all disclosures required by GAAP. However, Ciena believes that the disclosures are adequate to understand the information presented herein. The operating results for interim periods are not necessarily indicative of the operating results for the entire year. These financial statements should be read in conjunction with Ciena’s audited consolidated financial statements and the notes thereto included in Ciena’s annual report on Form 10-K for the fiscal year ended October 31, 2016.
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 2017 and 2016 are 52-week fiscal years. For purposes of financial statement presentation, each fiscal year is described as having ended on October 31, and the fiscal quarters are described as having ended on January 31, April 30 and July 31 of each fiscal year.

(2) SIGNIFICANT ACCOUNTING POLICIES

Business Combinations

Ciena records acquisitions using the purchase method of accounting. All of the assets acquired, liabilities assumed, contractual contingencies and contingent consideration are recognized at their fair value as of the acquisition date. The excess of the purchase price over the estimated fair values of the net tangible and net intangible assets acquired is recorded as goodwill. The application of the purchase method of accounting for business combinations requires management to make significant estimates and assumptions in the determination of the fair value of assets acquired and liabilities assumed in order to allocate purchase price consideration properly between assets that are depreciated and amortized from goodwill. These assumptions and estimates include a market participant's use of the asset and the appropriate discount rates for a market participant. Ciena's estimates are based on historical experience, information obtained from the management of the acquired companies and, when appropriate, include assistance from independent third-party appraisal firms. Significant assumptions and estimates can include, but are not limited to, the cash flows that an asset is expected to generate in the future, the appropriate weighted-average cost of capital, and the cost savings expected to be derived from acquiring an asset. These estimates are inherently uncertain and unpredictable. In addition, unanticipated events and circumstances may occur which may affect the accuracy or validity of such estimates.

Use of Estimates

The preparation of the financial statements and related disclosures in conformity with GAAP requires management to make estimates and judgments that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Estimates are used for selling prices for multiple element arrangements, share-based compensation, convertible notes payable valuations, bad debts, valuation of inventories and investments, recoverability of intangible assets, other long-lived assets and goodwill, income taxes, warranty obligations, restructuring liabilities, derivatives, incentive compensation, contingencies and litigation. Ciena bases its estimates on historical experience and assumptions that it believes are reasonable. Actual results may differ materially from management's estimates.

Cash and Cash Equivalents

Ciena considers all highly liquid investments purchased with original maturities of three months or less to be cash equivalents. Any restricted cash collateralizing letters of credit is included either in other current assets or in other long-term assets depending upon the duration of the restriction.

Investments

Ciena's investments are classified as available-for-sale and are reported at fair value, with unrealized gains and losses recorded in accumulated other comprehensive income (loss). Ciena recognizes losses in the income statement when it determines that a decline in the fair value of any investment below its cost basis is other-than-temporary. In determining whether a decline in fair value is other-than-temporary, Ciena considers various factors, including market price (when available), investment ratings, the financial condition and near-term prospects of the investee, the length of time and the extent to which the fair value has been less than Ciena's cost basis, and Ciena's intent and ability to hold the investment until maturity or for a period of time sufficient to allow for any anticipated recovery in market value. Ciena considers all marketable debt securities that it expects to convert to cash within one year or less to be short-term investments, with all others considered to be long-term investments.

Ciena has minority equity investments in privately held technology companies that are classified in other long-term assets. These investments are carried at cost because Ciena owns less than 20% of the voting equity and does not have the ability to exercise significant influence over the companies. Ciena monitors these investments for impairment and makes appropriate reductions to the carrying value when necessary. As of July 31, 2017, the combined carrying value of these investments was $6.0 million. Ciena has not estimated the fair value of these cost method investments because determining the fair value is not practicable. Ciena has not evaluated these investments for impairment as there have not been any events or changes in circumstances that Ciena believes would have had a significant adverse effect on the fair value of these investments.

Inventories

Inventories are stated at the lower of cost or market, with cost computed using standard cost, which approximates actual cost, on a first-in, first-out basis. Ciena records a provision for excess and obsolete inventory when an impairment has been identified.

Segment Reporting

Ciena's chief operating decision maker, its chief executive officer, evaluates the Company's performance and allocates resources based on multiple factors, including measures of segment profit (loss). Operating segments are defined as components of an enterprise that engage in business activities that may earn revenue and incur expense, for which discrete financial information is available, and for which such information is evaluated regularly by the chief operating decision maker for purposes of allocating resources and assessing performance. Ciena considers the following to be its operating segments for reporting purposes: (i) Networking Platforms, (ii) Software and Software-Related Services, and (iii) Global Services. See Note 20 below.

Goodwill

Goodwill is the excess of the purchase price over the fair values assigned to the net assets acquired in a business combination. Ciena tests goodwill for impairment on an annual basis, which it has determined to be the last business day of fiscal September each year. Ciena also tests goodwill for impairment between annual tests if an event occurs or circumstances change that would, more likely than not, reduce the fair value of the reporting unit below its carrying value.

The first step in the process of assessing goodwill impairment is to compare the fair value of the reporting unit with the unit’s carrying amount, including goodwill. If this test indicates that the fair value is less than the carrying value, then step two as amended by Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") No. 2017-04, Simplifying the Test for Goodwill Impairment, adopted by Ciena in the first quarter of fiscal 2017, requires goodwill impairments to be measured on the basis of the fair value of the reporting unit relative to the reporting unit's carrying amount. A non-cash goodwill impairment charge would have the effect of decreasing earnings or increasing losses in such period. If Ciena is required to take a substantial impairment charge, its operating results would be materially adversely affected in such period.

Long-lived Assets

Long-lived assets include: equipment, building, furniture and fixtures; intangible assets; and maintenance spares. Ciena tests long-lived assets for impairment whenever triggering events or changes in circumstances indicate that the asset's carrying amount is not recoverable from its undiscounted cash flows. An impairment loss is measured as the amount by which the carrying amount of the asset or asset group exceeds its fair value. Ciena's long-lived assets are assigned to asset groups that represent the lowest level for which cash flows can be identified.

Equipment, Building, Furniture and Fixtures and Internal Use Software

Equipment, building, furniture and fixtures are recorded at cost. Depreciation and amortization are computed using the straight-line method over useful lives of two to five years for equipment and furniture and fixtures and the shorter of useful life or lease term for leasehold improvements.

Ciena establishes assets and liabilities for the estimated construction costs incurred under build-to-suit lease arrangements to the extent that Ciena is involved in the construction of structural improvements or takes construction risk prior to commencement of a lease. See Notes 10 and 13 below.

Qualifying internal use software and website development costs incurred during the application development stage, which consist primarily of outside services and purchased software license costs, are capitalized and amortized straight-line over the estimated useful lives of two to five years.

Intangible Assets

Ciena has recorded finite-lived intangible assets as a result of several acquisitions. Finite-lived intangible assets are carried at cost less accumulated amortization. Amortization is computed using the straight-line method over the expected economic lives of the respective assets, up to seven years, which approximates the use of intangible assets.

Ciena has recorded in-process research and development projects acquired as the result of an acquisition as indefinite-lived intangible assets. Upon completion of the projects, the assets will be amortized on a straight-line basis over the expected economic life of the asset, which will be determined on that date. Should the project be determined to be abandoned, and the asset developed has no alternative use, the full value of the asset will be charged to expense.

Maintenance Spares

Maintenance spares are recorded at cost. Spares usage cost is expensed ratably over four years.

Concentrations

Substantially all of Ciena's cash and cash equivalents are maintained at a small number of major U.S. financial institutions. The majority of Ciena's cash equivalents consist of money market funds. Deposits held with banks may exceed the amount of insurance provided on such deposits. Because these deposits generally may be redeemed upon demand, management believes that they bear minimal risk.

Historically, a significant percentage of Ciena's revenue has been concentrated among sales to a small number of large communications service providers. Consolidation among Ciena's customers has increased this concentration. Consequently, Ciena's accounts receivable are concentrated among these customers. See Note 20 below.

Additionally, Ciena's access to certain materials or components is dependent upon sole or limited source suppliers. The inability of any of these suppliers to fulfill Ciena's supply requirements, or significant changes in supply cost, could affect future results. Ciena relies on a small number of contract manufacturers to perform the majority of the manufacturing for its products. If Ciena cannot effectively manage these manufacturers or forecast future demand, or if these manufacturers fail to deliver products or components on time, Ciena's business and results of operations may suffer.

Revenue Recognition

Ciena recognizes revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the price to the buyer is fixed or determinable; and collectibility is reasonably assured. Customer purchase agreements and customer purchase orders are generally used to determine the existence of an arrangement. Shipping documents and evidence of customer acceptance, when applicable, are used to verify delivery or services rendered. Ciena assesses whether the price is fixed or determinable based on the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment. Ciena assesses collectibility based primarily on the creditworthiness of the customer as determined by credit checks and analysis, as well as the customer's payment history. Revenue for maintenance services is deferred and recognized ratably over the period during which the services are performed.

Shipping and handling fees billed to customers are included in revenue, with the associated expenses included in product cost of goods sold.

Software revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is probable. In instances where final acceptance criteria of the software are specified by the customer, revenue is deferred until there are no uncertainties regarding customer acceptance.

Ciena limits the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations or subject to customer-specified return or refund privileges.

Revenue for multiple element arrangements is allocated to each unit of accounting based on the relative selling price of each delivered element, with revenue recognized for each delivered element when the revenue recognition criteria are met. Ciena determines the selling price for each deliverable based upon the selling price hierarchy for multiple-deliverable arrangements. Under this hierarchy, Ciena uses vendor-specific objective evidence ("VSOE") of selling price, if it exists, or third party evidence ("TPE") of selling price if VSOE does not exist. If neither VSOE nor TPE of selling price exists for a deliverable, Ciena uses its best estimate of selling price ("BESP") for that deliverable. For multiple element software arrangements where VSOE of undelivered maintenance does not exist, revenue for the entire arrangement is recognized over the maintenance term.

VSOE, when determinable, is established based on Ciena's pricing and discounting practices for the specific product or service when sold separately. In determining whether VSOE exists, Ciena requires that a substantial majority of the selling prices for a product or service falls within a reasonably narrow pricing range. Ciena has been unable to establish TPE of selling price because its go-to-market strategy differs from that of others in its markets, and the extent of customization and differentiated features and functions varies among comparable products or services from its peers. Ciena determines BESP based upon management-approved pricing guidelines, which consider multiple factors including the type of product or service, gross margin objectives, competitive and market conditions, and the go-to-market strategy, all of which can affect pricing practices.

Warranty Accruals

Ciena provides for the estimated costs to fulfill customer warranty obligations upon recognition of the related revenue. Estimated warranty costs include estimates for material costs, technical support labor costs and associated overhead. Warranty is included in cost of goods sold and is determined based upon actual warranty cost experience, estimates of component failure rates and management's industry experience. Ciena's sales contracts do not permit the right of return of the product by the customer after the product has been accepted.

Accounts Receivable, Net

Ciena's allowance for doubtful accounts is based on its assessment, on a specific identification basis, of the collectibility of customer accounts. Ciena performs ongoing credit evaluations of its customers and generally has not required collateral or other forms of security from them. In determining the appropriate balance for Ciena's allowance for doubtful accounts, management considers each individual customer account receivable in order to determine collectibility. In doing so, management considers creditworthiness, payment history, account activity and communication with the customer. If a customer's financial condition changes, Ciena may be required to record an allowance for doubtful accounts for that customer, which could negatively affect its results of operations.

Research and Development

Ciena charges all research and development costs to expense as incurred. Types of expense incurred in research and development include employee compensation, prototype equipment, consulting and third party services, depreciation, facility costs and information technology.

Advertising Costs

Ciena expenses all advertising costs as incurred.

Legal Costs

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Ciena expenses legal costs associated with litigation as incurred.

Share-Based Compensation Expense

Ciena measures and recognizes compensation expense for share-based awards based on estimated fair values on the date of grant. Ciena estimates the fair value of each option-based award on the date of grant using the Black-Scholes option-pricing model. This model is affected by Ciena's stock price as well as estimates regarding a number of variables, including expected stock price volatility over the expected term of the award and projected employee stock option exercise behaviors. Ciena estimates the fair value of each restricted stock unit award based on the fair value of the underlying common stock on the date of grant. In each case, Ciena only recognizes expense in its Condensed Consolidated Statement of Operations for those stock options or restricted stock units that are expected ultimately to vest. Ciena recognizes the estimated fair value of performance-based awards, net of estimated forfeitures, as share-based expense over the performance period, using graded vesting, which considers each performance period or tranche separately, based upon Ciena's determination of whether it is probable that the performance targets will be achieved. At the end of each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets, and the expense is adjusted accordingly. Ciena uses the straight-line method to record expense for share-based awards with only service-based vesting. See Note 19 below.

Income Taxes

Ciena accounts for income taxes using an asset and liability approach. This approach recognizes deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases, and for operating loss and tax credit carryforwards. In estimating future tax consequences, Ciena considers all expected future events other than the enactment of changes in tax laws or rates. Valuation allowances are provided if, based upon the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

In the ordinary course of business, transactions occur for which the ultimate outcome may be uncertain. In addition, tax authorities periodically audit Ciena’s income tax returns. These audits examine significant tax filing positions, including the timing and amounts of deductions and the allocation of income tax expenses among tax jurisdictions. Ciena is currently under audit in India for 2012 through 2014 and in Canada for 2011 through 2013. Management does not expect the outcome of these audits to have a material adverse effect on Ciena’s consolidated financial position, results of operations or cash flows. Ciena’s major tax jurisdictions and the earliest open tax years are as follows: United States (2014), United Kingdom (2014), Canada (2011), India (2012) and Brazil (2012). Limited adjustments can be made to Federal U.S. tax returns in earlier years in order to reduce net operating loss carryforwards. Ciena classifies interest and penalties related to uncertain tax positions as a component of income tax expense.

Ciena has not provided for U.S. deferred income taxes on the cumulative unremitted earnings of its non-U.S. affiliates, as it plans to indefinitely reinvest cumulative unremitted foreign earnings outside the U.S., and it is not practicable to determine the unrecognized deferred income taxes. These cumulative unremitted foreign earnings relate to ongoing operations in foreign jurisdictions and are required to fund foreign operations, capital expenditures and future expansion requirements.

Ciena recognizes windfall tax benefits associated with the exercise of stock options or release of restricted stock units directly to stockholders’ equity only when realized. A windfall tax benefit occurs when the actual tax benefit realized by Ciena upon an employee’s disposition of a share-based award exceeds the deferred tax asset, if any, associated with the award that Ciena had recorded. When assessing whether a tax benefit relating to share-based compensation has been realized, Ciena follows the “with-and-without” method. Under the with-and-without method, the windfall is considered realized and recognized for financial statement purposes only when an incremental benefit is provided after considering all other tax benefits including Ciena’s net operating losses. The with-and-without method results in the windfall from share-based compensation awards always being effectively the last tax benefit to be considered. Consequently, the windfall attributable to share-based compensation will not be considered realized in instances where Ciena’s net operating loss carryover (that is unrelated to windfalls) is sufficient to offset the current year’s taxable income before considering the effects of current-year windfalls.

Loss Contingencies

Ciena is subject to the possibility of various losses arising in the ordinary course of business. These may relate to disputes, litigation and other legal actions. Ciena considers the likelihood of loss or the incurrence of a liability, as well as Ciena's ability to estimate the amount of loss reasonably, in determining loss contingencies. An estimated loss contingency is accrued when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Ciena regularly evaluates current information available to it in order to determine whether any accruals should be adjusted and whether new accruals are required.

Fair Value of Financial Instruments

The carrying value of Ciena's cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximates fair market value due to the relatively short period of time to maturity. For information related to the fair value of Ciena's convertible notes and term loans, see Note 16 below.

Fair value for the measurement of financial assets and liabilities is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. Ciena utilizes a valuation hierarchy for disclosure of the inputs for fair value measurement. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities;

- Level 2 inputs are quoted prices for identical or similar assets or liabilities in less active markets or model-derived valuations in which significant inputs are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument; and

- Level 3 inputs are unobservable inputs based on Ciena's assumptions used to measure assets and liabilities at fair value.

By distinguishing between inputs that are observable in the marketplace, and therefore more objective, and those that are unobservable, and therefore more subjective, the hierarchy is designed to indicate the relative reliability of the fair value measurements. A financial asset's or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

Restructuring

From time to time, Ciena takes actions to better align its workforce, facilities and operating costs with perceived market opportunities, business strategies and changes in market and business conditions. Ciena recognizes a liability for the cost associated with an exit or disposal activity in the period in which the liability is incurred, except for one-time employee termination benefits related to a service period, typically of more than 60 days, which are accrued over the service period. See Note 3 below.

Foreign Currency

Certain of Ciena's foreign branch offices and subsidiaries use the U.S. Dollar as their functional currency because Ciena Corporation, as the U.S. parent entity, exclusively funds the operations of these branch offices and subsidiaries. For those subsidiaries using the local currency as their functional currency, assets and liabilities are translated at exchange rates in effect at the balance sheet date, and the statement of operations is translated at a monthly average rate. Resulting translation adjustments are recorded directly to a separate component of stockholders' equity. Where the monetary assets and liabilities are transacted in a currency other than the entity's functional currency, re-measurement adjustments are recorded in interest and other income (loss), net on the Condensed Consolidated Statement of Operations. See Note 4 below.

Derivatives

From time to time, Ciena uses foreign currency forward contracts to reduce variability in certain forecasted non-U.S. Dollar denominated cash flows. Generally, these derivatives have maturities of 12 months or less. Ciena also has interest rate hedge arrangements to reduce variability in certain forecasted interest expense associated with its term loans. All of these derivatives are designated as cash flow hedges. At the inception of the cash flow hedge, and on an ongoing basis, Ciena assesses whether the derivative has been effective in offsetting changes in cash flows attributable to the hedged risk during the hedging period. The effective portion of the derivative's net gain or loss is initially reported as a component of accumulated other comprehensive income (loss), and, upon occurrence of the forecasted transaction, is subsequently reclassified to the line item in the Condensed Consolidated Statement of Operations to which the hedged transaction relates. Any net gain or loss associated with the ineffectiveness of the hedging instrument is reported in interest and other income (loss), net. To date, no ineffectiveness has occurred.

Ciena records derivative instruments in the Condensed Consolidated Statements of Cash Flows within operating, investing, or financing activities consistent with the cash flows of the hedged items.

From time to time, Ciena uses foreign currency forward contracts to hedge certain balance sheet exposures. These forward contracts 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 (loss), net on the Condensed Consolidated Statement of Operations.

See Notes 6 and 14 below.

Computation of Net Income (Loss) per Share

Ciena calculates basic earnings per share ("EPS") by dividing earnings attributable to common stock by the weighted average number of common shares outstanding for the period. Diluted EPS includes other potential dilutive shares that would be outstanding if securities or other contracts to issue common stock were exercised or converted into common stock. Ciena uses a dual presentation of basic and diluted EPS on the face of its income statement. A reconciliation of the numerator and denominator used for the basic and diluted EPS computations is set forth in Note 18 below.

Software Development Costs

Ciena develops software for sale to its customers. GAAP requires the capitalization of certain software development costs that are incurred subsequent to the date technological feasibility is established and prior to the date the product is generally available for sale. The capitalized cost is then amortized straight-line over the estimated life of the product. Ciena defines technological feasibility as being attained at the time a working model is completed. To date, the period between Ciena achieving technological feasibility and the general availability of such software has been short, and software development cost qualifying for capitalization has been insignificant. Accordingly, Ciena has not capitalized any software development costs.

Newly Issued Accounting Standards - Effective

In April 2015, the FASB issued ASU No. 2015-03, Simplifying the Presentation of Debt Issuance Costs ("ASU 2015-03"). ASU 2015-03 requires debt issuance costs related to a recognized debt liability to be presented in the balance sheet as a direct deduction from the carrying value of that debt liability, consistent with debt discounts. ASU 2015-03 is to be applied on a retrospective basis and represents a change in accounting principle. In August 2015, the FASB issued Accounting Standards Update No. 2015-15, "Interest — Imputation of Interest (Subtopic 835-30): Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements — Amendments to SEC Paragraphs Pursuant to Staff Announcement at June 18, 2015 EITF Meeting" ("ASU 2015-15"), which clarifies the treatment of debt issuance costs from line-of-credit arrangements after the adoption of ASU 2015-03. In particular, ASU 2015-15 clarifies that the SEC staff would not object to an entity deferring and presenting debt issuance costs related to a line-of-credit arrangement as an asset and subsequently amortizing the deferred debt issuance costs ratably over the term of such arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement. Ciena adopted these ASU's during the first quarter of fiscal 2017. The adoption of ASU 2015-03 resulted in the reclassification of unamortized debt issuance costs related to Ciena's convertible notes and term loans from other long-term assets to current portion of long-term debt and long-term debt, net in Ciena's Consolidated Balance sheets in the amount of $5.8 million at July 31, 2017 and $8.9 million at October 31, 2016. As permitted by ASU 2015-15, Ciena elected not to reclassify unamortized debt issuance costs associated with its ABL Credit Facility (described in Note 17 below) and to continue to present such capitalized costs in other assets.

In January 2017, the FASB issued ASU No. 2017-04, Simplifying the Test for Goodwill Impairment ("ASU 2017-04"), which simplifies the accounting for goodwill impairments by eliminating step two from the goodwill impairment test. ASU 2017-04 requires goodwill impairments to be measured on the basis of the fair value of the reporting unit relative to the reporting unit's carrying amount rather than on the basis of the implied amount of goodwill relative to the goodwill balance of the reporting unit. ASU 2017-04 is effective for annual and interim impairment tests for periods beginning after December 15, 2021. Early adoption is allowed for annual and interim impairment tests occurring after January 1, 2017. Ciena elected to adopt ASU 2017-04 during the first quarter of fiscal 2017.

Newly Issued Accounting Standards - Not Yet Effective

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASU 2014-09"), which provides guidance for revenue recognition. This ASU affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of non-financial assets. This ASU will supersede the revenue recognition requirements in Topic 605, Revenue Recognition, and most industry-specific guidance. This ASU also supersedes some cost guidance included in Subtopic 605-35, Revenue Recognition-Construction-Type and Production-Type Contracts.

For multiple element software arrangements where VSOE of undelivered maintenance does not exist, Ciena currently recognizes revenue for the entire arrangement over the maintenance term. Ciena expects that the adoption of this ASU will require that it determine the stand alone selling price for each of the elements at the contract inception, and Ciena consequently expects certain software deliverables will be recognized at a point in time rather than over a period of time.

Ciena also expects certain installation and deployment and consulting and network design services will be recognized over a period of time rather than at a point in time.

Ciena has considered the impact of the guidance in ASC 340-40, Other Assets and Deferred Costs; Contracts with Customers, and the interpretations of the FASB Transition Resource Group for Revenue Recognition (TRG) with respect to capitalization and amortization of incremental costs of obtaining a contract. In conjunction with this interpretation, Ciena has elected to implement the practical expedient clause allowing for incremental costs to be recognized as an expense when incurred if the period of the asset recognition is one year or less and amortized over the period of performance if the period of the asset recognition is greater than one year.

Ciena expects to implement this standard using the modified retrospective approach whereby the cumulative effect at adoption will be an adjustment to the opening balance of retained earnings. The comparative information will not be restated and will continue to be reported under the accounting standards in effect for those periods. ASU 2014-09 will be effective for Ciena beginning in the first quarter of fiscal 2019. Ciena is continuing to evaluate other possible impacts of the adoption of this ASU on its Consolidated Financial Statements and disclosures.

In February 2016, the FASB issued ASU No. 2016-02, Leases ("ASU 2016-02"), which requires an entity to recognize assets and liabilities on the balance sheet for the rights and obligations created by leased assets and to provide additional disclosures. ASU 2016-02 is effective for Ciena beginning in the first quarter of fiscal 2020. Under current GAAP, the majority of Ciena's leases for its properties are considered operating leases, and Ciena expects that the adoption of this ASU will require these leases to be classified as financing leases and to be recognized as assets and liabilities on Ciena's balance sheet. Ciena is continuing to evaluate other possible impacts of the adoption of this ASU on its Consolidated Financial Statements and disclosures.

In March 2016, the FASB issued ASU No. 2016-09 ("ASU 2016-09"), Improvements to Employee Share-Based Payment Accounting, which provides guidance on several aspects of accounting for share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification on the statement of cash flows. ASU 2016-09 is effective for Ciena beginning in the first quarter of fiscal 2018. Under the new guidance, Ciena would recognize all excess tax benefits previously unrecognized, along with any related valuation allowance, on a modified retrospective basis as a cumulative-effect adjustment to retained earnings as of the date of adoption of this updated standard. Additionally, the consolidated statements of cash flows will include excess tax benefits as an operating activity, with the prior periods adjusted accordingly, as a result of the adoption. Finally, Ciena will elect to continue to estimate expected forfeitures rather than account for forfeitures as they occur.

In January 2017, the FASB issued ASU No. 2017-01 ("ASU 2017-01"), Business Combinations: Clarifying the Definition of a Business, which clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisition or disposal of assets or businesses. The amendments in this update provide a screen to determine when a set of assets is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set of assets is not a business. ASU 2017-01 is effective for Ciena beginning first quarter of fiscal 2018. Ciena will evaluate the effect of the update at the time of any future acquisition or disposal.

In August 2017, the FASB issued ASU No. 2017-12 ("ASU 2017-12"), Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities, which improves the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements and make certain targeted improvements to simplify the application of the hedge accounting guidance in current GAAP. The amendments in this update better align an entity's risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and presentation of hedge results. ASU 2017-12 is effective for Ciena beginning in the first quarter of fiscal 2020. Ciena is evaluating the effect of the update on its Consolidated Financial Statements and disclosures.

(3) RESTRUCTURING COSTS

Ciena has undertaken a number of restructuring activities intended to reduce expense and to better align its workforce and costs with market opportunities, product development and business strategies. The following table sets forth the restructuring activity and balance of the restructuring liability accounts for the nine months ended July 31, 2017 (in thousands):

	Workforce reduction	Consolidation of excess facilities	Total
Balance at October 31, 2016	$ 868	$ 1,970	$2,838
Additional liability recorded	3,967 (1)	4,907 (2)	8,874
Cash payments	(3,370)	(2,679)	(6,049)
Balance at July 31, 2017	$ 1,465	$ 4,198	$5,663
Current restructuring liabilities	$ 1,465	$ 4,198	$5,663
Non-current restructuring liabilities	$ —	$ —	$—

(1) Reflects a global workforce reduction of approximately 60 employees during fiscal 2017 as part of a business optimization strategy to improve gross margin, constrain operating expense and redesign certain business processes and systems.

(2) Reflects unfavorable lease commitments and relocation costs incurred during fiscal 2017 in connection with the facility transition from Ciena's existing research and development center located at Lab 10 on the former Nortel Carling Campus to a new campus facility in Ottawa, Canada.

The following table sets forth the restructuring activity and balance of the restructuring liability accounts for the nine months ended July 31, 2016 (in thousands):

	Workforce reduction	Consolidation of excess facilities	Total
Balance at October 31, 2015	$ 591	$ 688	$1,279
Additional liability recorded	2,067	(9)	2,058
Cash payments	(1,736)	(316)	(2,052)
Balance at July 31, 2016	$ 922	$ 363	$1,285
Current restructuring liabilities	$ 922	$ 363	$1,285
Non-current restructuring liabilities	$ —	$ —	$—

(4) INTEREST AND OTHER INCOME (LOSS), NET

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

	Quarter Ended July 31,		Nine Months Ended July 31,	
	2017	2016	2017	2016
Interest income	$1,820	$1,250	$4,609	$2,918
Gains (losses) on non-hedge designated foreign currency forward contracts	834	(4,787)	(891)	(20,000)
Foreign currency exchange gain (loss)	(2,946)	(839)	(4,071)	5,291
Modification of term loan	—	—	(2,924)	—
Other	(556)	729	(119)	335
Interest and other income (loss), net	$(848)	$(3,647)	$(3,396)	$(11,456)

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 the local currency as their functional currency. During the first nine months of fiscal 2017 Ciena recorded $4.1 million in foreign currency exchange rate losses, and during the first nine months of fiscal 2016, Ciena recorded $5.3 million in foreign currency exchange rate gains as a result of monetary assets and liabilities that were transacted in a currency other than the entity's functional currency, and the re-measurement adjustments were recorded in interest and other income (loss), net on the Condensed Consolidated Statement of Operations. From time to time, Ciena uses foreign currency forwards to hedge these balance sheet exposures. 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 (loss), net on the Condensed Consolidated Statement of Operations. During the first nine months of fiscal 2017 and fiscal 2016, Ciena recorded losses of $0.9 million and $20.0 million, respectively, from non-hedge designated foreign currency forward contracts.

(5) SHORT-TERM AND LONG-TERM INVESTMENTS

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

	July 31, 2017			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government obligations:				
Included in short-term investments	$225,032	$ —	(272)	$224,760
Included in long-term investments	59,976	—	(102)	59,874
	$285,008	$ —	$ (374)	$284,634
Commercial paper:				
Included in short-term investments	$9,983	—	—	$9,983
	$9,983	$ —	$ —	$9,983

	October 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government obligations:				
Included in short-term investments	$260,125	$ 140	$ (6)	$260,259
Included in long-term investments	90,145	57	(30)	90,172
	$350,270	$ 197	$ (36)	$350,431
Commercial paper:				
Included in short-term investments	$14,989	—	—	$14,989
	$14,989	$ —	$ —	$14,989

The following table summarizes the final legal maturities of debt investments at July 31, 2017 (in thousands):

	Amortized Cost	Estimated Fair Value
Less than one year	$235,015	$234,743
Due in 1-2 years	59,976	59,874
	$294,991	$294,617

(6) FAIR VALUE MEASUREMENTS

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

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	July 31, 2017			
	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$392,351	$—	$ —	$392,351
U.S. government obligations	—	284,634	—	284,634
Commercial paper	—	89,887	—	89,887
Foreign currency forward contracts	—	1,811	—	1,811
Total assets measured at fair value	$392,351	$376,332	$ —	$768,683
Liabilities:				
Foreign currency forward contracts	$—	$229	$ —	$229
Forward starting interest rate swap	—	1,396	—	1,396
Total liabilities measured at fair value	$—	$1,625	$ —	$1,625

	October 31, 2016			
	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$625,277	$—	$ —	$625,277
U.S. government obligations	—	350,431	—	350,431
Commercial paper	—	69,959	—	69,959
Foreign currency forward contracts	—	175	—	175
Total assets measured at fair value	$625,277	$420,565	$ —	$1,045,842
Liabilities:				
Foreign currency forward contracts	$—	$1,396	$ —	$1,396
Forward starting interest rate swap	—	5,967	—	5,967
Total liabilities measured at fair value	$—	$7,363	$ —	$7,363

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

	July 31, 2017			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$392,351	$79,904	$ —	$472,255
Short-term investments	—	234,743	—	234,743
Prepaid expenses and other	—	1,811	—	1,811
Long-term investments	—	59,874	—	59,874
Total assets measured at fair value	$392,351	$376,332	$ —	$768,683
Liabilities:				
Accrued liabilities	$—	$229	$ —	$229
Other long-term obligations	—	1,396	—	1,396
Total liabilities measured at fair value	$—	$1,625	$ —	$1,625

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	October 31, 2016			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$625,277	$54,970	$ —	$680,247
Short-term investments	—	275,248	—	275,248
Prepaid expenses and other	—	175	—	175
Long-term investments	—	90,172	—	90,172
Total assets measured at fair value	$625,277	$420,565	$ —	$1,045,842
Liabilities:				
Accrued liabilities	$—	$1,396	$ —	$1,396
Other long-term obligations	—	5,967	—	5,967
Total liabilities measured at fair value	$—	$7,363	$ —	$7,363

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

(7) ACCOUNTS RECEIVABLE

As of July 31, 2017, one customer accounted for 10.3% of Ciena's net accounts receivable and as of October 31, 2016, a different customer accounted for 10.4% of Ciena's net accounts receivable. Ciena has not historically experienced a significant amount of bad debt expense. The allowance for doubtful accounts was $3.6 million and $4.0 million as of July 31, 2017 and October 31, 2016, respectively.

(8) INVENTORIES

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

	July 31, 2017	October 31, 2016
Raw materials	$46,857	$44,644
Work-in-process	16,172	12,852
Finished goods	179,394	156,402
Deferred cost of goods sold	90,157	59,856
	332,580	273,754
Provision for excess and obsolescence	(56,159)	(62,503)
	$276,421	$211,251

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 and market conditions. During the first nine months of fiscal 2017, Ciena recorded a provision for excess and obsolescence of $28.7 million, primarily related to a decrease in the forecasted demand for certain Networking Platforms products. Deductions from the provision for excess and obsolete inventory relate primarily to disposal activities.

(9) PREPAID EXPENSES AND OTHER

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

	July 31, 2017	October 31, 2016
Prepaid VAT and other taxes	$92,998	$ 77,474
Product demonstration equipment, net	42,881	42,259
Deferred deployment expense	28,028	19,138
Prepaid expenses	25,229	25,659
Other non-trade receivables	6,847	4,398
Financing receivable	1,395	3,740
Derivative assets	1,811	175
	$199,189	$ 172,843

Depreciation of product demonstration equipment was $7.5 million and $8.1 million for the first nine months of fiscal 2017 and 2016, respectively.

(10) EQUIPMENT, BUILDING, FURNITURE AND FIXTURES

As of the dates indicated, equipment, building, furniture and fixtures are comprised of the following (in thousands):

	July 31, 2017	October 31, 2016
Equipment, furniture and fixtures	$483,482	$451,029
Building subject to capital lease	79,002	22,529
Construction in progress subject to build-to-suit lease	—	57,602
Leasehold improvements	86,617	60,011
	649,101	591,171
Accumulated depreciation and amortization	(334,251)	(302,765)
	$314,850	$288,406

Ciena capitalizes construction in progress and records a corresponding long-term liability for build-to-suit lease agreements where Ciena is considered the owner, for accounting purposes, during the construction period. On April 15, 2015, Ciena entered into a build-to-suit lease arrangement pursuant to which the landlord constructed, and Ciena subsequently leased, two new office buildings at its new Ottawa, Canada campus. The landlord constructed the buildings and contributed up to a maximum of CAD$290.00 per rentable square foot in total construction costs plus certain allowances for tenant improvements, and Ciena was responsible for any additional construction costs. As of May 1, 2017, occupancy for both of the office buildings was complete. As such, Ciena recorded capital leases of $50.4 million for these buildings, which will be depreciated over the lease term and removed the build-to-suit construction in progress asset and the corresponding long-term liability.

The total of the depreciation of equipment, furniture and fixtures and the amortization of leasehold improvements was $48.3 million and $38.5 million for the first nine months of fiscal 2017 and 2016, respectively.

(11) OTHER INTANGIBLE ASSETS

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

	July 31, 2017			October 31, 2016		
	Gross Intangible	Accumulated Amortization	Net Intangible	Gross Intangible	Accumulated Amortization	Net Intangible
Developed technology	$341,255	$ (262,308)	$78,947	$347,727	$ (248,128)	$99,599
In-process research and development	671	—	671	4,200	—	4,200
Patents and licenses	7,165	(6,473)	692	7,165	(6,285)	880
	334,642	(307,962)	26,680	358,647	(316,615)	42,032

Customer relationships, covenants not to compete, outstanding purchase orders and contracts						
Total other intangible assets	$683,733	$(576,743)	$106,990	$717,739	$(571,028)	$146,711

During the third quarter of fiscal 2017, certain fully amortized intangible assets of approximately $34.0 million were eliminated from gross intangible assets and accumulated amortization, with no corresponding impact to the income statement. These assets were primarily technology for products no longer being sold by Ciena.

As the result of the acquisition of the high-speed photonics components assets from TeraXion and its wholly-owned subsidiary on February 1, 2016, Ciena had recorded in-process research and development projects acquired as indefinite-lived intangible assets. Upon completion of the projects, the assets will be amortized on a straight-line basis over the expected economic life of the assets. In the third quarter of fiscal 2017, Ciena placed into service $3.5 million of developed technology, which will be amortized over the expected economic life of five years.

The aggregate amortization expense of intangible assets was $39.7 million and $59.4 million for the first nine months of fiscal 2017 and 2016, respectively. Expected future amortization of intangible assets for the fiscal years indicated is as follows (in thousands):

Period ended October 31,	
2017 (remaining three months)	$5,993
2018	23,386
2019	22,839
2020	21,812
2021	18,878
Thereafter	13,411
	$106,319 (1)

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

(12) GOODWILL

The following table presents the goodwill allocated to Ciena's applicable reportable segments as of the dates indicated (in thousands):

	Balance at October 31, 2016	Acquisitions	Impairments	Translation	Balance at July 31, 2017
Software and Software-Related Services	$201,428	$ —	$ —	$ —	$201,428
Networking Platforms	65,546	—	—	867	66,413
Total	$266,974	$ —	$ —	$ 867	$267,841

(13) OTHER BALANCE SHEET DETAILS

As of the dates indicated, other long-term assets are comprised of the following (in thousands):

	July 31, 2017	October 31, 2016
Maintenance spares, net	$46,576	$ 49,535
Deferred debt issuance costs, net (1)	1,122	1,363
Financing receivable	716	1,870
Other	15,556	15,352

$63,970 $ 68,120

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(1) As described in Note 2 above, in connection with Ciena's adoption of ASU 2015-03 during the first quarter of fiscal 2017, deferred debt issuance costs associated with its convertible notes and term loans were retrospectively reclassified from other long-term assets to current portion of long-term debt and long-term debt, net on the Condensed Consolidated Balance Sheets. The deferred debt issuance costs reflected relate to Ciena's ABL Credit Facility (described in Note 17 below). The amortization of deferred debt issuance costs for Ciena's ABL Credit Facility is included in interest expense, and was $0.3 million and $0.3 million during the first nine months of fiscal 2017 and 2016, respectively.

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

	July 31, 2017	October 31, 2016
Compensation, payroll related tax and benefits	$94,934	$ 106,687
Warranty	44,296	52,324
Vacation	40,541	36,112
Capital lease obligations	3,784	2,321
Interest payable	5,032	4,649
Other	96,042	108,260
	$284,629	$ 310,353

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

Nine months ended July 31,	Beginning Balance	Provisions	Settlements	Ending Balance
2016	$ 56,654	13,114	(15,289)	$54,479
2017	$ 52,324	5,188	(13,216)	$44,296

The decrease in warranty provisions during fiscal 2017 was primarily due to lower failure rates than previously estimated and reduced costs due to efficiencies.

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

	July 31, 2017	October 31, 2016
Products	$61,913	$ 45,216
Services	135,614	137,647
	197,527	182,863
Less current portion	(110,629)	(109,009)
Long-term deferred revenue	$86,898	$ 73,854

As of the dates indicated, other long-term obligations are comprised of the following (in thousands):

	July 31, 2017	October 31, 2016
Capital lease obligations	$76,549	$ 24,298
Income tax liability	15,621	14,122
Deferred tenant allowance	8,412	9,164
Straight-line rent	7,371	6,406
Forward starting interest rate swap	1,396	5,967
Construction liability	—	57,602
Other	7,185	6,835
	$116,534	$ 124,394

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Ciena capitalizes construction in progress and records a corresponding long-term liability for build-to-suit lease agreements where Ciena is considered the owner during the construction period for accounting purposes. As of May 1, 2017, occupancy of both office buildings was complete. As such, Ciena recorded capital leases for these buildings, which will be depreciated over the lease terms and removed the build-to-suit construction in progress asset and the corresponding long-term liability. See Note 10 for more details regarding this arrangement.

The following is a schedule by fiscal year of future minimum lease payments under capital leases and the present value of minimum lease payments as of July 31, 2017 (in thousands):

Period ended October 31,	
2017 (remaining three months)	$2,371
2018	9,486
2019	9,060
2020	8,078
2021	7,974
Thereafter	96,279
Net minimum capital lease payments	133,248
Less: Amount representing interest	(52,915)
Present value of minimum lease payments	80,333
Less: Current portion of present value of minimum lease payments	(3,784)
Long-term portion of present value of minimum lease payments	$76,549

(14) DERIVATIVE INSTRUMENTS

Foreign Currency Derivatives

As of July 31, 2017 and October 31, 2016, Ciena had forward contracts in place to reduce the variability in its Canadian Dollar and Indian Rupee denominated expense, which principally relates to research and development activities, and its British Pound denominated expense, which principally relates to sales and marketing activities. The notional amount of these contracts was approximately $35.4 million and $107.6 million as of July 31, 2017 and October 31, 2016, respectively. These foreign exchange contracts have maturities of 12 months or less and have been designated as cash flow hedges.

During the first nine months of fiscal 2017 and fiscal 2016, in order to hedge certain balance sheet exposures, Ciena entered into forward contracts to mitigate risk due to volatility in the Brazilian Real, Canadian Dollar and Mexican Peso. The notional amount of these contracts was approximately $86.8 million and $59.6 million as of July 31, 2017 and October 31, 2016, respectively. These foreign exchange contracts have maturities of 12 months or less and have not been designated as hedges for accounting purposes.

Interest Rate Derivatives

Ciena is exposed to floating rates of LIBOR interest on its term loan borrowings (see Note 16 below) and has hedged such risk by entering into floating to fixed interest rate swap arrangements ("interest rate swaps"). During the second quarter of fiscal 2017, Ciena refinanced its existing 2019 and 2021 Term Loans into a new 2022 Term Loan (as defined in Note 16), thereby reducing the aggregate outstanding principal to $400 million and extending the maturity to January 2022 (see Note 16 below). In order to align its interest rate hedges to the reduced 2022 Term Loan principal value and later maturity date, Ciena also reduced the total outstanding value of its interest rate swaps, as described below, and entered into new forward starting interest rate swaps in January 2017 and February 2017, respectively. The interest rate swaps, as adjusted, fix 98%, 82% and 77% of the principal value of the 2022 Term Loan from February 2017 through July 2018, July 2018 through June 2020, and June 2020 through January 2021, respectively. The fixed rate on the amounts hedged during these periods will be 4.25%, 4.25% and 4.75%, respectively. The total notional amount of these interest rate swaps in effect as of July 31, 2017 was $390.6 million.

During fiscal 2014, Ciena entered into interest rate swaps that fixed the interest rate under the 2019 Term Loan (as defined in Note 16) at 5.004% for the period commencing on July 20, 2015 through July 19, 2018. The total notional amount of these derivatives as of October 31, 2016 was $244.4 million. In May 2016, Ciena entered into interest rate swaps that fixed the total interest rate under the 2021 Term Loan (as defined in Note 16) at 4.62% to 4.87%, depending on the applicable margin, for the period commencing on June 20, 2016 through June 22, 2020. The total notional amount of these derivatives as of October 31, 2016 was $248.8 million.

Ciena expects the variable rate payments to be received under the terms of the interest rate swaps to offset exactly the forecasted variable rate payments on the equivalent notional amounts of the term loans. 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 4 and Note 6 above.

(15) ACCUMULATED OTHER COMPREHENSIVE INCOME

The following table summarizes the changes in accumulated balances of other comprehensive income ("AOCI") for the nine months ended July 31, 2017:

	Unrealized Gain/(Loss) on Marketable Securities	Unrealized Gain/(Loss) on Foreign Currency Contracts	Unrealized Gain/(Loss) on Forward Starting Interest Rate Swap	Cumulative Foreign Currency Translation Adjustment	Total
Balance at October 31, 2016	$ 139	$ (1,091)	$ (5,967)	$ (17,410)	$ (24,329)
Other comprehensive income (loss) before reclassifications	(533)	896	4,838	11,891	17,092
Amounts reclassified from AOCI	—	2,010	(268)	—	1,742
Balance at July 31, 2017	$ (394)	$ 1,815	$ (1,397)	$ (5,519)	$ (5,495)

The following table summarizes the changes in AOCI for the nine months ended July 31, 2016:

	Unrealized Gain/(Loss) on Marketable Securities	Unrealized Gain/(Loss) on Foreign Currency Contracts	Unrealized Gain/(Loss) on Forward Starting Interest Rate Swap	Cumulative Foreign Currency Translation Adjustment	Total
Balance at October 31, 2015	$ (78)	$ (268)	$ (5,522)	$ (16,258)	$ (22,126)
Other comprehensive income (loss) before reclassifications	425	(70)	(4,655)	1,969	(2,331)
Amounts reclassified from AOCI	—	588	2,479	—	3,067
Balance at July 31, 2016	$ 347	$ 250	$ (7,698)	$ (14,289)	$ (21,390)

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

(16) SHORT-TERM AND LONG-TERM DEBT

Outstanding Term Loan Payable

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

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	July 31, 2017	October 31, 2016
Term Loan Payable due July 15, 2019	$—	$241,359
Term Loan Payable due April 25, 2021	—	244,944
Term Loan Payable due January 30, 2022	393,674	—
	$393,674	$486,303

The term loan balances in the table above reflect Ciena's adoption of ASU 2015-03, as described in Note 2 above. Deferred debt issuance costs that were deducted from the carrying amounts of the term loans totaled $3.3 million at July 31, 2017 and $4.9 million at October 31, 2016. Deferred debt issuance costs are amortized using the straight-line method, which approximates the effect of the effective interest rate method, through the maturity of the term loans. The amortization of deferred debt issuance costs for these term loans is included in interest expense, and was $0.7 million and $0.8 million during the first nine months of fiscal 2017 and 2016, respectively. The carrying values of the term loans listed above are also net of any unamortized debt discounts.

2022 Term Loan

On January 30, 2017, Ciena, as borrower, and Ciena Communications, Inc. and Ciena Government Solutions, Inc., as guarantors, entered into an Omnibus Refinancing Amendment to the Credit Agreement, Security Agreement and Pledge Agreement with the lenders party thereto and the administrative agent (the “Refinancing Agreement”), pursuant to which Ciena refinanced its existing 2019 Term Loan and 2021 Term Loan (as described under "Prior Term Loans" below) into a single term loan with an aggregate principal amount of $400 million maturing on January 30, 2022 (the “2022 Term Loan”). In connection with the transaction, Ciena received a loan in the amount of $399.5 million, net of original discount, from the 2022 Term Loan and repaid $493.1 million of outstanding principal under the 2019 Term Loan and 2021 Term Loan. The 2022 Term Loan requires Ciena to make installment payments of approximately $1.0 million on a quarterly basis. This arrangement was accounted for as a modification of debt and, as such, $2.9 million of debt issuance costs associated with the 2022 Term Loan were expensed. The aggregate balance of $3.5 million of debt issuance costs and approximately $1.7 million of original discount from the 2019 Term Loan and the 2021 Term Loan, and approximately $0.5 million of original discount from the 2022 Term Loan, are included in the carrying value of the 2022 Term Loan. See table below.

The Refinancing Agreement amends the Term Loan Credit Agreement (as defined below) and provides that the 2022 Term Loan will, among other things:

- be subject to mandatory prepayment on the same basis as under the Term Loan Credit Agreement;
- bear interest, at Ciena’s election, at a per annum rate equal to (a) LIBOR (subject to a floor of 0.75%) plus an applicable margin of 2.50%, or (b) a base rate (subject to a floor of 1.75%) plus an applicable margin of 1.50%; and
- be repayable at any time at Ciena's election, provided that repayment of the 2022 Term Loan with proceeds of certain indebtedness prior to July 30, 2017 will require a prepayment premium of 1% of the aggregate principal amount of such prepayment.

Except as amended by the Refinancing Agreement, the remaining terms of the Term Loan Credit Agreement remain in full force and effect.
The principal balance, unamortized debt discount, deferred debt issuance costs and net carrying value of the liability components of Ciena's 2022 Term Loan were as follows as of July 31, 2017 (in thousands):

Net Carrying Value

	Principal Balance	Unamortized Discount	Deferred Debt Issuance Costs	
Term Loan Payable due January 30, 2022	$399,000	$ (2,038)	$(3,288)	$393,674

The following table sets forth the carrying value and the estimated fair value of Ciena's 2022 Term Loan (in thousands):

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	July 31, 2017	
	Carrying Value(1)	Fair Value(2)
Term Loan Payable due January 30, 2022	$393,674	$401,993

(1) Includes unamortized debt discount and debt issuance costs.

(2) Ciena's term loan is categorized as Level 2 in the fair value hierarchy. Ciena estimated the fair value of its 2022 Term Loan using a market approach based upon observable inputs, such as current market transactions involving comparable securities.

Prior Term Loans

On July 15, 2014, Ciena entered into a Term Loan Credit Agreement (the "Term Loan Credit Agreement") providing for senior secured term loans in an aggregate principal amount of $250 million (the “2019 Term Loan”) with a maturity date of July 15, 2019. The 2019 Term Loan required Ciena to make installment payments of approximately $0.6 million on a quarterly basis.

On April 25, 2016, Ciena entered into an Incremental Joinder and Amendment Agreement (the “Incremental Term Loan Credit Agreement”) that amended the Term Loan Credit Agreement. The Incremental Term Loan Credit Agreement provided for a new tranche of senior secured term loans under the Term Loan Credit Agreement in an aggregate principal amount of $250 million (the “2021 Term Loan”). The 2021 Term Loan required Ciena to make installment payments of approximately $0.6 million on a quarterly basis.

Maturity of 2017 Convertible Notes

On June 15, 2017, the outstanding 0.875% Convertible Senior Notes matured and Ciena repaid the approximately $185.3 million in aggregate principal amount outstanding, together with approximately $0.8 million in accrued interest through the date of maturity.

Outstanding Convertible Notes Payable

The net carrying values of Ciena's outstanding convertible notes payable was comprised of the following for the fiscal periods indicated (in thousands):

	July 31, 2017	October 31, 2016
0.875% Convertible Senior Notes due June 15, 2017	$—	$231,240
3.75% Convertible Senior Notes due October 15, 2018	348,557	347,630
4.0% Convertible Senior Notes due December 15, 2020	193,071	188,509
	$541,628	$767,379

The convertible notes payable balances in the table above reflects Ciena's adoption of ASU 2015-03, as described in Note 2 above. Deferred debt issuance costs that were deducted from the carrying amounts of the convertible notes payable totaled $2.5 million at July 31, 2017 and $3.9 million at October 31, 2016. Deferred debt issuance costs are amortized using the straight-line method, which approximates the effect of the effective interest rate method, through the maturity of the convertible notes payable. The amortization of deferred debt issuance costs is included in interest expense, and was $1.4 million and $2.1 million during the first nine months of fiscal 2017 and 2016, respectively. The carrying values of the convertible notes payable listed above also include accretion of principal and are net of any unamortized debt discounts.

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The principal balance, unamortized debt discount, deferred debt issuance costs and net carrying value of the liability and equity components of Ciena's outstanding issues of convertible notes were as follows as of July 31, 2017 (in thousands):

	Liability Component				Equity Component
	Principal Balance	Unamortized Debt Discount	Deferred Debt Issuance Costs	Net Carrying Value	Net Carrying Value
3.75% Convertible Senior Notes due October 15, 2018	$350,000	$ —	$(1,443)	$348,557	$ —
4.0% Convertible Senior Notes due December 15, 2020	$203,996	$ (9,893)	$(1,032)	$193,071	$ 43,131

The following table sets forth, in thousands, the net carrying value and the estimated fair value of Ciena's outstanding issues of convertible notes as of July 31, 2017:

	July 31, 2017	
	Net Carrying Value (1)	Fair Value(2)
3.75% Convertible Senior Notes due October 15, 2018	348,557	482,825
4.0% Convertible Senior Notes due December 15, 2020	193,071	269,719
	$541,628	$752,544

(1) Includes unamortized debt discount, accretion of principal and deferred debt issuance costs.

(2) The convertible notes are categorized as Level 2 in the fair value hierarchy. Ciena estimated the fair value of its outstanding convertible notes using a market approach based upon observable inputs, such as current market transactions involving comparable securities.

(17) ABL CREDIT FACILITY

Ciena Corporation and certain of its subsidiaries are parties to a senior secured asset-based revolving credit facility (the "ABL Credit Facility"). Ciena principally uses the ABL Credit Facility to support the issuance of letters of credit that arise in the ordinary course of its business and thereby to reduce its use of cash required to collateralize these instruments.

As of July 31, 2017, letters of credit totaling $74.1 million were collateralized by the ABL Credit Facility. There were no borrowings outstanding under the ABL Credit Facility as of July 31, 2017.

(18) EARNINGS PER SHARE CALCULATION

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

	Quarter Ended July 31,		Nine Months Ended July 31,	
Numerator	2017	2016	2017	2016

Net income	$60,010	$33,546	$101,897	$35,997
Add: Interest expense associated with 0.875% Convertible Senior Notes due 2017	246	1,326	1,343	—
Add: Interest expense associated with 3.75% Convertible Senior Notes due 2018	3,572	3,572	10,750	—
Add: Interest expense associated with 4.0% Convertible Senior Notes due 2020	3,323	—	—	—
Net income used to calculate Diluted EPS	$67,151	$38,444	$113,990	$35,997

Denominator	Quarter Ended July 31, 2017	Quarter Ended July 31, 2016	Nine Months Ended July 31, 2017	Nine Months Ended July 31, 2016
Basic weighted average shares outstanding	142,464	138,881	141,631	137,835
Add: Shares underlying outstanding stock options and restricted stock units and issuable under employee stock purchase plan	1,386	895	1,401	1,218
Add: Shares underlying 0.875% Convertible Senior Notes due 2017	1,708	12,217	4,043	—
Add: Shares underlying 3.75% Convertible Senior Notes due 2018	17,356	17,356	17,356	—
Add: Shares underlying 4.0% Convertible Senior Notes due 2020	9,198	—	—	—
Dilutive weighted average shares outstanding	172,112	169,349	164,431	139,053

EPS	Quarter Ended July 31, 2017	Quarter Ended July 31, 2016	Nine Months Ended July 31, 2017	Nine Months Ended July 31, 2016
Basic EPS	$0.42	$0.24	$0.72	$0.26
Diluted EPS	$0.39	$0.23	$0.69	$0.26

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

	Quarter Ended July 31, 2017	Quarter Ended July 31, 2016	Nine Months Ended July 31, 2017	Nine Months Ended July 31, 2016
Shares underlying stock options and restricted stock units	682	2,082	988	2,089
0.875% Convertible Senior Notes due June 15, 2017	—	—	—	12,571
3.75% Convertible Senior Notes due October 15, 2018	—	—	—	17,356
4.0% Convertible Senior Notes due December 15, 2020	—	9,198	9,198	9,198
Total shares excluded due to anti-dilutive effect	682	11,280	10,186	41,214

(19) SHARE-BASED COMPENSATION EXPENSE

Ciena has outstanding equity awards issued under its 2008 Omnibus Incentive Plan (the "2008 Plan"), certain legacy equity plans, equity plans assumed as a result of previous acquisitions, and its 2017 Omnibus Incentive Plan (the "2017 Plan"), which was approved by Ciena's stockholders on March 23, 2017. All equity awards granted on or after March 23, 2017 are made exclusively from the 2017 Plan. Ciena also makes shares of its common stock available for purchase under its Amended and Restated 2003 Employee Stock Purchase Plan (the "ESPP"). Each of the 2017 Plan and the ESPP are described below.

2017 Plan

The 2017 Plan has a ten year term and authorizes the issuance of awards including stock options, restricted stock units (RSUs), restricted stock, unrestricted stock, stock appreciation rights (SARs) and other equity and/or cash performance incentive awards to employees, directors and consultants of Ciena. Subject to certain restrictions, the Compensation Committee of the Board of Directors has broad discretion to establish the terms and conditions for awards under the 2017 Plan, including the number of shares, vesting conditions, and the required service or performance criteria. Options and SARs have a maximum term of ten years, and their exercise price may not be less than 100% of fair market value on the date of grant. Repricing of stock options and SARs is prohibited without stockholder approval. Certain change in control transactions may cause awards granted under the 2017 Plan to vest, unless the awards are continued or substituted for in connection with the transaction.

The 2017 Plan authorizes and reserves 8.9 million shares for issuance. In addition, any shares that remained available for issuance under the 2008 Plan as of March 23, 2017 were added to the 2017 Plan and are available for issuance thereunder. The number of shares available under the 2017 Plan will also be increased from time to time by: (i) the number of shares subject to outstanding awards granted under Ciena's prior equity compensation plans that are forfeited, expire or are canceled without delivery of common stock following the effective date of the 2017 Plan, and (ii) the number of shares subject to awards

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assumed or substituted in connection with the acquisition of another company. As of July 31, 2017, approximately 10.4 million shares remained available for issuance under the 2017 Plan.

Stock Options

Ciena did not grant any stock options during the first nine months of fiscal 2017 or fiscal 2016. Outstanding stock option awards granted to employees in prior periods or assumed as a result of acquisitions are generally subject to service-based vesting conditions and vest incrementally over a four-year period. The following table is a summary of Ciena’s stock option activity for the period indicated (shares in thousands):

	Shares Underlying Options Outstanding	Weighted Average Exercise Price
Balance at October 31, 2016	1,387	$ 26.90
Exercised	(223)	10.74
Canceled	(270)	28.80
Balance at July 31, 2017	894	$ 30.35

The total intrinsic value of options exercised during the first nine months of fiscal 2017 and fiscal 2016 was $3.1 million and $4.6 million, respectively.

The following table summarizes information with respect to stock options outstanding at July 31, 2017, based on Ciena’s closing stock price on the last trading day of Ciena’s third fiscal quarter of 2017 (shares and intrinsic value in thousands):

	Options Outstanding at July 31, 2017				Vested Options at July 31, 2017			
Range of Exercise Price	Number of Underlying Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number of Underlying Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Aggregate Intrinsic Value
$1.88 — $11.16	65	2.84	$ 8.66	$ 1,094	64	2.78	$ 8.64	$ 1,082
$11.34 — $17.24	178	4.84	13.44	2,130	172	4.76	13.39	2,065
$17.50 — $30.46	127	1.82	25.90	222	119	1.48	26.35	172
$31.93 — $37.10	299	1.74	35.10	—	299	1.74	35.10	—
$37.82 — $55.63	225	3.92	46.17	—	224	3.91	46.19	—
$1.88 — $55.63	894	3.00	$ 30.35	$ 3,446	878	2.92	$ 30.56	$ 3,319

Assumptions for Option-Based Awards

Ciena recognizes the fair value of service-based options as share-based compensation expense on a straight-line basis over the requisite service period.

Restricted Stock Units

A restricted stock unit is a stock award that entitles the holder to receive shares of Ciena common stock as the unit vests. Ciena's outstanding restricted stock unit awards are subject to service-based vesting conditions and/or performance-based vesting conditions. Awards subject to service-based conditions typically vest in increments over a three or four-year period. However, the 2017 Plan permits Ciena to grant service-based stock awards with a minimum one-year vesting period. Awards with performance-based vesting conditions require the achievement of certain operational, financial or other performance criteria or targets as a condition of vesting, or the acceleration of vesting, of such awards. Ciena recognizes the estimated fair value of performance-based awards, net of estimated forfeitures, as share-based compensation expense over the performance period, using graded vesting, which considers each performance period or tranche separately, based upon Ciena's determination of whether it is probable that the performance targets will be achieved. At the end of each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets.

The following table is a summary of Ciena's restricted stock unit activity for the period indicated, with the aggregate fair value of the balance outstanding at the end of each period, based on Ciena's closing stock price on the last trading day of the relevant period (shares and aggregate fair value in thousands):

	Restricted Stock Units Outstanding	Weighted Average Grant Date Fair Value Per Share	Aggregate Fair Value
Balance at October 31, 2016	4,280	$ 19.96	$ 83,511
Granted	2,211		
Vested	(1,687)		
Canceled or forfeited	(476)		
Balance at July 31, 2017	4,328	$ 21.36	$ 110,051

The total fair value of restricted stock units that vested and were converted into common stock during the first nine months of fiscal 2017 and fiscal 2016 was $41.5 million and $41.3 million, respectively. The weighted average fair value of each restricted stock unit granted by Ciena during the first nine months of fiscal 2017 and fiscal 2016 was $23.36 and $19.72 respectively.

Assumptions for Restricted Stock Unit Awards

The fair value of each restricted stock unit award is based on the closing price on the date of grant. Share-based expense for service-based restricted stock unit awards is recognized, net of estimated forfeitures, ratably over the vesting period on a straight-line basis.

Share-based expense for performance-based restricted stock unit awards, net of estimated forfeitures, is recognized ratably over the performance period based upon Ciena's determination of whether it is probable that the performance targets will be achieved. At the end of each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets. The estimation of whether the performance targets will be achieved involves judgment, and the estimate of expense is revised periodically based on the probability of achieving the performance targets. Revisions are reflected in the period in which the estimate is changed. If any performance goals are not met, no compensation cost is ultimately recognized against that goal, and to the extent previously recognized, compensation expense is reversed.

Because share-based compensation expense is recognized only for those awards that are ultimately expected to vest, the amount of share-based compensation expense recognized reflects a reduction for estimated forfeitures. Ciena estimates forfeitures at the time of grant and revises those estimates in subsequent periods based upon new or changed information.

Amended and Restated Employee Stock Purchase Plan (ESPP)

Under the ESPP, eligible employees may enroll in a 12-month offer period that begins in December and June of each year. Each offer period includes two six-month purchase periods. Employees may purchase a limited number of shares of Ciena common stock at 85% of the fair market value on either the day immediately preceding the offer date or the purchase date, whichever is lower. The ESPP is considered compensatory for purposes of share-based compensation expense. Pursuant to the ESPP's “evergreen” provision, on December 31 of each year, the number of shares available under the ESPP increases by up to approximately 0.6 million shares, provided that the total number of shares available at that time shall not exceed 8.2 million shares. Unless earlier terminated, the ESPP will terminate on January 24, 2023.

During the first nine months of fiscal 2017, Ciena issued 1.0 million shares under the ESPP. At July 31, 2017, 5.5 million shares remained available for issuance under the ESPP.

Share-Based Compensation Expense for Periods Reported

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

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	Quarter Ended July 31,		Nine Months Ended July 31,	
	2017	2016	2017	2016
Product costs	$709	$645	$1,978	$1,845
Service costs	619	637	1,926	1,922
Share-based compensation expense included in cost of sales	1,328	1,282	3,904	3,767
Research and development	3,139	3,479	10,001	10,698
Sales and marketing	3,242	3,590	9,628	12,248
General and administrative	4,321	4,284	13,191	14,381
Acquisition and integration costs	—	—	—	714
Share-based compensation expense included in operating expense	10,702	11,353	32,820	38,041
Share-based compensation expense capitalized in inventory, net	(17)	(13)	119	24
Total share-based compensation	$12,013	$12,622	$36,843	$41,832

As of July 31, 2017, total unrecognized share-based compensation expense was approximately $76.5 million: (i) $0.2 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 1.1 years; and (ii) $76.3 million, which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.4 years.

(20) SEGMENTS AND ENTITY WIDE DISCLOSURES

Segment Reporting

Ciena’s internal organizational structure and the management of its business are grouped into the following operating segments:

- Networking Platforms reflects sales of Ciena’s Converged Packet Optical, Packet Networking and Optical Transport product lines.

Converged Packet Optical — includes the 6500 Packet-Optical Platform and the 5430 Reconfigurable Switching System, which feature Ciena's WaveLogic coherent optical processors. Products also include the Waveserver stackable interconnect system, the family of CoreDirector® Multiservice Optical Switches and the OTN configuration for the 5410 Reconfigurable Switching System. This product line also includes sales of the Z-Series Packet-Optical Platform.

Packet Networking — includes the 3000 family of service delivery switches and service aggregation switches and the 5000 family of service aggregation switches. This product line also includes the 8700 Packetwave Platform and the Ethernet packet configuration for the 5410 Service Aggregation Switch.

Optical Transport — includes the 4200 Advanced Services Platform, 5100/5200 Advanced Services Platform, Common Photonic Layer (CPL) and 6100 Multiservice Optical Platform. Ciena's Optical Transport products have either been previously discontinued, or are expected to be discontinued during fiscal 2017, reflecting network operators' transition toward next-generation converged network architectures.

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 Statement of Operations.

- Software and Software-Related Services reflects sales of Ciena’s network virtualization, management, control and orchestration software solutions and software-related services, including subscription, installation, support, and consulting services.

This segment includes Ciena’s element and network management solutions and planning tools, including the OneControl Unified Management System, ON-Center® Network & Service Management Suite, Ethernet Services Manager, Optical Suite Release and Planet Operate. As Ciena seeks adoption of its Blue Planet software platform and transitions features, functionality and customers to this platform, Ciena expects revenue declines for its other element and network management solutions.

This segment includes Ciena’s Blue Planet network virtualization, service orchestration and network management software platform. Ciena's Blue Planet platform includes multi-domain service orchestration (MDSO), network function virtualization (NFV), management and orchestration (NFV MANO), and Ciena's manage, control and plan (MCP) solution, SDN Multilayer Controller and V-WAN application.

Revenue from the software platforms portion of this segment is included in product revenue on the Condensed Consolidated Statement of Operations. Revenue from software-related services is included in services revenue on the Condensed Consolidated Statement of Operations.

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

Ciena's long-lived assets, including equipment, building, furniture and fixtures, finite-lived intangible assets and maintenance spares, are not reviewed by the chief operating decision maker for purposes of evaluating performance and allocating resources. As of July 31, 2017, equipment, building, furniture and fixtures, net totaled $314.9 million primarily supporting asset groups within Ciena's Networking Platforms and Software and Software-Related Services segments and supporting Ciena's unallocated selling and general and administrative activities. As of July 31, 2017, $40.4 million of Ciena's intangible assets, net were assigned to asset groups within Ciena's Networking Platforms segment and $66.6 million of Ciena's intangible assets, net were assigned to asset groups within Ciena's Software and Software-Related Services segment. As of July 31, 2017, all of the maintenance spares, net, totaling $46.6 million, were assigned to asset groups within Ciena's Global Services segment.

Segment Revenue

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

	Quarter Ended July 31,		Nine Months Ended July 31,	
	2017	2016	2017	2016
Revenue:				
Networking Platforms				
Converged Packet Optical	$506,532	$467,615	$1,421,315	$1,291,956
Packet Networking	82,121	63,658	220,641	180,437
Optical Transport	3,694	9,619	11,822	30,215
Total Networking Platforms	592,347	540,892	1,653,778	1,502,608
Software and Software-Related Services				
Software Platforms	18,395	12,558	48,587	32,409
Software-Related Services	23,856	19,011	70,760	55,059
Total Software and Software-Related Services	42,251	31,569	119,347	87,468
Global Services				