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gaining momentum

our 20th year

annual report 2012

ciena : the network specialist



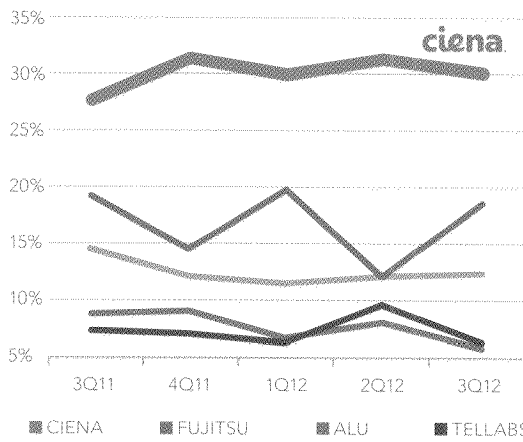
Momentum

Ciena is the network specialist. Ciena Corporation specializes in helping our customers transition their networks so they can better serve their customers in a rapidly evolving industry landscape. We offer leading network infrastructure solutions, intelligent software and a comprehensive services practice to help our customers use their networks to fundamentally change the way they compete. With a global presence, Ciena leverages its heritage of practical innovation to deliver maximum performance and economic value in communications networks worldwide.

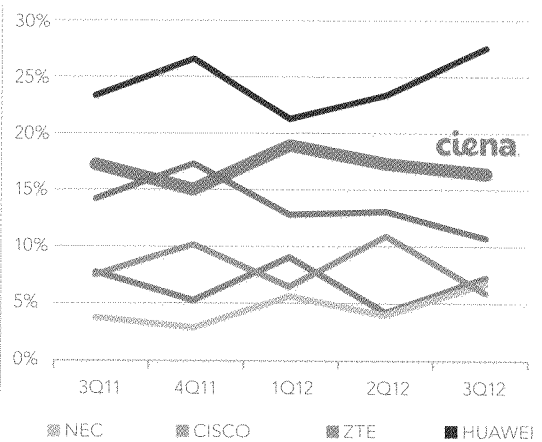
Ciena's portfolio of software-centric optical and Ethernet platforms combine network element programmability, network automation and comprehensive network management to create a next-generation network on which new services and applications can be delivered. Our solutions form the foundation of many of the largest, most reliable and sophisticated service provider, enterprise, government, and research and education networks across the globe.

NEXT-GEN NETWORKING¹

North America Market Share



Global Market Share



1. Long-haul WDM + metro WDM + optical switching; Source: Dell'Oro Group, Optical Report, November, 2012

different by design

A letter from Gary B. Smith, President & Chief Executive Officer

2012 represented another year of substantial progress for Ciena. We gained market share, had record order flow and year-end backlog, generated steady profitability and revenue growth, and strengthened our balance sheet—all amidst a challenging macroeconomic and industry environment. And with the market embracing our OPⁿ Architecture for building next-generation networks for an app-centric world, we believe Ciena's momentum is only beginning.

Early in 2012, we identified several strategic objectives for the Company. Specifically, we set out to further differentiate ourselves in a crowded market; to expand our market reach; and to deliver greater operating efficiency. We have made great progress against each of these objectives.

Ciena's technology and thought leadership are stronger than ever, serving to differentiate the Company, while translating into stronger win rates and share gains across multiple applications and around the world. Our OPⁿ architecture allows all types of network operators to quickly and easily adapt their networks to changing end-user requirements by building a programmable network infrastructure on which software applications can rapidly create new services. And it is because of Ciena's 'specialist-with-scale' positioning that we can offer this architectural approach. As a result, we have grown our global footprint with successes beyond

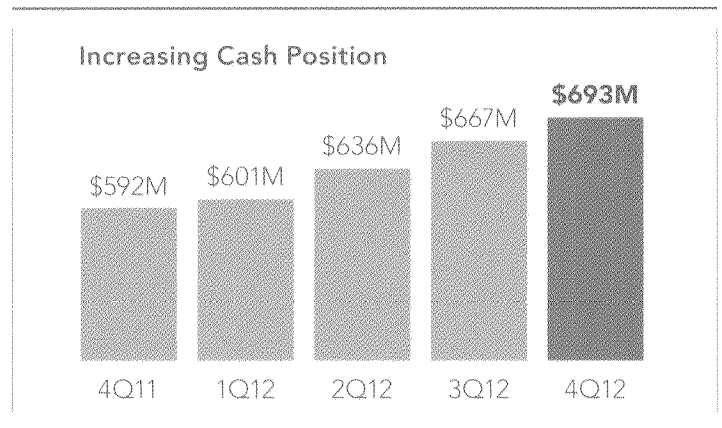


Gary B. Smith
President & Chief Executive Officer

our traditional customer segments and markets. For example, Ciena has approximately 25 percent market share in the submarine upgrade market, a space in which we had virtually no presence only two years ago. At the same time, we have pushed more deeply into additional vertical markets such as financial services, utilities, research and education, and state and local government. Consequently, we have been able to complement our consistent #1 market position in next-generation networking in North America with growth in a number of regions globally, resulting in a strengthened #2 position worldwide.

To advance our unique market position as the network specialist, we have focused our investment on technology convergence across our portfolio by uniting platforms with a common control plane and by sharing more software across those platforms. By optimizing and integrating our hardware and software portfolios to better address customer needs, we are better positioned in fast-emerging applications such as packet networking, cloud-based services and network virtualization—all of which represent growth areas for Ciena. To complement our hardware and software solutions we offer services-led Network Transformation Solutions designed to help customers migrate to next-generation technologies and fully leverage these new architectures. This specialized consulting practice will allow Ciena to become an even more strategic partner to our customers, deepening our relationships and increasing our opportunities over time.

Of course, expanding our technology and thought leadership as well as our market positioning is important but doing so profitably was also a primary driver for us in 2012. We continued the transformation of our supply chain and operations by leveraging increased volume across a smaller set of suppliers, building some of our own components and subsystems, and increasingly adopting a “direct order fulfillment” model for particular products. We also launched cost reduced versions of some of our newer products, most notably WaveLogic 3, our third generation coherent optical processor, which began shipping in December 2012. Additionally, we continued to generate efficiencies within our own operations. By establishing strategic partnerships for specific business functions, redesigning and streamlining a number of processes, and controlling operating expenses



tightly, we showed improved profitability. All of these initiatives helped us deliver improvements across a variety of financial metrics such as Days Sales Outstanding and Ciena's cash position, which grew by \$100 million in fiscal 2012. And finally, to end the calendar year 2012, we strengthened our balance sheet further by extending the maturity of half of the outstanding 2015 convertible notes to 2020, enhancing our financial flexibility without increasing our annual cash interest expense or adding incremental share dilution.

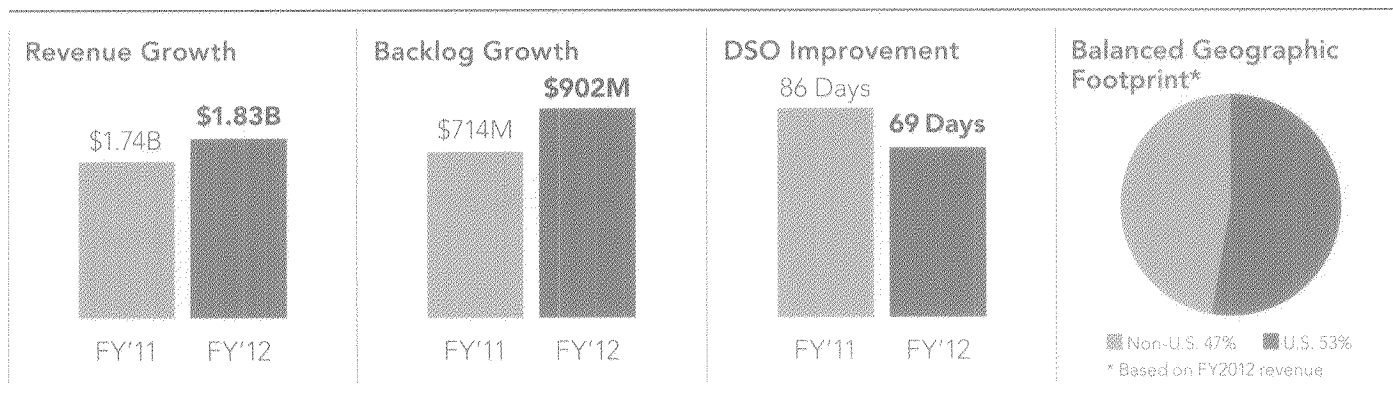
Simply put, Ciena outperformed in 2012. Our revenue grew 5 percent, from \$1.74 billion in fiscal 2011 to \$1.83 billion in fiscal 2012, in a market that declined approximately 7 percent. We believe our performance illustrates the degree by which Ciena is distancing itself from legacy and niche vendors in terms of wins, growth, market share, technology leadership and capabilities, and overall business performance. But we have more to do in 2013.

Looking Ahead with OPⁿ

As we look ahead, we see an environment where we can further extend our leadership and increase our momentum. We believe the distinctive platform we have created, our architectural vision, and the network deployments we have won will translate into greater separation between us and our competitors. We achieved notable design wins and began next generation deployments with some customers in 2012. In 2013, we expect to see the benefits of our 2012 momentum while continuing to accumulate new wins and applications.

Guiding these next generation deployments is Ciena's OPⁿ Architecture, which is designed to address the critical need to scale networks economically and to enable them to support new applications. OPⁿ allows customers to converge network functions and layers, particularly the integration of transport OTN switching and packet switching. Notably, this upgrade cycle is not simply about capacity but also the need to aggregate and manage multiple types of services, as well as the need to intelligently allocate and manage capacity.

OPⁿ also considers emerging concepts like OpenFlow and SDN, which would represent an increase in demand for software-based programmability of network



infrastructure. OPⁿ combines optical and packet networking with software programmability and open interfaces, all areas where Ciena offers industry-leading expertise and technology. Ciena's approach leverages convergence to create exponential network scale while reducing costs, implementing control plan across multiple platforms. It also uses network level apps to direct the behavior of that programmable network area, while leveraging open interfaces to orchestrate network resources alongside computing and storage resources in a virtualized environment. As a result, OPⁿ directly aligns with the needs of both service providers and nontraditional Ciena customers like enterprises and cloud service providers. We believe OPⁿ is the most effective approach to address market needs and, as such, the portfolio developments I discussed earlier as well as those we plan for 2013 directly support this architecture. The number of key design wins and the high level of engagement across multiple geographies and customer segments is evidence that our network vision is resonating. In short, we expect OPⁿ to be a key contributor to our 2013 results and long-term growth.

Ciena's Journey

We have built a unique company capable of delivering a unique vision. And the hard work of our employees and the strong support of our customers and partners continues to yield impressive progress. Consequently, fiscal 2012 was a year in which Ciena truly outpaced the market in an environment where many others struggled.

Our focus in 2013 will be extending our momentum. Leveraging the foundation we have built, we expect new volume deployments from recent wins and additional awards to result in further market share gains. We believe these successes validate our OPⁿ architecture and when combined with our increased thought leadership, our expanded market position, and improvements in our operations, Ciena will drive additional operating leverage over time.

As always, thanks also goes to all our stakeholders who have continued to support Ciena through our journey.

Gary B. Smith
President and Chief Executive Officer

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended **October 31, 2012**

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission file number 0-21969

Ciena Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
Incorporation or organization)

7035 Ridge Road, Hanover, MD

(Address of principal executive offices)

23-2725311

(I.R.S. Employer
Identification No.)

21076

(Zip Code)

(410) 694-5700

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, \$0.01 par value	The NASDAQ Stock Market

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES NO

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

Indicate by check mark whether the registrant has submitted electronically 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 (§232.4-5 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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

(Do not check if a smaller reporting company)

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

The aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant was approximately \$1.0 billion based on the closing price of the Common Stock on the NASDAQ Global Select Market on April 27, 2012.

The number of shares of Registrant's Common Stock outstanding as of December 13, 2012 was 100,610,686.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of the Form 10-K incorporates by reference certain portions of the Registrant's definitive proxy statement for its 2013 Annual Meeting of Stockholders to be filed with the Commission not later than 120 days after the end of the fiscal year covered by this report.

**CIENA CORPORATION
ANNUAL REPORT ON FORM 10-K
FOR FISCAL YEAR ENDED OCTOBER 31, 2012**

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PART I

The information in this annual report contains certain forward-looking statements, including statements related to our business prospects and strategies, the markets for our products and services, and trends in our business and markets that involve risks and uncertainties. Our actual results may differ materially from the results discussed in these forward-looking statements. Factors that might cause such a difference include those discussed in "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business" and elsewhere in this annual report.

Item 1. Business

Overview

We are a provider of equipment, software and services that support the transport, switching, aggregation and management of voice, video and data traffic on communications networks. Our Packet-Optical Transport, Packet-Optical Switching and Carrier-Ethernet Solutions products are used, individually or as part of an integrated solution, in communications networks operated by service providers, cable operators, governments, enterprises, research and education institutions and other network operators around the globe. We are a network specialist focused on solutions that enable converged, next-generation architectures, optimized to handle a broader mix of high-bandwidth communications services. Our products allow network operators to scale capacity and increase transmission speeds, efficiently allocate network traffic, and deliver services to business and consumer end users. Our network solutions also include our integrated Ciena One software suite that provides network management capabilities that unify our product portfolio and provide automation and management features that enable efficient service delivery. To complement our hardware and software portfolio, we offer a broad range of consulting and support services that help our customers design, optimize, deploy, manage and maintain their networks. We believe that the close, collaborative engagement with customers enabled by our services offering is an important component of our network specialist approach and a significant differentiator with customers.

Network operators face a challenging and rapidly changing environment that requires their networks to be robust enough to address increasing capacity needs and flexible enough to adapt quickly to emerging applications and evolving consumer and business use of communications services. At the same time, network operators are competing to distinguish their service offerings and add revenue-generating services while managing the cost to implement and maintain their networks. To address these business, infrastructure and service delivery challenges, we offer a comprehensive, solutions-oriented portfolio that builds upon the principles of our OPⁿ Architecture for next-generation networks. Our OPⁿ Architecture, which underpins our solutions offering and guides our research and development strategy, leverages the convergence of optical and packet networking technologies to increase network scale cost effectively, while emphasizing software-enabled programmability, automation and open interfaces. Through this network approach, we seek to enable high-capacity, configurable infrastructures that can be managed and adapted by network-level applications, and to provide flexible interfaces for the integration of computing, storage and network resources. By increasing network flexibility for service delivery, reducing required network elements and enabling increased scale at reduced cost, our communications networking solutions create business and operational value for our customers.

Certain Financial Information and Segment Data

We generated revenue of \$1.8 billion in fiscal 2012, as compared to \$1.7 billion in fiscal 2011. For more information regarding our results of operations, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this annual report. We currently organize our operations into four separate operating segments: "Packet-Optical Transport," "Packet-Optical Switching," "Carrier Ethernet Solutions," and "Software and Services." The matters discussed in this "Business" section should be read in conjunction with the Consolidated Financial Statements found under Item 8 of Part II of this annual report, which include additional financial information about our operating segments, total assets, revenue, measures of profit and loss, and financial information about geographic areas and customers representing greater than 10% of revenue.

Corporate Information and Access to SEC Reports

We were incorporated in Delaware in November 1992 and completed our initial public offering on February 7, 1997. Our principal executive offices are located at 7035 Ridge Road, Hanover, Maryland 21076. Our telephone number is (410) 694-5700, and our web site address is www.ciena.com. We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, available free of charge on the "Investors" page of our web site as soon as reasonably practicable after we file these reports with the Securities and Exchange Commission (SEC). We routinely post the reports above, recent news and announcements, financial results and other important information about our business on our website at www.ciena.com. Information contained on our web site is not a part of this annual report.

Industry Background

The markets in which we sell our communications networking solutions have been subject to significant changes in recent years, including rapid growth in network traffic, expanded service offerings, and evolving technologies and end user demands. These conditions have created market opportunities and business challenges, and they have changed competitive landscapes. Existing and emerging network operators are competing to distinguish their service offerings and rapidly introduce differentiated, revenue-generating services. At the same time, network operators continue to seek to manage network expense and operate their businesses profitably. These dynamics continue to drive technology convergence of network features, functions and layers, as well as demand for software-based programmability. We believe these market dynamics will cause network operators to adopt communications network infrastructures that are increasingly more automated, robust and configurable.

Network Traffic Growth Driving Increased Capacity Requirements and Transmission Speeds

Optical networks, which carry voice, video and data traffic using multiple wavelengths of light across fiber optic cables, have experienced a multi-year period of strong traffic growth, and industry analysts project continued growth for the foreseeable future. Increasing network traffic is being driven by growing use of and reliance upon a broad range of communications services by consumer and business end users, as well as the expansion of bandwidth intensive wireline and wireless service offerings. Expanding mobile applications, including Internet, video and data services from the proliferation of smartphones, tablets and other devices with wireless access, are further increasing network traffic. Business customers seeking to improve automation, efficiency and productivity are increasingly dependent upon bandwidth-intensive, enterprise-oriented communications services that facilitate global operations, employee mobility and seamless access to critical business applications and data. Enterprise technology trends such as virtualization, cloud computing and machine-to-machine connections are placing new capacity and service requirements on networks. At the same time, an increasing portion of network traffic is being driven by growth of consumer-oriented applications and adoption of mobile and broadband technologies. These include peer-to-peer Internet applications, residential video services, multimedia downloads, cloud-based consumer services and online gaming. This traffic growth requires that network operators add capacity or transition to higher capacity networks with increased transmission speeds.

Multiservice Traffic and Transition to Software-Defined Programmable Network Architectures

We expect that the broadening mix of high-bandwidth, data and video communications services, together with growing mobility and expanding wireless applications, will require upgrades to existing network infrastructure, including mobile backhaul and traditional wireline networks. We believe that this mix of high-bandwidth and latency-sensitive data traffic, and an increased focus on controlling network costs, are driving a transition from multiple, disparate SONET/SDH-based networks to more efficient, converged, multi-purpose optical transport network (OTN)/Ethernet packet-based network architectures. The industry has previously experienced such network technology transitions and these upgrade and investment cycles tend to happen over multi-year periods. For instance, from the mid 1980s to the mid 1990s, service providers focused network upgrades on the transition required to digitize voice traffic. From the mid 1990s to the mid 2000s, service providers focused network upgrades on the transition to SONET/SDH networks designed to reliably handle substantially more network traffic. We believe that the industry is currently experiencing a network transition to flexible, multi-purpose OTN/Ethernet packet-based network architectures that more efficiently handle a growing mix of high-bandwidth communications services and a greater concentration of data traffic.

Emerging Drivers for Network Modernization

Enterprise and consumer end users historically perceived value simply from their network connectivity. Today, however, end users are increasingly focused upon the value that they receive from the services, applications and performance delivered by the underlying network. As a result, network operators seek to create, market, and profitably sell services, as opposed to simply selling connectivity. This shift fundamentally changes how communications networks are designed and managed. Some of the areas that network operators are pursuing to better compete and drive end user value include:

- *Mobility.* The emergence of smart mobile devices that deliver integrated voice, audio, photo, video, email and mobile Internet capabilities, like Apple's iPhone™ and iPad™, and Android™-based smart phones and tablets, is rapidly changing the service type and magnitude of data traffic carried by wireless networks. The increase in availability and improved ease of use of mobile web-based applications expands the reach of virtualized services beyond a wireline connection. For instance, consumer-driven video and gaming are being virtualized, allowing broad access, regardless

of the device or the network used. Because most wireless traffic ultimately travels over a wireline network in order to reach its destination, growth in mobile communications continues to place demands upon wireline networks.

- *“Cloud” Services.* Cloud services are characterized by the sharing of computing, storage and network resources to improve economics through higher utilization of network elements. IT and network service providers are centralizing these resources in order to offer usage-based and metered services that are hosted remotely across a network. Prevalent cloud-based services include Platform as a Service (PaaS), Software as a Service (SaaS) and Infrastructure as a Service (IaaS). As a result, smaller enterprises and consumers can subscribe to an expanding range of cloud services to replace local computing and storage requirements. Larger enterprises and data center operators may use private clouds to consolidate their own resources and public clouds to accommodate peak demand situations, often in combination.
- *Network Virtualization.* Virtualization is the process of decoupling physical IT or communications assets from the logical services or capabilities they can provide. This approach has many appealing attributes such as minimizing expensive resources while adding flexibility and scale. The virtualization of computing, storage and network resources elevates the value of connectivity and drives demand for network infrastructures that offer greater programmability, scale, and flexibility.
- *Machine-to-Machine (M2M) Applications.* In the past, communications services largely related to the connection of people-to-people or people with content. Today, the number of networked connections between devices and servers is growing rapidly with M2M-related traffic expected to represent an increasing portion of Internet traffic. These connections allow the sharing of data that can be monitored and analyzed by applications residing on those devices in order to provide value-added services to users. We expect service traffic relating to the interconnection of machines or devices to grow as Internet and cloud content delivery, smartgrid applications, health care and safety monitoring, resource/inventory management, home entertainment, consumer appliances and other mobile data applications become more widely adopted.

Market Conditions and Effect on Network Investment

We believe that these dynamics, together with multiservice traffic growth, are driving a shift in network priorities and spending toward high-capacity, converged network architectures. However, during fiscal 2012 our market experienced a challenging environment, including declining growth rates in spending in the packet-optical networking markets our solutions address. We believe that this reflects the macroeconomic conditions and competitive landscape encountered in our market during the year. The sustained period of macroeconomic weakness and volatility in the global economy resulted in heightened uncertainty and cautious customer spending in our industry. These market dynamics have caused increased customer scrutiny and more rigid prioritization of network investment, resulting in protracted sales cycles, lengthier network deployments, and revenue recognition delays. In addition, our market is intensely competitive and fragmented and securing new opportunities, particularly for international sales, can often require less favorable pricing and less favorable commercial terms that can elongate the revenue recognition cycle and contribute to fluctuations in operating results. In spite of these macroeconomic and competitive conditions, we grew our business in fiscal 2012 and believe we are well positioned for the longer-term opportunities presented by multiservice traffic growth. By offering a solution that converges network functions and layers, particularly the integration of transport, OTN switching and packet-switching, we believe we offer a more robust, efficient and differentiated network architecture that allows network operators to create and rapidly deliver new service offerings and derive increased value from their network investment.

Strategy

We believe that a number of underlying drivers in the marketplace represent significant, long-term opportunities for our business. We believe that market trends, including the proliferation of smartphones, tablets and similar devices running mobile web applications, the prevalence of video applications, and the shift of enterprise and consumer applications to cloud-based or virtualized network environments, are indicative of increasing use and dependence by consumers and enterprises upon a growing variety of broadband applications and services. We expect that these services will continue to add significant multiservice network traffic, requiring network operators to invest in next-generation, high-capacity network infrastructures that are more efficient, robust and programmable.

Our corporate strategy to capitalize on these market dynamics, promote operational efficiency and drive profitable growth of our business includes the following initiatives:

Promote our OPⁿ Architecture for Next-Generation Networks. The services and applications running on communications networks require that more of the traffic on these networks be packet-oriented. The traditional approach to this problem has

been to add IP routing capability at various points in the network. As capacity needs grow, this approach becomes unnecessarily complex and costly. We reduce the cost and complexity of growing these networks with a programmable infrastructure that we believe brings together the reliability and capacity of optical networking with the flexibility and economics of packet networking technologies. Combining these attributes with network level applications creates an approach we call our OPⁿ Architecture. Our OPⁿ Architecture leverages the convergence of optical and packet networking to enable network scale, applies advanced control plane software for network programmability and enables network-level applications to integrate and optimize network, computing and storage resources in a virtualized environment. We intend to promote the scalability, programmability, flexibility and cost effectiveness advantages of our OPⁿ Architecture, and we see opportunities in offering a portfolio of carrier-class solutions that facilitate the transition to converged, next-generation networks.

Alignment of Research and Development Investment with Growth Opportunities. We seek to ensure that our product development initiatives and investments are closely aligned with market growth opportunities and reflect the changing dynamics faced by network operators. We are investing in our OPⁿ Architecture, which combines a cost-optimized, programmable network platform with open interfaces and network-level software applications. Our current development efforts are focused upon expanding packet capabilities on our Carrier Ethernet Solutions and Packet-Optical Transport products for metro and service aggregation applications, optimizing our core network solutions for application in metro networks, and investing in new vectors for growth. Research and development efforts are focused on extending our WaveLogic coherent optical processor for 40G and 100G optical transport across our portfolio and introducing 400G transmission products. We are also focused upon enhancing our software applications, extending our OneConnect control plane across the 5400 and 6500 platform families, and developing network level applications that automate network functions and support new service introduction.

Evolve Go-to-Market Model. We seek to evolve our go-to-market selling model, both from a coverage and an engagement perspective.

Coverage. Our coverage model is focused on penetrating high-growth geographic markets, selling into key customer segments and addressing additional network applications with our solutions. We seek to enhance our brand internationally, expand our geographic reach and capture market share in international markets, including Brazil, the Middle East, Russia, Japan and India. We intend to pursue opportunities to diversify our customer base beyond our traditional customer base. We are expanding our sales efforts to capture opportunities arising from enterprise migration to, and increased reliance upon, cloud-based services, and targeting government agencies, and research and educational institutions. We are also targeting Internet content providers and other network operators emerging as a result of network modernization drivers and the adoption of new communication services. We seek to expand the application of our solutions, including in metro aggregation, submarine networks, and in support of cloud-based services, business Ethernet services and mobile backhaul. We intend to pursue selling initiatives and strategic channel opportunities, including relationships with key resellers, and carrier-managed sales to end users through our service provider customers, in order to complement our direct sales force and penetrate more deeply our targeted geographic markets, customer segments and additional applications for our solutions.

Engagement. Our strategy is to leverage our close relationship with customers in the design, development, implementation and support of their networks and to promote a close alignment of our solutions with customer network priorities. This engagement model is a key differentiator for our business and provides us with unique insight into the business and network needs of our customers. We seek to expand our Network Transformation Solutions offering to address the network modernization and service delivery demands of our customers, as well as their desire to drive additional value from their network infrastructure. We believe this services-oriented solutions offering shifts our value proposition beyond the sale of our next-generation communications networking products and allows us to play a key role in the design and evolution of our customers' networks to support their strategic business objectives. By understanding and addressing their network infrastructure needs and the evolving markets in which our customers compete, we believe this customized solutions offering creates additional business and operational value for our customers, enabling them to better compete in a challenging environment.

Business optimization to yield operating leverage. We seek to improve the operational efficiencies in our business and gain additional operating leverage. We are focused on the transformation and redesign of certain business processes, systems, and resources. These initiatives include additional investments, re-engineering and automation of certain key business processes, including the engagement of strategic partners or resources to assist with select business functions. In addition, we are focused on optimizing our supply chain structure in order to increase efficiency, reduce overhead and cost-reduce our product solutions. These initiatives include the rationalization and consolidation of third party manufacturers, distribution facilities and logistics providers, direct order fulfillment of additional products, and the consideration of select vertical integration within our supply chain. We seek to leverage these opportunities to promote the profitable growth of our business.

Customers and Markets

Our customer base, and the geographic markets and customer segments into which we sell our products and services, have expanded in recent years. As a result of industry dynamics above, additional network operators supporting new communications services and applications continue to emerge. The network infrastructure needs of our customers vary, depending upon their size, location, the nature of their end users and the services that they deliver and support. We sell our product and service solutions through our direct sales force and third party channel partners to end user network operators in the following customer segments:

Communications Service Providers

Our service provider customers include regional, national and international wireline and wireless carriers, as well as service provider consortia offering services over submarine networks. Our customers include AAPT, Allstream, AT&T, Australia Japan Cable, Bell Canada, BT, Cable & Wireless, CenturyLink, France Telecom, Japan-US Cable, Korea Telecom, PLDT, Reliance, SEA-ME-WE 4, SingTel, Southern Cross, Sprint, Tata Communications, Telefonica, Telmex, Telus, Verizon, Vimpelcom, Vodafone and XO Communications. Communications service providers are our historical customer base and continue to represent a significant majority of our revenue. We provide service providers with products from the network core to its edge where end users gain access. Our service provider solutions address growing bandwidth demand from multiservice traffic growth and support key service provider offerings, including carrier-managed services, wide area network (WAN) consolidation, data center and inter-site connectivity, wireless backhaul and business Ethernet services.

Cable & Multiservice Operators (MSO)

Our customers include leading cable and multiservice operators in the U.S. and internationally. These customers include Cogeco, Comcast, Cox, RCN, Rogers and Time Warner. Our cable and multiservice operator customers rely upon us for carrier-grade, Ethernet transport and switching products and high-capacity coherent optical transport to support enterprise-oriented services. Our platforms allow cable operators to integrate voice, video and data applications over a converged infrastructure and to scale their networking infrastructure to keep ahead of the bandwidth and application demands of their subscribers. Our products support key cable applications including business Ethernet services, wireless backhaul, broadcast and digital video, voice over IP, and video on demand.

Enterprise

Our enterprise customers include large, multi-site commercial organizations, including participants in the financial, health care, transportation, utilities and retail industries. Our solutions enable enterprises to leverage network resources to achieve operational improvements, increased automation and information technology cost reductions. Our products enable inter-site connectivity between data centers, sales offices, manufacturing plants, retail stores and research and development centers, using an owned or leased private fiber network or a carrier-managed service. Our products facilitate key enterprise applications including IT virtualization, cloud computing, business Ethernet services, business continuity, online collaboration, video conferencing, low latency networking and WAN encryption. Our products also enable our enterprise customers to prevent unexpected network downtime and ensure the safety, security and availability of their data.

Internet Content Providers

Our customers include global providers of a diverse range of Internet content services and applications such as search, social media, video, real-time communications and cloud-based offerings to consumers and enterprises. Our customers require massive scale, low latency, and proven reliability and performance to connect end-users to network resources and to interconnect critical data centers. Our customers leverage high-capacity coherent optics, packet switching, automated service provisioning and software-based network control to deliver flexible, high-performance connectivity services on demand in a virtualized network environment.

Government, Research and Education

Our government customers include federal and state agencies in the U.S. as well as international government entities. Our government and research and education customers seek to take advantage of technology innovation, improve their information infrastructure, and facilitate increased collaboration. Our solutions feature ultra-high capacity, reconfigurability and service flexibility to meet the requirements of supercomputing systems. Our solutions offering promotes network assurance, security and reliability while improving network performance, capacity, and flexibility. We collaborate with leading institutions to

provide government and research and education communities with optimized networks that minimize cost and complexity, through initiatives that support intelligent control plane technologies, interoperability and scalability.

Products and Services

Our product portfolio consists of our Packet-Optical Transport, Packet-Optical Switching and Carrier Ethernet Solutions products. These products, together with our unified network management software, network transformation solutions and support services offerings, allow us to offer customers comprehensive solutions to address their communications network priorities.

Packet-Optical Transport

Our Packet-Optical Transport platforms include flexible, scalable wavelength division multiplexing (WDM) solutions that add capacity to core, regional and metro networks and enable cost-effective and efficient transport of voice, video and data traffic at high transmission speeds. We offer scalable Packet-Optical Transport platforms, including several chassis sizes and a comprehensive set of line cards, that can be utilized from the customer premises, where space and power are limited, to the metropolitan/regional core, where the need for high capacity and carrier-class performance is essential. By automating optical infrastructures, our Packet-Optical Transport products support the efficient delivery of a wide variety of consumer-oriented network services, as well as key managed service and enterprise applications. Our Packet-Optical Transport portfolio includes the following products:

- 6500 Packet-Optical Platform;
- 4200® Advanced Services Platform;
- 5100/5200 Advanced Services Platform;
- Corestream® Agility Optical Transport System;
- Common Photonic Layer (CPL); and
- 6100 Multiservice Optical Platform.

Our Packet-Optical Transport portfolio, including our 6500 Packet-Optical Platform, features coherent, 40G and 100G optical transport technology and our WaveLogic coherent optical processors. We are currently shipping our third generation of these proprietary silicon chips that facilitate deployment of our transport technology over existing customer fiber plant (terrestrial and submarine), enable our optical transmission systems to scale capacity to 40G and 100G, and yield additional economic benefits through the reduction or elimination of network equipment, such as amplifiers, regenerators and dispersion compensating devices. Our 6500 Packet-Optical Platform includes certain integrated switching elements addressing market demand for converged network features, functions and layers to drive more robust and cost-effective network infrastructures. Our Packet-Optical Transport solutions also include our traditional SONET/SDH products and data networking products, as well as certain enterprise-oriented transport solutions that support storage and local area network (LAN) extension, interconnection of data centers, and virtual private networks.

Packet-Optical Switching

Our Packet-Optical Switching family of products provides time division multiplexing (TDM) switching and packet switching capability to allocate efficiently network capacity and to enable service delivery. Our principal Packet-Optical Switching products are our CoreDirector® Multiservice Optical Switch, our 5430 Reconfigurable Switching System and our OTN configuration for the 5410 Reconfigurable Switching System. This product segment includes multiservice, multi-protocol switching systems that consolidate the functionality of an add/drop multiplexer, digital cross-connect and packet switch into a single, high-capacity intelligent switching system. These products address both core and metro segments of communications networks and support key managed services, including Ethernet/TDM Private Line and IP services. Our Packet-Optical Switching solutions include a family of multi-terabit reconfigurable switching systems that utilize intelligent mesh networking to provide resiliency and feature an integrated optical control plane to automate the provisioning and bandwidth control of high-capacity services. Our Packet-Optical Switching systems flexibly support a mix of Carrier Ethernet/MPLS, OTN, WDM, and SONET/SDH switching to facilitate the transition to a service-enabling infrastructure.

Carrier Ethernet Solutions

Our Carrier Ethernet Solutions allow customers to utilize the automation and capacity created by our Packet-Optical Transport products in core and metro networks and to deliver new, revenue-generating services to consumers and enterprises. These products have applications from the edge of metro and core networks, where they aggregate traffic, to the access tiers of networks where they can be deployed to support wireless backhaul infrastructures and deliver business data services.

Employing sophisticated Carrier Ethernet switching technology, these products deliver quality of service capabilities, virtual local area networking and switching functions, and carrier-grade operations, administration, and maintenance features.

Our Carrier Ethernet Solutions offering primarily consists of our 3000 family of service delivery switches and service aggregation switches, our 5000 series of service aggregation switches, and our Carrier Ethernet configuration for the 5410 Service Aggregation Switch. Our service delivery and packet aggregation switches provide a more reliable and feature-rich Ethernet technologies that can support a wider variety of services. Service delivery products are often used at customer premises locations while aggregation platforms are used to combine services to improve network resource utilization. This segment also includes our legacy broadband products that transition voice networks to support IP telephony, video services and DSL.

Unified Software and Service Management Tools

Our integrated software offering, the Ciena One software suite, includes OneControl, our integrated network management software that unifies our product portfolio and provides the automation and management features that enable efficient service delivery. Our network management tools offer a comprehensive set of functions, from monitoring network performance and provisioning the network to full service level management across a variety of network layers and domains. Our Ciena One software suite is a robust, service aware framework that improves network utilization and availability, while delivering enhanced performance monitoring and reliability. By increasing network automation, minimizing network downtime and monitoring network performance and service metrics, our software tools enable customers to improve cost effectiveness, while increasing the performance and functionality of their network operations. This software suite also includes Ciena OnePlanner, a suite of planning tools that help network operators utilize their networks more efficiently, and our ON-Center® Network & Service Management Suite.

Network Transformation Solutions and Support Services

To complement our product portfolio, we offer a broad range of consulting and support services that help our customers design, optimize, deploy, manage and maintain their communications networks. We believe that our broad set of service offerings is an important component of our network specialist approach and a significant differentiator from our competitors. We believe that our services offering and our close collaborative engagement with customers provide us with valued insight into network and business challenges faced by our customers, enabling them to modernize and gain value from their network infrastructures. Our network transformation solutions offering enables us to work closely with our customers in the assessment, planning, deployment, and transformation of their networks. We believe that customers place significant value on the strategic, consultative engagements afforded by our services offering, and our ability to partner with them through services-oriented solutions that address their network and business needs.

Our services and support portfolio includes the following offerings:

- Network transformation solutions, including:
 - Network analysis, planning and design; and
 - Network optimization, modernization and assurance services.
- Maintenance and support services, including:
 - helpdesk and technical assistance;
 - training;
 - spares and logistics management;
 - engineering dispatch and on-site professional services;
 - equipment repair and replacement; and
 - software maintenance and updates.
- Deployment services, including turnkey installation and turn-up and test services; and
- Project management services, including staging, site preparation and installation support activities.

We provide these services using a combination of internal resources and qualified third party service partners.

Product Development

Our industry is subject to rapid technological developments, evolving service delivery requirements, standards and protocols, and shifts in customer and end user network demand. To remain competitive, we must continually enhance existing product platforms by adding new features and functionality, increasing transmission speeds and capacity, and introducing new network solutions that address multiservice traffic growth and enable new service offerings. Our research and development

strategy has been to pursue technology convergence, which allows us to consolidate network features, functionalities and layers onto a single platform, helping network operators architect robust, feature-rich networks that reduce required network elements and address cost, space and power limitations. We believe these converged, next-generation networking solutions promote rapid service delivery and allow network operators to derive business and operational value from their network infrastructures.

We are investing in our OPⁿ Architecture for designing next-generation network. Our OPⁿ Architecture, which underpins our solutions offering and guides our research and development strategy, leverages the convergence of optical and packet technologies to increase network scale cost effectively, while emphasizing software-enabled programmability, automation and open interfaces. Through this network approach, we seek to enable high-capacity, configurable infrastructures that can be managed and adapted by network-level applications, and to provide flexible interfaces for the integration of computing and storage resources in a unified network. Our product development initiatives also include design and development work intended to address growing opportunities, such as metropolitan network applications, enterprise networking, cloud infrastructure and packet-based infrastructure solutions for next-generation, high-capacity networks. To address these opportunities and realize our network vision, our current development efforts are focused upon:

- Extending our leadership in 40G and 100G long-haul transport, and making metropolitan network applications more cost effective for network operators;
- Continued development of our high-capacity optical transport technology and our WaveLogic coherent optical processor to further improve network capacity, transmission speed, spectral efficiency and reach;
- Expanding packet networking capabilities and features for our high-capacity Ethernet aggregation switches, for metro and service aggregation applications, mobile backhaul and business Ethernet services;
- Enhancing our data-optimized, switching solutions to enable an end-to-end Optical Transport Network (OTN) architecture that offers improved cost per bit, flexibility and reliability;
- Interoperability and enhancing our control plane and integrated network management software platform to enable service level management across our solutions; and
- Development of network level applications that automate various network functions and support new service introduction.

Our research and development efforts are also geared toward engineering changes intended to drive cost reductions across our platforms.

To ensure that our product development investments and solutions offering are closely aligned with market demand, we continually seek input from customers and promote collaboration among our product development, marketing and global field organizations. In some cases, we work with third parties pursuant to technology licenses, original equipment manufacturer (OEM) arrangements and other strategic technology relationships or investments, to develop new components or products, modify existing platforms or offer complementary technology to our customers. In addition, we participate in industry and standards organizations, where appropriate, and incorporate information from these affiliations throughout the product development process.

We regularly review our existing product offerings and prospective development projects to determine their fit within our portfolio and broader corporate strategy. We assess the market demand, technology evolution, prospective return on investment and growth opportunities, as well as the costs and resources necessary to develop and support these products. In recent years, our strategy has been to pursue technology and product convergence that allows us to consolidate multiple technologies and functionalities on a single platform, or to control and manage multiple elements throughout the network from a uniform management system, ultimately creating more robust, integrated and cost-effective network tools. We have also shifted our strategic development approach from delivering point products to providing a focused combination of networking equipment, software and service solutions that address the business and network needs of our customers.

Within our global products group, we maintain a team of skilled engineers with extensive experience in the areas of photonics, packet and circuit switching, network system design, embedded operating system and network management software. Our research and development expense was \$327.6 million, \$379.9 million and \$364.2 million, for fiscal 2010, 2011 and 2012, respectively. For more information regarding our research and development expense, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7 of Part II of this report.

Sales and Marketing

We sell our communications networking solutions through our direct sales resources as well as through strategic channel relationships. In addition to securing new customers in growth geographies and customer market segments, our sales strategy has focused on building long-term, consultative relationships with existing customers. We believe this approach promotes our

network specialist approach and helps ensure the alignment of our expertise with the business and network requirements of our customers. We believe this approach also provides opportunities to participate in future projects relating to the transition or expansion of existing network infrastructures and to cross-sell solutions across our portfolio.

Within our global field organization, we maintain a direct sales presence that is organized geographically around the following markets: (i) U.S. and Canada; (ii) Caribbean and Latin America; (iii) Europe, Middle East and Africa; and (iv) Asia-Pacific. These regions include sales personnel that focus on one or more of the following customer segments: communications service providers including wireless providers, cable and multiservice operators, enterprise customers and government, research and education. Within each geographic area, we maintain regional, country and/or customer-specific teams, including sales management, account salespersons, and systems engineers, as well as strategic marketing, services and commercial management personnel, who ensure we operate closely with and provide a high level of support to our customers. We also maintain global sales teams that focus on submarine network opportunities and emerging customer segments including Internet content and cloud infrastructure providers.

We also maintain a global channel program that works with resellers, systems integrators, service providers, and other third party distributors who market and sell our products and services. Our third party channel sales and other distribution arrangements enable us to reach additional geographic regions and customer segments. We intend to pursue and foster a small number of strategic channel relationships in an effort to enable us to sell our products as a complement to the broader offering of these vendors or integrators, including, in particular, in support of enterprise-oriented applications and cloud-based services. We also see opportunities to leverage these strategic channel relationships to address additional customer segments, emerging applications for our solutions and growth geographies. Our use of channel partners has been a key component in our sales to government, research and education and enterprise customers. We believe this strategy and our use of third party channels affords us expanded market opportunities and reduces the financial and operational risk of entering these additional markets.

To support our sales efforts, we engage in marketing activities intended to position and promote both our brand and our product, software and service offerings. Our marketing team supports sales efforts through direct customer interaction, industry events, public relations, industry analysts, social media, tradeshow, our website and other marketing channels for our customers and channel partners.

Operations and Supply Chain Management

Operations personnel within our global products group manage our relationships with our third party manufacturers and manage our supply chain. In addition, this team also addresses component procurement and sourcing, product testing and quality, fulfillment and logistics relating to our sales, support and professional services, and distribution efforts.

We utilize a global sourcing strategy that emphasizes procurement of materials and product manufacturing in lower cost regions. Activities performed by our third party supply partners can include design and prototype development, component sourcing, full production, final assembly, testing and customer order fulfillment. We rely upon third party contract manufacturers, with facilities in Canada, China, Mexico, Thailand and the United States, to perform nearly all of the manufacturing of our products. As a result, we are exposed to risks associated with the business continuity of these third parties and other events or conditions affecting the locations where their manufacturing occurs. We are also exposed to risks associated with their business practices and practices in the markets in which they operate including the level of corruption or protection of intellectual property. To address customer concerns and to mitigate the related risks to our business, operations and intellectual property, we have been reducing our reliance upon contract manufacturers and component suppliers in China and are currently transitioning, or expect to transition in the near-term, the procurement of certain components and the manufacture and assembly of our product platforms to alternate locations.

We are currently utilizing a direct order fulfillment model for the sale of certain products, and are engaged in initiatives to expand this model to a broader set of products. This model allows us to rely on our third party manufacturers to perform final system integration and testing prior to shipment of products from their facilities directly to our customers. For certain products, we continue to perform a portion of the system assembly, software application, final system integration and testing internally. We believe that our sourcing and manufacturing strategy allows us to conserve capital, lower costs of product sales, adjust quickly to changes in market demand, and operate without dedicating significant resources to manufacturing-related plant and equipment. As part of our effort to optimize our operations, we continue to focus on driving cost reductions through sourcing and engineering efforts, rationalizing our supply chain and consolidating third party contract manufacturers, distribution sites and service logistics partners.

Our manufacturers procure components necessary for assembly and manufacture of our products based on our specifications, approved vendor lists, bill of materials and testing and quality standards. Our manufacturers' activity is based on rolling forecasts that we provide to them to estimate demand for our products. This build-to-forecast purchase model exposes us to the risk that our customers will not order those products for which we have forecast sales, or will purchase less than we have forecast. As a result, we incur carrying charges or obsolete material charges for components purchased by our manufacturers. We work closely with our manufacturers to manage material, quality, cost and delivery times, and we continually evaluate their services to ensure performance on a reliable and cost-effective basis.

Our products include some components that are proprietary in nature, only available from one or a small number of suppliers, or manufactured by sole or limited sources responsible for production. If component supplies become limited, production at a manufacturer is disrupted, or if we experience difficulty in our relationship with a key supplier or manufacturer, we may encounter manufacturing delays that could adversely affect our business.

Backlog

Generally, we make sales pursuant to purchase orders issued under framework agreements that govern the general commercial terms and conditions of the sale of our products and services. These agreements do not obligate customers to purchase any minimum or guaranteed order quantities. Our backlog includes orders for products that have not been shipped and for services that have not yet been performed. In addition, backlog also includes orders relating to products that have been delivered and services that have been performed, but are awaiting customer acceptance under the applicable purchase terms. Generally, our customers may cancel or change their orders with limited advance notice, or they may decide not to accept these products and services, although both cancellation and non-acceptance are infrequent. Orders in backlog may be fulfilled several quarters following receipt or may relate to multi-year support service obligations. As a result, backlog should not be viewed as an accurate indicator of future revenue in any particular period.

Our backlog increased from \$714.1 million as of October 31, 2011 to \$902.0 million as of October 31, 2012. Backlog includes product and service orders from commercial and government customers combined. Backlog at October 31, 2012 includes approximately \$140.5 million, primarily related to orders for maintenance and support services that we do not reasonably expect to be filled within the next fiscal year. Backlog at October 31, 2011 included approximately \$84.1 million that was not expected to be filled within fiscal 2012. Our presentation of backlog may not be comparable with figures presented by other companies in our industry.

Seasonality

Like other companies in our industry, we have experienced quarterly fluctuations in customer activity due to seasonal considerations. We typically experience reductions in order volume toward the end of the calendar year, as the procurement cycles of some of our customers slow and network deployment activity at service providers is curtailed. This seasonality in our order flows can result in somewhat weaker revenue results in the first quarter of our fiscal year. These seasonal effects do not apply consistently and do not always correlate to our financial results. Accordingly, they should not be considered a reliable indicator of our future revenue or results of operations.

Competition

Competition among communications network solution vendors remains intense. The markets in which we compete are characterized by rapidly advancing and converging technologies, introduction of new network solutions and selling efforts to displace incumbent vendors and secure market share. Successfully competing in these markets is based on any one or a combination of the following factors:

- product functionality, speed, capacity, scalability and performance;
- price and total cost of ownership;
- incumbency and existing business relationships;
- ability to offer comprehensive networking solutions, consisting of equipment, software and network consulting services;
- product development plans and the ability to drive convergence of network features, functions and layers and meet customers' immediate and future network requirements;
- flexibility, including ease of integration, product interoperability and integrated management;
- manufacturing and lead-time capability; and
- services and support capabilities.

In this competitive environment, securing new opportunities, particularly in international markets, often requires that we agree to less favorable commercial terms or pricing, financial commitments requiring collateralized performance bonds or similar instruments that place cash resources at risk, and other onerous contractual commitments that place a disproportionate allocation of risk upon the vendor. These terms can adversely affect our result of operations.

Competition for sales of communications networking solutions is dominated by a small number of very large, multinational companies. Our competitors have included Alcatel-Lucent, Cisco, Ericsson, Fujitsu, Huawei, Juniper Networks, Nokia Siemens Networks, and ZTE. Many of these competitors have substantially greater financial, operational and marketing resources than Ciena, significantly broader product offerings or more extensive customer bases. In recent years, mergers among some of our larger competitors have intensified these advantages. We expect the level of competition, particularly in North America, to continue and potentially increase, as Chinese equipment vendors seek to gain entry into the U.S. market, and other multinational competitors seek to retain incumbent positions and market share with large customers in the region.

We expect our competitive landscape to be dynamic as network technologies and features converge, and vendors compete to have their network architectural approaches adopted. As this convergence occurs, and networks become more cloud-based, virtualized and software-defined, we expect that we may compete with additional information technology and software vendors, as well as suppliers of networking technology traditionally geared toward different network layers or functions. We also continue to compete with several smaller, but established, companies that offer one or more products that compete directly or indirectly with our offerings or whose products address specific niches within the markets and customer segments we address. These competitors include ADVA, BTI, Infinera, Tellabs and Transmode. In addition, there are a variety of earlier-stage companies with products targeted at specific segments of the communications networking market. These competitors often employ aggressive competitive and business tactics as they seek to gain entry to certain customers or markets. Due to these practices and the narrower focus of their development efforts, these competitors may be able to develop and introduce products more quickly, or offer commercial terms that are more attractive to customers.

Patents, Trademarks and Other Intellectual Property Rights

The success of our business and technology leadership is significantly dependent upon our proprietary and internally developed technology. We rely upon patents, copyrights, trademarks, and trade secret laws to establish and maintain proprietary rights in our technology. We maintain a patent incentive program that seeks to reward innovation. We regularly file applications for patents and have a significant number of patents in the United States and other countries where we do business. As of December 1, 2012, we had 1,357 U.S. patents and 233 pending U.S. applications. We also have over 415 non-U.S. patents.

We also rely on non-disclosure agreements and other contracts and policies regarding confidentiality with employees, contractors and customers, to establish proprietary rights and protect trade secrets and confidential information. Our practice is to require employees and relevant consultants to execute non-disclosure and proprietary rights agreements upon commencement of employment or consulting arrangements with us. These agreements acknowledge our ownership of intellectual property developed by the individual during the course of his or her work with us. The agreements also require that these persons maintain the confidentiality of all proprietary information disclosed to them.

Enforcing proprietary rights, especially patents, can be costly and uncertain. Moreover, monitoring unauthorized use of our technology is difficult, and we cannot be certain that the steps that we are taking will detect or prevent unauthorized use. In recent years, we have filed suit to enforce our intellectual property rights. We have also been subject to several claims related to patent infringement, including by competitors and non-practicing entities or "patent trolls," and have been requested to indemnify customers pursuant to contractual indemnity obligations relating to infringement claims made by third parties. Intellectual property infringement assertions could cause us to incur substantial costs, including legal fees in the defense of these actions. If we are not successful in defending these claims, our business would be adversely affected. For example, we may be required to enter into a license agreement requiring ongoing royalty payments, required to redesign our products, or prohibited from selling any infringing technology.

Our operating system, element and network management software and other products incorporate software and components under licenses from third parties. We may be required to license additional technology from third parties in order to develop new products or product enhancements. Failure to obtain or maintain such licenses or other rights could affect our development efforts, require us to re-engineer our products or obtain alternate technologies.

In connection with our acquisition of substantially all of the optical networking and Carrier Ethernet assets of Nortel's Metro Ethernet Networks business (the "MEN Acquisition"), we obtained a non-exclusive license to use patents and other intellectual property controlled or exclusively owned by Nortel in connection with our manufacture, sale and support of a broad range of optical networking and Carrier Ethernet products and services and natural evolutions of such products and services.

This license also provides us with an exclusive license to use a narrower set of patents and other intellectual property owned by Nortel in connection with Ciena's manufacture, sale and support of optical networking and Carrier Ethernet products and services within a narrower field of use and subject to certain limitations. As part of this license, we granted Nortel a non-exclusive license to use the patents and other intellectual property (except trademarks) that we acquired as part of the MEN Business in connection with the manufacture and sale of products and services in the fields of Nortel's other businesses (including those businesses sold and to be sold to other parties) and natural evolutions of such fields.

Environmental Matters

Our business and operations are subject to environmental laws in various jurisdictions around the world, including the Waste Electrical and Electronic Equipment (WEEE) and Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) regulations adopted by the European Union. We seek to operate our business in compliance with such laws relating to the materials and content of our products and product takeback and recycling. Environmental regulation is increasing, particularly outside of the United States, and we expect that our domestic and international operations may be subject to additional environmental compliance requirements, which could expose us to additional costs. To date, our compliance costs relating to environmental regulations have not resulted in a material cost or effect on our business, results of operations or financial condition.

Employees

As of October 31, 2012, we had 4,481 employees. We have not experienced any work stoppages, and we consider the relationships with our employees to be good. Competition to attract and retain highly skilled technical, engineering and other personnel with experience in our industry is intense. We believe that our future success depends in critical part on our continued ability to recruit, motivate and retain such qualified personnel.

Directors and Executive Officers

The table below sets forth certain information concerning our directors and executive officers:

Name	Age	Position
Patrick H. Nettles, Ph.D.	69	Executive Chairman of the Board of Directors
Gary B. Smith	52	President, Chief Executive Officer and Director
Stephen B. Alexander	53	Senior Vice President, Chief Technology Officer
Rick Dodd	43	Senior Vice President, Global Marketing
James A. Frodsham	46	Senior Vice President, Chief Strategy Officer
François Locoh-Donou	41	Senior Vice President, Global Products Group
Philippe Morin	47	Senior Vice President, Global Field Organization
James E. Moylan, Jr.	61	Senior Vice President, Finance and Chief Financial Officer
Andrew C. Petrik	49	Vice President and Controller
David M. Rothenstein	44	Senior Vice President, General Counsel and Secretary
Harvey B. Cash (1)(3)	74	Director
Bruce L. Claflin (1)(2)	61	Director
Lawton W. Fitt (2)	59	Director
Judith M. O'Brien (1)(3)	62	Director
Michael J. Rowny (2)	62	Director
Patrick T. Gallagher (2)	57	Director

(1) Member of the Compensation Committee

(2) Member of the Audit Committee

(3) Member of the Governance and Nominations Committee

Our Directors hold staggered terms of office, expiring as follows: Ms. Fitt, Dr. Nettles and Mr. Rowny in 2013; Ms. O'Brien and Messrs. Cash and Smith in 2014; and Messrs. Claflin and Gallagher in 2015.

Patrick H. Nettles, Ph.D. has served as a Director of Ciena since April 1994 and as Executive Chairman of the Board of Directors since May 2001. From October 2000 to May 2001, Dr. Nettles was Chairman of the Board and Chief Executive Officer of Ciena, and he was President and Chief Executive Officer from April 1994 to October 2000. Dr. Nettles serves as a Trustee for the California Institute of Technology and serves on the board of directors of Axcelis Technologies, Inc. and The Progressive Corporation. Dr. Nettles also serves on the board of directors of Optiwind Corp, a privately held company, and has previously served on the board of directors of Apptrigger, Inc., formerly known as Carrius Technologies, Inc.

Gary B. Smith joined Ciena in 1997 and has served as President and Chief Executive Officer since May 2001. Mr. Smith has served on Ciena's Board of Directors since October 2000. Prior to his current role, his positions with Ciena included Chief Operating Officer, and Senior Vice President, Worldwide Sales. Mr. Smith previously served as Vice President of Sales and Marketing for INTELSAT and Cray Communications, Inc. Mr. Smith also serves on the board of directors for Avaya Inc. and CommVault Systems, Inc. Mr. Smith is a member of the President's National Security Telecommunications Advisory Committee, the Global Information Infrastructure Commission and the Center for Corporate Innovation (CCI).

Stephen B. Alexander joined Ciena in 1994 and has served as Chief Technology Officer since September 1998 and as a Senior Vice President since January 2000. Mr. Alexander has previously served as General Manager of Products & Technology and General Manager of Transport and Switching and Data Networking.

Rick Dodd has served as Ciena's Senior Vice President, Global Marketing since December 2010 and is responsible for Ciena's product, solutions and corporate marketing organizations. In this role, he provides strategic support to Ciena's global field organization and global products groups. Mr. Dodd previously worked at Infinera Corporation from September 2003 to December 2010 and served in roles including Vice President of Product Marketing and Vice President of Corporate Marketing. Mr. Dodd previously served as Associate Partner at venture capital firm Kleiner, Perkins, Caufield and Byers and as Ciena's Director, Strategic Marketing.

James A. Frodsham joined Ciena in May 2004 and has served as Senior Vice President and Chief Strategy Officer since March 2010 with responsibility for our strategic planning and corporate development activities. In August 2010, Mr. Frodsham also assumed responsibility for the integration of the MEN Business, which was substantially completed in fiscal 2011. Mr. Frodsham previously served as Senior Vice President, General Manager of Ciena's former Broadband Access Group from October 2004 to October 2005 and Metro and Enterprise Solutions Group from May 2004 to October 2004. From August 2000 to January 2003, Mr. Frodsham served as chief operating officer of Innovance Networks, an optical networking company. On December 23, 2003, Innovance filed a Notice of Intent to make a proposal pursuant to Part III of the Bankruptcy and Insolvency Act (Canada). Prior to that, Mr. Frodsham was employed for more than ten years in senior level positions with Nortel Networks in product development and marketing strategy, lastly as Vice President, Product Line Marketing, Optical Networking Group, from December 1998 to June 2000. Mr. Frodsham serves on the board of directors of Innovance Networks.

François Locoh-Donou has served as Ciena's Senior Vice President, Global Products Group since August 2011. In this capacity, Mr. Locoh-Donou leads Ciena's engineering, supply chain, product line management, quality/customer advocacy and solutions interpretation organizations on a global basis. Mr. Locoh-Donou joined Ciena in August 2002 and served as Ciena's Vice President and General Manager, EMEA from June 2005 to August 2011.

Philippe Morin joined Ciena in March 2010 in connection with Ciena's acquisition of Nortel's MEN Business and has served as Senior Vice President, Global Field Organization since August 2011, where he is responsible for leading Ciena's global sales and services organizations. From March 2010 to August 2011, Mr. Morin served as Ciena's Senior Vice President, Global Products Group. Mr. Morin previously served as President of Nortel's MEN Business from May 2006 until Ciena's completion of the MEN Acquisition in March 2010. In January 2009, Nortel Networks Corporation and certain of its subsidiaries filed voluntary petitions in the United States under Chapter 11 of the U.S. Bankruptcy Code. From January 2003 to May 2006, Mr. Morin held the position of Nortel's General Manager of Optical Networks. Mr. Morin previously held other positions at Nortel in manufacturing, marketing, sales and product management both in North America and Europe.

James E. Moylan, Jr. has served as Senior Vice President, Finance and Chief Financial Officer since December 2007. From June 2006 to December 2007, Mr. Moylan served as Executive Vice President and Chief Financial Officer of Swett & Crawford, a wholesale insurance broker.

Andrew C. Petrik joined Ciena in 1996 and has served as Vice President, Controller since August 1997 and served as Treasurer from August 1997 to October 2008.

David M. Rothenstein joined Ciena in January 2001 and has served as Senior Vice President, General Counsel and Secretary since November 2008. Mr. Rothenstein served as Vice President and Associate General Counsel from July 2004 to October 2008 and previously as Assistant General Counsel.

Harvey B. Cash has served as a Director of Ciena since April 1994. Mr. Cash is a general partner of InterWest Partners, a venture capital firm in Menlo Park, California, which he joined in 1985. Mr. Cash serves on the board of directors of First Acceptance Corp., Silicon Laboratories, Inc. and Argonaut Group, Inc. and has previously served on the boards of directors of i2 Technologies, Inc., Voyence, Inc. and Staktek Holdings, Inc.

Bruce L. Claflin has served as a Director of Ciena since August 2006. Mr. Claflin served as President and Chief Executive Officer of 3Com Corporation from January 2001 until his retirement in February 2006. Mr. Claflin joined 3Com as President and Chief Operating Officer in August 1998. Prior to 3Com, Mr. Claflin served as Senior Vice President and General Manager, Sales and Marketing, for Digital Equipment Corporation. Mr. Claflin also worked for 22 years at IBM, where he held various sales, marketing and management positions, including general manager of IBM PC Company's worldwide research and development, product and brand management, as well as president of IBM PC Company Americas. Mr. Claflin also serves on the board of directors of Advanced Micro Devices (AMD) where he is currently Chairman of the Board.

Lawton W. Fitt has served as a Director of Ciena since November 2000. From October 2002 to March 2005, Ms. Fitt served as Director of the Royal Academy of Arts in London. From 1979 to October 2002, Ms. Fitt was an investment banker with Goldman Sachs & Co., where she was a partner from 1994 to October 2002, and a managing director from 1996 to October 2002. In addition to her service as a director of non-profit organizations, Ms. Fitt currently serves on the board of directors of Thomson Reuters, The Carlyle Group L.P., and The Progressive Corporation, and has previously served on the board of directors of Overture Acquisition Corporation and Frontier Communications Company.

Judith M. O'Brien has served as a Director of Ciena since July 2000. Since November 2012, Ms. O'Brien has served as a partner and head of the Emerging Company Practice Group at the law firm of King & Spalding. From November 2006 through December 2010, Ms. O'Brien served as Executive Vice President and General Counsel of Obopay, Inc., a provider of mobile payment services. From February 2001 until October 2006, Ms. O'Brien served as a Managing Director at Incubic Venture Fund, a venture capital firm. Ms. O'Brien was a lawyer with Wilson Sonsini Goodrich & Rosati, where, from February 1984 to February 2001, she was a partner specializing in corporate finance, mergers and acquisitions and general corporate matters. Ms. O'Brien has previously served on the board of directors of Adaptec, Inc.

Michael J. Rowny has served as a Director of Ciena since August 2004. Mr. Rowny has been Chairman of Rowny Capital, a private equity firm, since 1999. From 1994 to 1999, and previously from 1983 to 1986, Mr. Rowny was with MCI Communications in positions including President and Chief Executive Officer of MCI's International Ventures, Alliances and Correspondent group, acting Chief Financial Officer, Senior Vice President of Finance, and Treasurer. Mr. Rowny's career in business and government has also included positions as Chairman and Chief Executive Officer of the Ransohoff Company, Chief Executive Officer of Hermitage Holding Company, Executive Vice President and Chief Financial Officer of ICF Kaiser International, Inc., Vice President of the Bendix Corporation, and Deputy Staff Director of the White House. Mr. Rowny also serves on the board of directors of Neustar, Inc. and Pixspan, Inc. and has previously served on the boards of directors of Llamagraphics, Inc. and Step 9 Software Corporation.

Patrick T. Gallagher has served as a Director of Ciena since May 2009. From March 2008 until March 2012, Mr. Gallagher was Chairman of Ubiquisys Ltd., a leading developer and supplier of femtocells for the global 3G mobile wireless market. From January 2008 until February 2009, Mr. Gallagher was Chairman of Macro 4 plc, a global software solutions company, and from May 2006 until March 2008, served as Vice Chairman of Golden Telecom Inc., a leading facilities-based provider of integrated communications in Russia and the CIS. From 2003 until 2006, Mr. Gallagher was Executive Vice Chairman and served as Chief Executive Officer of FLAG Telecom Group and, prior to that role, held various senior management positions at British Telecom. Mr. Gallagher also serves on the boards of directors of Harmonic Inc. and Sollers JSC.

Item 1A. Risk Factors

Investing in our securities involves a high degree of risk. In addition to the other information contained in this report, you should consider the following risk factors before investing in our securities.

Our revenue and operating results can fluctuate significantly and unpredictably from quarter to quarter.

Our revenue and results of operations can fluctuate significantly and unpredictably from quarter to quarter. Our budgeted expense levels depend in part on our expectations of long-term, future revenue and gross margin, and substantial reductions in expense are difficult and can take time to implement. Uncertainty or lack of visibility into customer spending, and changes in economic or market conditions that affect customer spending can make it difficult to forecast future revenue and margins. In addition, increases in the percentage of a given quarter's revenue relating to orders placed during that quarter, along with significant order volume late that quarter, could further result in variability and less predictability in our quarterly revenue. Consequently, our level of operating expense or inventory may be high relative to revenue, which could harm our profitability and cash flow. Additional factors that contribute to fluctuations in our revenue and operating results include:

- broader macroeconomic conditions, including weakness and volatility in global markets, affecting our customers;
- changes in capital spending by large communications service providers;
- order flow and backlog levels;
- the timing of our ability to recognize revenue on sales;
- the mix of revenue by product segment, geography and customer in any particular quarter;
- the level of competition and pricing pressure we encounter;
- seasonal effects in our business;
- the level of start-up costs we incur to support initial deployments, gain new customers or enter new markets; and
- our level of success in improving manufacturing efficiencies and achieving cost reductions in our supply chain.

Quarterly fluctuations from these and other factors may cause our results of operations to fall short of or significantly exceed the expectations of securities analysts or investors, which may cause volatility in our stock price.

We face intense competition that could hurt our sales and results of operations.

We face a competitive market for sales of communications networking equipment, software and services and increased competition could result in pricing pressure, reduced demand, lower gross margins and the loss of market share that could harm our business and results of operations. Competition is particularly intense as we and our competitors aggressively seek to displace incumbent equipment vendors at large service providers and secure new customers. In an effort to secure customer opportunities and capture market share, we have in the past, and may in the future, agree to onerous commercial terms or pricing that result in low or negative gross margins on a particular order or group of orders. We expect the level of competition we face to continue and potentially increase, particularly in the U.S., as larger Chinese equipment vendors such as Huawei seek to gain market entry and other global competitors seek to retain incumbent positions with customers in the region.

Competition in our markets, generally, is based on any one or a combination of the following factors: price; product features; functionality and performance; service offering; manufacturing capability and lead-times; incumbency and existing business relationships; scalability; and the flexibility of products to meet the immediate and future network and service requirements of customers. A small number of very large companies have dominated our industry, many of which have substantially greater financial and marketing resources, broader product offerings and more established relationships with service providers and other customer segments than we do. In addition, a number of these vendors are putting forth competing visions for how next-generation network architectures should be designed. Because of their scale and resources, they may be perceived to be a better fit for the procurement, or network operating and management, strategies of large service providers. We also compete with a number of smaller companies that provide significant competition for a specific product, application, customer segment or geographic market. Due to the narrower focus of their efforts, these competitors may achieve commercial availability of their products more quickly or may be more attractive to customers. If competitive pressures increase or we fail to compete successfully in our markets, our business and results of operations would suffer.

Our business and operating results could be adversely affected by unfavorable changes in macroeconomic and market conditions and reductions in the level of capital expenditure by customers in response to these conditions.

Global markets have experienced a period of significant volatility that has resulted in a high degree of uncertainty and cautious customer behavior. Broad macroeconomic weakness and market volatility have previously resulted in sustained periods

of decreased demand for our products and services that have adversely affected our operating results. Continuation of or an increase in macroeconomic weakness could result in:

- reductions in customer spending and delay, deferral or cancellation of network infrastructure initiatives;
- difficulty forecasting, budgeting and planning;
- increased competition for fewer network projects and sales opportunities;
- increased pricing pressure that may adversely affect revenue, gross margin and profitability;
- higher overhead costs as a percentage of revenue;
- tightening of credit markets to fund capital expenditures by our customers and us;
- customer financial difficulty, including longer collection cycles and difficulties collecting accounts receivable or write-offs of receivables; and
- increased risk of charges relating to excess and obsolete inventories and the write-off of other intangible assets.

Our business and operating results could be materially adversely affected by reduced customer spending in response to unfavorable or uncertain macroeconomic and market conditions, globally or specific to a particular region where we operate.

A small number of large communications service providers account for a significant portion of our revenue and the loss of any of these customers, or a significant reduction in their spending, would have a material adverse effect on our business and results of operations.

A significant portion of our revenue is concentrated among a few, large global communications service providers. By way of example, AT&T accounted for approximately 13.5% of fiscal 2012 revenue and our largest ten customers contributed 54.2% of fiscal 2012 revenue. Consequently, our financial results are closely correlated with the spending of a relatively small number of service provider customers and can be significantly affected by market or industry changes that affect their businesses. These factors can include consumer and enterprise spending on communication services, macroeconomic volatility, the adoption of new communications products and services, the emergence of competing network operators and changing demands of end user customers. Because the terms of our frame contracts generally do not include any minimum purchase commitment and spending by these service providers can be unpredictable and sporadic, our revenue and operating results can fluctuate on a quarterly basis. Reliance upon a relatively small number of service providers increases our exposure to changes in the network and purchasing strategies. Some of our customers are pursuing efforts to outsource the management and operation of their networks, or have indicated a procurement strategy to reduce the number of vendors from which they purchase equipment, which may benefit our larger competitors. Our concentration in revenue has increased in the past as a result of consolidation among a number of our largest customers. Consolidation may increase the likelihood of temporary or indefinite reductions in customer spending or changes in network strategy that could harm our business and operating results. The loss of one or more of our large service provider customers, a significant reduction in their spending, or market or industry factors adversely affecting service providers generally, would have a material adverse effect on our business, financial condition and results of operations.

Our reliance upon third party contract manufacturers exposes us to risks that could negatively affect our business and operations.

We rely upon third party contract manufacturers to perform substantially all of the manufacturing of our products and a significant portion of our component sourcing. We do not have guaranteed supply of components or access to manufacturing capacity, and in some cases are utilizing temporary or transitional commercial arrangements. Our reliance upon third party manufacturers could expose us to increased risks related to lead times, continuity of supply, on-time delivery, quality assurance, and compliance with environmental standards and other regulations. Reliance upon third party manufacturers exposes us to significant risks related to their operations, financial position, business continuity, sourcing relationships and labor relationships, that may affect their servicing of Ciena including their continued viability. Our product manufacturing principally takes place in Mexico, Canada, China and Thailand. Significant disruptions in these and other countries where our products or key components are manufactured, including natural disasters, epidemics, acts of war or terrorism, social or political unrest or work stoppages, could affect the cost, availability or allocation of supply and manufacturing capacity and negatively affect our business and results of operations.

In an effort to drive cost reductions and further optimize Ciena's operations, we are working to rationalize our supply chain, consolidate third party contract manufacturers and distribution facilities and transition to alternative manufacturing locations. We are also actively pursuing additional opportunities for direct fulfillment of products from our manufacturers to our customers. These transitions are complex and there can be no assurance that these efforts, including any reallocation of third party manufacturing and sourcing, or our changes in fulfillment, will not ultimately result in additional costs or disruptions in our operations and business that affect our results of operations.

Our reliance upon third party component suppliers, including sole and limited source suppliers, exposes our business to additional risk and could limit our sales, increase our costs and harm our customer relationships.

We maintain a global sourcing strategy and depend on third party suppliers for our product components and subsystems. Our products include key optical and electronic components for which reliable, high-volume supply is often available only from sole or limited sources. Increases in market demand or scarcity of resources or manufacturing capability have previously resulted in shortages in availability of important components for our solutions, allocation challenges and increased lead times. We are exposed to risks relating to unfavorable economic conditions or other similar challenges affecting the businesses of our component providers that can affect their liquidity levels, ability to continue to invest in their business, and manufacturing capability. This could expose our business to increased costs, lack of supply or discontinuation of components that can result in lost revenue, additional product costs, increased lead times and deployment delays that could harm our business and customer relationships. We do not have any guarantee of supply from these third parties, and in certain cases are relying upon temporary or transitional commercial arrangements. As a result, there is no assurance that we will be able to secure the components or subsystems that we require in sufficient quantity and quality on reasonable terms. The loss of a source of supply, or lack of sufficient availability of key components, could require that we locate an alternate source or redesign our products, each of which could increase our costs and negatively affect our product gross margin and results of operations. Our business and results of operations would be negatively affected if we were to experience any significant disruption or difficulties with key suppliers affecting the price, quality, availability or timely delivery of required components.

Investment of research and development resources in communications networking technologies for which there is not a matching market opportunity, or failure to sufficiently or timely invest in technologies for which there is market demand, would adversely affect our revenue and profitability.

The market for communications networking equipment is characterized by rapidly evolving technologies and changes in market demand. We continually invest in research and development to sustain or enhance our existing products and develop or acquire new product technologies. Our current development efforts are focused upon enhancing our software applications, extending our OneConnect control plane across the 5400 and 6500 platform families, expanding packet applications on service delivery switches, aggregation switches, and packet-optical transport platforms, extending our WaveLogic chipset, enabling 40G and 100G coherent optical transport across our portfolio, and introducing 400G transmission products. There is often a lengthy period between commencing these development initiatives and bringing a new or improved products to market. During this time, technology preferences, customer demand and the market for our products, or those introduced by our competitors, may move in directions we had not anticipated. There is no guarantee that our new products or enhancements will achieve market acceptance or that the timing of market adoption will be as predicted. There is a significant possibility, therefore, that some of our development decisions, including significant expenditures on acquisitions, research and development costs, or investments in technologies, will not turn out as anticipated, and that our investment in some projects will be unprofitable. There is also a possibility that we may miss a market opportunity because we failed to invest, or invested too late, in a technology, product or enhancement sought by our customers, or addressing growth markets or emerging customer segments or applications beyond our traditional customer base. Changes in market demand or investment priorities may also cause us to discontinue existing or planned development for new products or features, which can have a disruptive effect on our relationships with customers. If we fail to make the right investments or fail to make them at the right time, our competitive position may suffer and our revenue and profitability could be harmed.

We may experience delays in the development of our products that may negatively affect our competitive position and business.

Our products are based on complex technology, and we can experience unanticipated delays in developing and manufacturing these solutions. Our current development efforts are focused upon enhancing our software applications, extending our OneConnect control plane across the 5400 and 6500 platform families, expanding packet applications on service delivery switches, aggregation switches, and packet-optical transport platforms, extending our WaveLogic 3 chipset for 40G and 100G coherent optical transport across our portfolio, and introducing 400G transmission products. Delays in these and other product development may affect our reputation with customers, affect our ability to seize market opportunities and impact the timing and level of demand for our products. Each step in the development life cycle of our products presents serious risks of failure, rework or delay, any one of which could adversely affect the cost-effective and timely development of our products. We may encounter delays relating to engineering development activities and software, design, sourcing and manufacture of critical components, and the development of prototypes. In addition, intellectual property disputes, failure of critical design elements, and other execution risks may delay or even prevent the release of these products. If we do not successfully develop products in a timely manner, our competitive position may suffer and our business, financial condition and results of operations would be harmed.

Product performance problems and undetected errors affecting the performance, reliability or security of our products could damage our business reputation and negatively affect our results of operations.

The development and production of sophisticated hardware and software for communications network equipment is complicated. Some of our products can be fully tested only when deployed in communications networks or when carrying traffic with other equipment. As a result, undetected defects or errors, and product quality, interoperability, reliability and performance problems are often more acute for initial deployments of new products and product enhancements. We are in the process of launching a number of new platforms across our product segments. Unanticipated product performance problems can relate to the design, manufacturing and installation of our products. Undetected errors can also arise as a result of defects in components, software or manufacturing, installation or maintenance services supplied by third parties, and technology acquired from or licensed by third parties. Unanticipated security vulnerabilities relating to our products or the activities of our supply chain, including any actual or perceived exposure of our solutions to malicious software or cyber-attacks, would adversely affect our business and reputation. Product performance, reliability, security and quality problems can negatively affect our business, including:

- damage to our reputation, declining sales and order cancellations.
- increased costs to remediate defects or replace products;
- payment of liquidated damages, contractual or similar penalties, or other claims for performance failures or delays;
- increased warranty expense or estimates resulting from higher failure rates, additional field service obligations or other rework costs related to defects;
- increased inventory obsolescence;
- costs and claims that may not be covered by liability insurance coverage or recoverable from third parties; and
- delays in recognizing revenue or collecting accounts receivable.

These and other consequences relating to undetected errors affecting the quality, reliability and security of our products could negatively affect our business and results of operations.

Network equipment sales to large communications service providers often involve lengthy sales cycles and protracted contract negotiations and may require us to assume commercial terms or conditions that negatively affect pricing, risk allocation, payment and the timing of revenue recognition.

A significant portion of our revenue comes from sales to large communications service providers. These sales typically involve lengthy sales cycles, extensive product testing, and demonstration laboratory or network certification, including network-specific or region-specific product certification or homologation processes. These sales also often involve protracted and sometimes difficult contract negotiations in which we may deem it necessary to agree to unfavorable contractual or commercial terms that adversely affect pricing, expose us to penalties for delays or non-performance, and require us to assume a disproportionate amount of risk. We may also be requested to provide deferred payment terms, vendor or third-party financing, or offer other alternative purchase structures that extend the timing of payment and revenue recognition. These terms may negatively affect our revenue and results of operations and increase our susceptibility to quarterly fluctuations in our results. Service providers may ultimately insist upon terms and conditions that we deem too onerous or not in our best interest. Moreover, our purchase agreements generally do not include minimum purchase commitments and customers often have the right to modify, delay, reduce or cancel previous orders. As a result, we may incur substantial expense and devote time and resources to potential sales opportunities that never materialize or result in lower than anticipated sales.

Efforts by us or our strategic third party channel partners to sell our solutions into targeted geographic markets and customer segments may be unsuccessful.

We continue to take steps, including sales initiatives and strategic channel relationships, to sell our products into new markets, growth geographies and diverse customer segments beyond our traditional service provider customer base. Specifically, we are targeting opportunities in Brazil, the Middle East, Russia, Japan and India. We are also targeting sales opportunities with enterprises, wireless operators, cable operators, submarine network operators, Internet content providers, cloud infrastructure providers, research and education institutions, and federal, state and local governments. We believe sales to these customer segments, as well as emerging network operators supporting new communications services and applications, will be an important component of our growth strategy. In many cases, we have less experience in these markets and customer segments and they may have less familiarity with our company. To succeed in some of these geographic markets and customer segments we intend to leverage strategic sales channels and distribution arrangements and expect these relationships to be an important part of our business. Our efforts may be unsuccessful, and difficulties selling into these target markets, including through third party channels, could limit our growth and harm our results of operations.

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

We market, sell and service our products globally and rely upon a global supply chain for sourcing important components and manufacturing of our products. Our international operations are subject to inherent risks, including:

- the impact of economic conditions in countries outside the United States;
- effects of changes in currency exchange rates;
- greater difficulty in collecting accounts receivable and longer collection periods;
- difficulty and cost of staffing and managing foreign operations;
- less protection for intellectual property rights in some countries;
- adverse tax and customs consequences, particularly as related to transfer-pricing issues;
- social, political and economic instability;
- higher incidence of corruption or unethical business practices that could expose us to liability or damage our reputation;
- trade protection measures, export compliance, domestic preference procurement requirements, qualification to transact business and additional regulatory requirements; and
- natural disasters, epidemics and acts of war or terrorism.

We expect that we may enter new markets and withdraw from or reduce operations in others. Our global operations expose us to additional risk and expense that could give rise to unanticipated liabilities, costs or other difficulties that could adversely affect our operations and financial results.

We may be required to write off significant amounts of inventory as a result of our inventory purchase practices, the obsolescence of product lines or unfavorable market conditions.

To avoid delays and meet customer demand for shorter delivery terms, we place orders with our contract manufacturers and component suppliers based in part on forecasts of customer demand. As a result, our business is exposed to the risk that our customers ultimately may not order the products we have forecast, or will purchase fewer products than forecast. As features and functionalities converge across our product lines, and we introduce new products with overlapping feature sets, it is increasingly possible that customers may forgo purchases of one product we have inventoried in favor of another product with similar functionality. Market uncertainty can also limit our visibility into customer spending plans and compound the difficulty of forecasting inventory at appropriate levels. Moreover, our customer purchase agreements generally do not include any minimum purchase commitment, and customers often have the right to modify, reduce or cancel purchase quantities. We may also be exposed to the risk of inventory write offs as a result of certain supply chain initiatives, including consolidation and transfer of key manufacturing activities. As a result, we may purchase inventory in anticipation of sales that ultimately do not occur. If we are required to write off or write down a significant amount of inventory, our results of operations for the period would be materially adversely affected.

Our intellectual property rights may be difficult and costly to enforce.

We generally rely on a combination of patents, copyrights, trademarks and trade secret laws to establish and maintain proprietary rights in our products and technology. Although we have been issued numerous patents and other patent applications are currently pending, there can be no assurance that any of these patents or other proprietary rights will not be challenged, invalidated or circumvented or that our rights will provide us with any competitive advantage. In addition, there can be no assurance that patents will be issued from pending applications or that claims allowed on any patents will be sufficiently broad to protect our technology. Further, the laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the United States.

We are subject to the risk that third parties may attempt to access, divert or use our intellectual property without authorization. Protecting against the unauthorized use of our products, technology and other proprietary rights is difficult, time-consuming and expensive, and we cannot be certain that the steps that we are taking will prevent or minimize the risks of such unauthorized use. Litigation may be necessary to enforce or defend our intellectual property rights or to determine the validity or scope of the proprietary rights of others. Such litigation could result in substantial cost and diversion of management time and resources, and there can be no assurance that we will obtain a successful result. Any inability to protect and enforce our intellectual property rights, despite our efforts, could harm our ability to compete effectively.

We may incur significant costs in response to claims by others that we infringe their intellectual property rights.

From time to time third parties may assert claims or initiate litigation or other proceedings related to patent, copyright, trademark and other intellectual property rights to technologies and related standards that are relevant to our business. The rate of patent infringement assertions both by operating entities and third party non-practicing entities (sometimes referred to as “patent trolls”) is increasing, particularly in the United States and Canada. We can be adversely affected by litigation, other

proceedings or claims against us, as well as our manufacturers, suppliers or customers, alleging infringement of third party proprietary rights by our products and technology, or components of those products. Regardless of the merit of these claims, they can be time-consuming, divert the time and attention of our technical and management personnel, and result in costly litigation. These claims, if successful, can require us to:

- pay substantial damages or royalties;
- comply with an injunction or other court order that could prevent us from offering certain of our products;
- seek a license for the use of certain intellectual property, which may not be available on commercially reasonable terms or at all;
- develop non-infringing technology, which could require significant effort and expense and ultimately may not be successful; and
- indemnify our customers pursuant to contractual obligations and pay expense or damages on their behalf.

Any of these events could adversely affect our business, results of operations and financial condition. Our exposure to risks associated with the use of intellectual property may be increased as a result of acquisitions, as we have a lower level of visibility into the development process with respect to such technology or the steps taken to safeguard against the risks of infringing the rights of third parties.

Our failure to manage effectively our relationships with third party service partners could adversely impact our financial results and relationship with customers.

We rely on a number of third party service partners, both domestic and international, to complement our global service and support resources. We rely upon these partners for certain installation, maintenance and support functions. In order to ensure the proper installation and maintenance of our products, we must identify, train and certify qualified service partners. Certification can be costly and time-consuming, and our partners often provide similar services for other companies, including our competitors. We may not be able to manage effectively our relationships with our service partners and cannot be certain that they will be able to deliver services in the manner or time required. We may also be exposed to liability relating to the performance of our service partners. If our service partners are unsuccessful in delivering services:

- we may suffer delays in recognizing revenue;
- our services revenue and gross margin may be adversely affected; and
- our relationship with customers could suffer.

If we do not manage effectively our relationships with third party service partners, or they fail to perform these services in the manner or time required, our financial results and relationship with customers could be adversely affected.

We may be exposed to unanticipated risks and additional obligations in connection with our resale of complementary products or technology of other companies.

We have entered into agreements with strategic supply partners that permit us to distribute their products or technology. We may rely upon these relationships to add complementary products or technologies, diversify our product portfolio, or address a particular customer or geographic market. We may enter into additional original equipment manufacturer (OEM), resale or similar strategic arrangements in the future, including in support of our selection as a domain supply partner with AT&T. We may incur unanticipated costs or difficulties relating to our resale of third party products. Our third party relationships could expose us to risks associated with the business, financial condition, intellectual property rights and supply chain continuity of such partners, as well as delays in their development, manufacturing or delivery of products or technology. We may also be required by customers to assume warranty, indemnity, service and other commercial obligations, including potential liability to customers, greater than the commitments, if any, made to us by our technology partners. Some of our strategic supply partners are relatively small companies with limited financial resources. If they are unable to satisfy their obligations to us or our customers, we may have to expend our own resources to satisfy these obligations. Exposure to these risks could harm our reputation with key customers and negatively affect our business and our results of operations.

Our exposure to the credit risks of our customers and resellers may make it difficult to collect receivables and could adversely affect our revenue and operating results.

In the course of our sales to customers and resale channel partners, we may have difficulty collecting receivables and our business and results of operations could be exposed to risks associated with uncollectible accounts. Lack of liquidity in the capital markets, macroeconomic weakness and market volatility may increase our exposure to these credit risks. Our attempts to monitor these situations carefully and take appropriate measures to protect ourselves may not be sufficient, and it is possible that we may have to write down or write off accounts receivable. Such write-downs or write-offs could negatively affect our

operating results for the period in which they occur, and, if large, could have a material adverse effect on our revenue and operating results.

Our business is dependent upon the proper functioning of our internal business processes and information systems and modification or interruption of such systems may disrupt our business, processes and internal controls.

We rely upon a number of internal business processes and information systems to support key business functions and the efficient operation of these processes and systems is critical to our business. Our business processes and information systems need to be sufficiently scalable to support the growth of our business and may require modifications or upgrades that expose us to a number of operational risks. We are currently pursuing initiatives to transform and optimize our business operations through the reengineering of certain processes, investment in automation and engagement of strategic partners or resources to assist with certain business functions. These changes may be costly and disruptive to our operations, and could impose substantial demands on management time. These changes may also require changes in our information systems, modification of internal control procedures and significant training of employees or third party resources. Our information technology systems, and those of third party providers, may also be vulnerable to damage or disruption caused by circumstances beyond our control. These include catastrophic events, power anomalies or outages, natural disasters, computer system or network failures, viruses or malware, physical or electronic break-ins, unauthorized access and cyber-attacks affecting our systems or those of third party business partners. Any material disruption, malfunction or similar challenges with our business processes or information systems, or disruptions or challenges relating to the transition to new processes, systems or providers, could have a material adverse effect on the operation of our business and our results of operations.

Data breaches and cyber-attacks could compromise our intellectual property or other sensitive information and cause significant damage to our business and reputation.

In the ordinary course of our business, we maintain sensitive data on our networks, including our intellectual property and proprietary or confidential business information relating to our business and that of our customers and business partners. The secure maintenance of this information is critical to our business and reputation. We believe that companies in the technology industry have been increasingly subject to a wide variety of security incidents, cyber-attacks and other attempts to gain unauthorized access. Our network and storage applications may be subject to unauthorized access by hackers or breached due to operator error, malfeasance or other system disruptions. In some cases, it is difficult to anticipate or immediately detect such incidents and the damage caused thereby. These data breaches and any unauthorized access or disclosure of our information, could compromise our intellectual property and expose sensitive business information. Cyber-attacks could also cause us to incur significant remediation costs, disrupt key business operations and divert attention of management and key information technology resources. These incidents could also subject us to liability, expose us to significant expense, or cause significant harm to our reputation.

Outstanding indebtedness under our convertible notes may adversely affect our liquidity and results of operations and could limit our business.

At October 31, 2012, indebtedness on our outstanding convertible notes totaled approximately \$1.4 billion in aggregate principal, including approximately \$216.0 million in convertible notes that mature in May 2013. Our indebtedness could have important negative consequences, including:

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

On August 13, 2012, we entered into a \$150 million senior secured asset-based revolving Credit Facility. In addition to customary remedies should we default under the credit agreement governing this facility, we may be subject to lender control over certain cash assets and required to comply with a fixed charge coverage ratio in the event that we do not maintain the requisite level of availability under the facility. The credit agreement also contains customary covenants that limit our ability to, among other things, pay cash dividends, incur debt, create liens and encumbrances, redeem or repurchase stock, enter into certain acquisition transactions, repay indebtedness, make investments or dispose of assets. The Credit Facility matures on August 13, 2015, provided that it will mature early on (i) January 31, 2013, if any of Ciena's 0.25% senior convertible notes due May 1, 2013 are then outstanding and Ciena is unable to meet certain financial criteria with respect to its cash position at that time, or (ii) December 15, 2014, if any of Ciena's 4.00% senior convertible notes due March 15, 2015 are then outstanding. We

may also enter into additional transactions or lending facilities, including equipment loans, working capital lines of credit and other long-term debt, that may increase our indebtedness and result in additional restrictions upon our business.

Significant volatility and uncertainty in the capital markets may limit our access to funding.

We have accessed the capital markets in the past and successfully raised funds, through the issuance of equity or convertible debt, to increase our cash position, support our operations and undertake strategic growth initiatives, including the acquisition of the MEN Business. We regularly evaluate our liquidity position, debt obligations, and anticipated cash needs to fund our long-term operating plans and may consider raising additional capital in the future. Global capital markets have undergone a sustained period of significant volatility and uncertainty, and there can be no assurance that such financing alternatives would be available to us, should we determine it necessary or advisable to seek additional cash resources.

Facilities transitions could be disruptive to our operations and result in unanticipated expense.

We have recently undertaken and expect to undertake a number of significant facilities transitions affecting a number of our largest employee populations, including our headquarters facility. In November 2011, we entered into a lease for our new corporate headquarters in Hanover, Maryland. While we have transitioned certain affected employees and operations, including key management and administration resources, to this new facility, we do not expect to complete the transition of all affected personnel and functions until early 2013. This transition could be disruptive to our operations and could result in unanticipated expense that adversely affects our financial results. In addition, the lease of our "Lab 10" building on the Carling Campus in Ottawa, Canada will expire in fiscal 2016 and the lease for our research and development facility in Gurgaon, India will expire in fiscal 2014. Both locations include sophisticated research and development lab equipment and key engineering personnel, and our Ottawa facility is our largest facility globally. We are currently considering facilities and development alternatives in advance of the expiration of these leases. However, locating appropriate alternative space for our engineering operations may be costly and there can be no assurance that the transition of key engineering functions to a successor facility will not be disruptive, or adversely affect productivity.

Restructuring activities could disrupt our business and affect our results of operations.

We have previously taken steps, including reductions in force, office closures, and internal reorganizations to reduce the size and cost of our operations, improve efficiencies, or realign our organization and staffing to better match our market opportunities and our technology development initiatives. We may take similar steps in the future as we seek to realize operating synergies, optimize our operations to achieve our target operating model and profitability objectives, or better reflect changes in the strategic direction of our business. These changes could be disruptive to our business and may result in significant expense including accounting charges for inventory and technology-related write-offs, workforce reduction costs and charges relating to consolidation of excess facilities. Substantial expense or charges resulting from restructuring activities could adversely affect our results of operations in the period in which we take such a charge.

If we are unable to attract and retain qualified personnel, we may be unable to manage our business effectively.

Competition to attract and retain highly skilled technical, engineering and other personnel with experience in our industry is intense, and our employees have been the subject of targeted hiring by our competitors. We may experience difficulty retaining and motivating existing employees and attracting qualified personnel to fill key positions. Because we rely upon equity awards as a significant component of compensation, particularly for our executive team, a lack of positive performance in our stock price, reduced grant levels, or changes to our compensation program may adversely affect our ability to attract and retain key employees. The loss of members of our management team or other key personnel could be disruptive to our business, and, were it necessary, it could be difficult to replace members of our management team or other key personnel. In addition, none of our executive officers is bound by an employment agreement for any specific term. If we are unable to attract and retain qualified personnel, we may be unable to manage our business effectively, and our operations and results of operations could suffer.

We may be adversely affected by fluctuations in currency exchange rates.

As a global concern, we face exposure to adverse movements in foreign currency exchange rates. Historically, our sales were primarily denominated in U.S. dollars. As a result of our increased global presence, a larger percentage of our revenue and operating expense are now non-U.S. dollar denominated and therefore subject to foreign currency fluctuation. We face exposure to currency exchange rates as a result of the growth in our non-U.S. dollar denominated operating expense in Canada, Europe, Asia and Latin America. From time to time, we may hedge against currency exposure associated with anticipated foreign currency cash flows. There can be no assurance that any hedging instruments will be effective, and losses associated with these instruments and the adverse effect of foreign currency exchange rate fluctuation may negatively affect our results of operations.

Our products incorporate software and other technology under license from third parties and our business would be adversely affected if this technology were no longer available to us on commercially reasonable terms.

We integrate third-party software and other technology into our embedded operating system, network management system tools and other products. Licenses for this technology may not be available or continue to be available to us on commercially reasonable terms. Third party licensors may insist on unreasonable financial or other terms in connection with our use of such technology. Difficulties with third party technology licensors could result in termination of such licenses, which may result in significant costs and require us to obtain or develop a substitute technology. Difficulty obtaining and maintaining third-party technology licenses may disrupt development of our products and increase our costs.

Strategic acquisitions and investments may expose us to increased costs and unexpected liabilities.

We may acquire or make investments in other technology companies, or enter into other strategic relationships, to expand the markets we address, diversify our customer base or acquire or accelerate the development of technology or products. To do so, we may use cash, issue equity that would dilute our current stockholders' ownership, or incur debt or assume indebtedness. These transactions involve numerous risks, including:

- significant integration costs;
- disruption due to the integration and rationalization of operations, products, technologies and personnel;
- diversion of management's attention;
- difficulty completing projects of the acquired company and costs related to in-process projects;
- the loss of key employees;
- ineffective internal controls over financial reporting;
- dependence on unfamiliar suppliers or manufacturers;
- exposure to unanticipated liabilities, including intellectual property infringement claims; and
- adverse tax or accounting effects including amortization expense related to intangible assets and charges associated with impairment of goodwill.

As a result of these and other risks, our acquisitions, investments or strategic transactions may not reap the intended benefits and may ultimately have a negative impact on our business, results of operation and financial condition.

Changes in government regulation affecting the communications industry and the businesses of our customers could harm our prospects and operating results.

The Federal Communications Commission, or FCC, has jurisdiction over the U.S. communications industry and similar agencies have jurisdiction over the communication industries in other countries. Many of our largest customers are subject to the rules and regulations of these agencies. Changes in regulatory requirements applicable to wireline or wireless communications and the Internet in the United States or other countries could serve as a disincentive to providers to invest in their communications network infrastructures or introduce new services. These changes could adversely affect the sale of our products and services. Changes in regulatory tariff requirements or other regulations relating to pricing or terms of carriage on communications networks could slow the development or expansion of network infrastructures and adversely affect our business, operating results, and financial condition.

Governmental regulations affecting the use, import or export of products could adversely affect our operations, and negatively affect our revenue and increase our costs.

The United States and various foreign governments have imposed controls, license requirements and other restrictions on the usage, import or export of some of the technologies that we sell. Governmental regulation of usage, import or export of our products, technology within our products, or our failure to obtain required approvals for our products, could harm our international and domestic sales and adversely affect our revenue and costs of sales. Failure to comply with such regulations could result in enforcement actions, fines or penalties and restrictions on export privileges. In addition, costly tariffs on our equipment, restrictions on importation, trade protection measures and domestic preference requirements of certain countries could limit our access to these markets and harm our sales. For example, India's government has recently implemented and is considering additional security regulations applicable to network equipment vendors, and has imposed significant tariffs that may inhibit sales of certain communications equipment; including equipment manufactured in China, where certain of our products are assembled. These and other regulations could adversely affect the sale or use of our products, substantially increase our cost of sales and could adversely affect our business and revenue.

Governmental regulations related to the environment and potential climate change, could adversely affect our business and operating results.

Our operations are regulated under various federal, state, local and international laws relating to the environment and potential climate change. We could incur fines, costs related to damage to property or personal injury, and costs related to investigation or remediation activities, if we were to violate or become liable under these laws or regulations. Our product design efforts, and the manufacturing of our products, are also subject to evolving requirements relating to the presence of certain materials or substances in our equipment, including regulations that make producers for such products financially responsible for the collection, treatment and recycling of certain products. For example, our operations and financial results may be negatively affected by environmental regulations, such as the Waste Electrical and Electronic Equipment (WEEE) and Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) that have been adopted by the European Union. Compliance with these and similar environmental regulations may increase our cost of designing, manufacturing, selling and removing our products. These regulations may also make it difficult to obtain supply of compliant components or require us to write off non-compliant inventory, which could have an adverse effect our business and operating results.

We may be required to write down long-lived assets and these impairment charges would adversely affect our operating results.

As of October 31, 2012, our balance sheet includes \$438.3 million in long-lived assets, which includes \$257.1 million of intangible assets. Valuation of our long-lived assets requires us to make assumptions about future sales prices and sales volumes for our products. These assumptions are used to forecast future, undiscounted cash flows. Given the significant uncertainty and instability of macroeconomic conditions in recent periods, forecasting future business is difficult and subject to modification. If actual market conditions differ or our forecasts change, we may be required to reassess long-lived assets and could record an impairment charge. Any impairment charge relating to long-lived assets would have the effect of decreasing our earnings or increasing our losses in such period. If we are required to take a substantial impairment charge, our operating results could be materially adversely affected in such period.

Failure to maintain effective internal controls over financial reporting could have a material adverse effect on our business, operating results and stock price.

Section 404 of the Sarbanes-Oxley Act of 2002 requires that we include in our annual report a report containing management's assessment of the effectiveness of our internal controls over financial reporting as of the end of our fiscal year and a statement as to whether or not such internal controls are effective. Compliance with these requirements has resulted in, and is likely to continue to result in, significant costs and the commitment of time and operational resources. Changes in our business, including certain initiatives to transform business processes, invest in information systems or transition certain functions to third party resources or providers, will necessitate modifications to our internal control systems, processes and information systems as we optimize our business and operations. Our increased global operations and expansion into new regions could pose additional challenges to our internal control systems. We cannot be certain that our current design for internal control over financial reporting, or any additional changes to be made, will be sufficient to enable management to determine that our internal controls are effective for any period, or on an ongoing basis. If we are unable to assert that our internal controls over financial reporting are effective, market perception of our financial condition and the trading price of our stock may be adversely affected, and customer perception of our business may suffer.

Our stock price is volatile.

Our common stock price has experienced substantial volatility in the past and may remain volatile in the future. Volatility in our stock price can arise as a result of a number of the factors discussed in this "Risk Factors" section. During fiscal 2012, our closing stock price ranged from a high of \$17.98 per share to a low of \$10.38 per share. The stock market has experienced significant price and volume fluctuations that have affected the market price of many technology companies, with such volatility often unrelated to the operating performance of these companies. Divergence between our actual or anticipated financial results and published expectations of analysts can cause significant swings in our stock price. Our stock price can also be affected by announcements that we, our competitors, or our customers may make, particularly announcements related to acquisitions or other significant transactions. Our common stock is included in a number of market indices and any change in the composition of these indices to exclude our company would adversely affect our stock price. These factors, as well as conditions affecting the general economy or financial markets, may materially adversely affect the market price of our common stock in the future.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

Overview. As of October 31, 2012, all of our properties are leased and we do not own any real property. We lease facilities globally related to the ongoing operations of our four business segments and related functions. Our principal executive offices are located in two buildings in Hanover, Maryland. In addition, we currently occupy five buildings at various sites in Linthicum, Maryland, including an engineering facility, two supply chain and logistics facilities, and two administrative and sales facilities, though we will be vacating three of these buildings in the first half of fiscal 2013.

Our largest facility is our research and development center located at “Lab 10” on the former Nortel Carling Campus in Ottawa, Canada. See below for information regarding the lease associated with this engineering facility. We also have engineering and/or service facilities located in San Jose, California; Alpharetta, Georgia; Spokane, Washington; Kanata, Canada; and Gurgaon, India. In addition, we lease various smaller offices in the United States, Mexico, South America, Europe, the Middle East and Asia-Pacific to support our sales and services operations. We believe the facilities we are now using are adequate and suitable for our business requirements.

Hanover, Maryland Headquarters Lease. Ciena entered into a lease agreement dated November 3, 2011, with W2007 RDG Realty, L.L.C. relating to office space for its new corporate headquarters in Hanover, Maryland, consisting of an agreed-upon rentable area of approximately 154,100 square feet. At the commencement date, the minimal rental commitments to be paid over the 15-year lease term are approximately \$61.8 million.

Carling, Ottawa Lease. Upon the completion of the MEN Acquisition, Ciena Canada Inc., a subsidiary of Ciena, entered into a lease agreement with Nortel Networks Technology Corp. (“Landlord”) relating to the “Lab 10” building on Nortel’s Carling Campus in Ottawa, Canada (the “Carling lease”). This facility consists of a rentable area of 265,000 square feet for which we incur lease expense of approximately \$7.2 million CAD per year, consisting of both base rent and fixed additional operating expense, the latter of which increases at 2% per year. The Carling lease initially had a ten-year term, subject to an early termination feature that allowed Nortel to reduce the term of the lease in exchange for its payment of an early termination fee of up to \$33.5 million. During the first quarter of fiscal 2011, Ciena received both notice of early termination from Nortel shortening the Carling lease to five years and the corresponding \$33.5 million early termination payment.

Restructuring. We attempt to sublease properties that we no longer occupy. As part of our restructuring costs, we provide for the estimated cost of the future net lease expense for these facilities. The cost is based on the fair value of future minimum lease payments under contractual obligations offset by the fair value of the estimated future sublease payments that we may receive. As of October 31, 2012, our accrued restructuring liability related to these properties was \$3.6 million. If actual market conditions relating to the use of these facilities are less favorable than those projected by management, additional restructuring costs associated with these facilities may be required. For additional information regarding our lease obligations, see Note 21 to the Consolidated Financial Statements in Item 8 of Part II of this annual report.

Item 3. Legal Proceedings

On July 29, 2011, Cheetah Omni LLC filed a complaint in the United States District Court for the Eastern District of Texas against Ciena and several other defendants, alleging, among other things, that certain of the parties' products infringe upon multiple U.S. Patents relating to certain reconfigurable optical add-drop multiplexer (ROADM) technologies. The complaint seeks injunctive relief and damages. On November 8, 2011, Ciena filed an answer and counterclaims to Cheetah Omni's amended complaint. The parties are currently engaged in discovery. Ciena believes that it has valid defenses to the lawsuit and intends to defend it vigorously.

On May 29, 2008, Graywire, LLC filed a complaint in the United States District Court for the Northern District of Georgia against Ciena and four other defendants, alleging, among other things, that certain of the parties' products infringe U.S. Patent 6,542,673 (the "673 Patent"), relating to an identifier system and components for optical assemblies. The complaint seeks injunctive relief and damages. In July 2009, upon request of Ciena and certain other defendants, the U.S. Patent and Trademark Office ("PTO") granted the defendants' inter partes application for reexamination with respect to certain claims of the '673 Patent, and the district court granted the defendants' motion to stay the case pending reexamination of all of the patents-in-suit. In December 2010, the PTO confirmed the validity of some claims and rejected the validity of other claims of the '673 Patent, to which Ciena and other defendants filed an appeal. On March 16, 2012, the PTO on appeal rejected multiple claims of the '673 Patent, including the two claims on which Ciena is alleged to infringe. Subsequently, the plaintiff requested a reopening of the prosecution of the '673 Patent, to which Ciena and the other defendants filed an opposition. The case currently remains stayed, and there can be no assurance as to whether or when the stay will be lifted.

In addition to the matters described above, we are subject to various legal proceedings and claims arising in the ordinary course of our business, including claims against third parties that may involve a contractual indemnification obligation on the part of Ciena. We do not expect that the ultimate costs to resolve these matters will have a material effect on our results of operations, financial position or cash flows.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Stock, Related Stockholder Matters and Issuer Purchases of Equity Securities

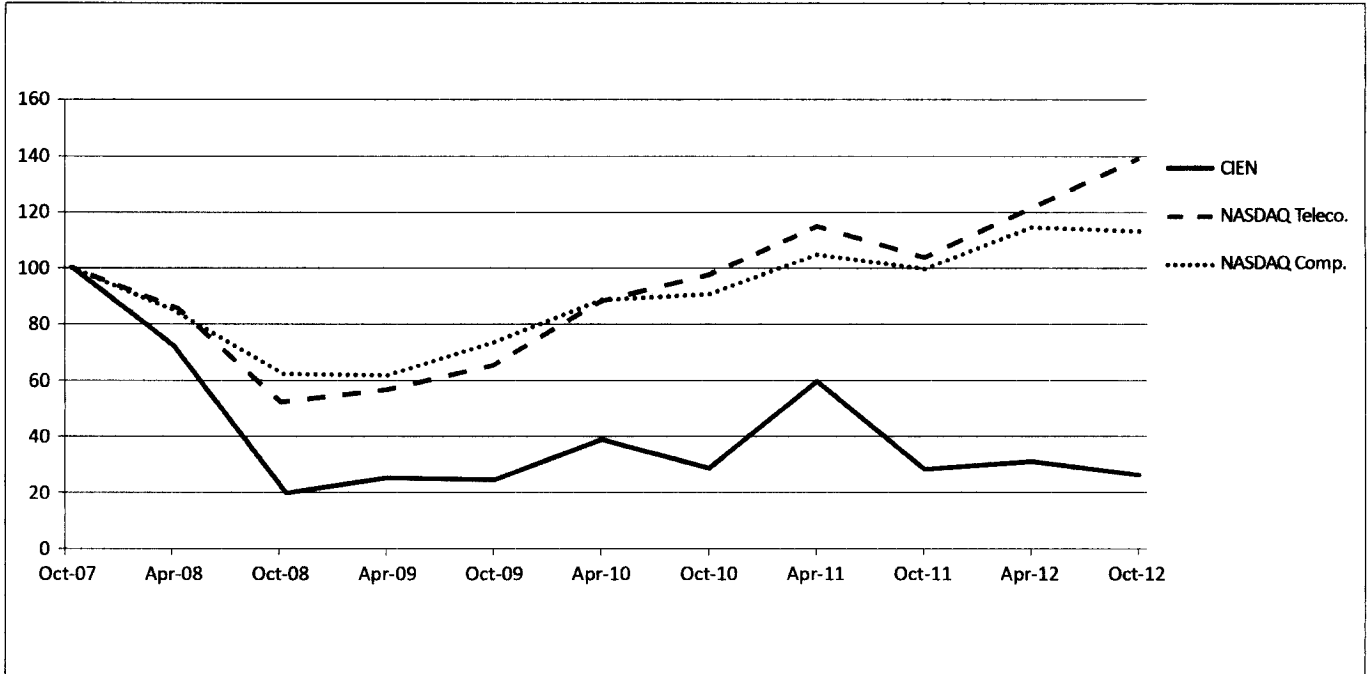
(a) Our common stock is traded on the NASDAQ Global Select Market under the symbol "CIEN." The following table sets forth the high and low sales prices of our common stock, as reported on the NASDAQ Global Select Market, for the fiscal periods indicated.

	High	Low
Fiscal Year 2011		
First Quarter ended January 31	\$ 25.49	\$ 13.55
Second Quarter ended April 30	\$ 28.81	\$ 22.03
Third Quarter ended July 31	\$ 27.91	\$ 15.46
Fourth Quarter ended October 31	\$ 14.82	\$ 10.28
Fiscal Year 2012		
First Quarter ended January 31	\$ 15.34	\$ 10.38
Second Quarter ended April 30	\$ 17.16	\$ 13.44
Third Quarter ended July 31	\$ 16.81	\$ 11.49
Fourth Quarter ended October 31	\$ 17.98	\$ 12.17

As of December 13, 2012, there were approximately 834 holders of record of our common stock and 100,610,686 shares of common stock outstanding. We have never paid cash dividends on our capital stock. We intend to retain earnings for use in our business, and we do not anticipate paying any cash dividends in the foreseeable future.

The following graph shows a comparison of cumulative total returns for an investment in our common stock, the NASDAQ Telecommunications Index and the NASDAQ Composite Index from October 31, 2007 to October 31, 2012. The NASDAQ

Composite Index measures all domestic and international based common stocks listed on The Nasdaq Stock Market. The NASDAQ Telecommunications Index contains securities of NASDAQ-listed companies classified according to the Industry Classification Benchmark as Telecommunications and Telecommunications Equipment. They include providers of fixed-line and mobile telephone services, and makers and distributors of high-technology communication products. This graph is not deemed to be “filed” with the SEC or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, and the graph shall not be deemed to be incorporated by reference into any prior or subsequent filing by us under the Securities Act of 1933 or the Exchange Act.



Assumes \$100 invested in Ciena Corporation, the NASDAQ Telecommunications Index and the NASDAQ Composite Index on October 31, 2007 with all dividends reinvested at month-end.

(b) Not applicable.

(c) Not applicable.

Item 6. Selected Consolidated Financial Data

The following selected consolidated financial data should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the Consolidated Financial Statements and the notes thereto included in Item 8, “Financial Statements and Supplementary Data.” We have a 52 or 53 week fiscal year, which ends on the Saturday nearest to the last day of October in each year. For purposes of financial statement presentation, each fiscal year is described as having ended on October 31. Fiscal 2008, 2009, 2010 and 2011 consisted of 52 weeks and fiscal 2012 consisted of 53 weeks.

	Year Ended October 31, (in thousands)				
	2008	2009	2010	2011	2012
Cash and cash equivalents	\$ 550,669	\$ 485,705	\$ 688,687	\$ 541,896	\$ 642,444
Short-term investments	\$ 366,336	\$ 563,183	\$ —	\$ —	\$ 50,057
Long-term investments	\$ 156,171	\$ 8,031	\$ —	\$ 50,264	\$ —
Total assets	\$ 2,024,594	\$ 1,504,383	\$ 2,118,093	\$ 1,951,418	\$ 1,881,143
Short-term convertible notes payable	\$ —	\$ —	\$ —	\$ —	\$ 216,210
Long-term convertible notes payable	\$ 798,000	\$ 798,000	\$ 1,442,705	\$ 1,442,364	\$ 1,225,806
Total liabilities	\$ 1,025,645	\$ 1,048,545	\$ 1,958,800	\$ 1,937,545	\$ 1,970,115
Stockholders’ equity (deficit)	\$ 998,949	\$ 455,838	\$ 159,293	\$ 13,873	\$ (88,972)

Statement of Operations Data:

	Year Ended October 31, (in thousands, except per share data)				
	2008	2009	2010	2011	2012
Revenue	\$ 902,448	\$ 652,629	\$ 1,236,636	\$ 1,741,970	\$ 1,833,923
Cost of goods sold	451,521	367,799	739,135	1,032,824	1,109,699
Gross profit	450,927	284,830	497,501	709,146	724,224
Operating expenses:					
Research and development	175,023	190,319	327,626	379,862	364,179
Selling and marketing	152,018	134,527	193,515	251,990	266,338
General and administrative	68,639	47,509	102,692	126,242	114,002
Acquisition and integration costs	—	—	101,379	42,088	—
Amortization of intangible assets	32,264	24,826	99,401	69,665	51,697
Restructuring costs	1,110	11,207	8,514	5,781	7,854
Goodwill impairment	—	455,673	—	—	—
Change in fair value of contingent consideration	—	—	(13,807)	(3,289)	—
Total operating expenses	429,054	864,061	819,320	872,339	804,070
Income (loss) from operations	21,873	(579,231)	(321,819)	(163,193)	(79,846)
Interest and other income (loss), net	36,762	9,487	3,917	6,022	(15,200)
Interest expense	(12,927)	(7,406)	(18,619)	(37,926)	(39,653)
Realized loss due to impairment of marketable debt investments	(5,101)	—	—	—	—
Gain (loss) on cost method investments	—	(5,328)	—	7,249	—
Gain on extinguishment of debt	932	—	4,948	—	—
Income (loss) before income taxes	41,539	(582,478)	(331,573)	(187,848)	(134,699)
Provision (benefit) for income taxes	2,645	(1,324)	1,941	7,673	9,322
Net income (loss)	<u>\$ 38,894</u>	<u>\$ (581,154)</u>	<u>\$ (333,514)</u>	<u>\$ (195,521)</u>	<u>\$ (144,021)</u>
Basic net income (loss) per common share	<u>\$ 0.44</u>	<u>\$ (6.37)</u>	<u>\$ (3.58)</u>	<u>\$ (2.04)</u>	<u>\$ (1.45)</u>
Diluted net income (loss) per potential common share	<u>\$ 0.42</u>	<u>\$ (6.37)</u>	<u>\$ (3.58)</u>	<u>\$ (2.04)</u>	<u>\$ (1.45)</u>
Weighted average basic common shares outstanding	<u>89,146</u>	<u>91,167</u>	<u>93,103</u>	<u>95,854</u>	<u>99,341</u>
Weighted average dilutive potential common shares outstanding	<u>110,605</u>	<u>91,167</u>	<u>93,103</u>	<u>95,854</u>	<u>99,341</u>

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

This report contains statements that discuss future events or expectations, projections of results of operations or financial condition, changes in the markets for our products and services, or other "forward-looking" information. Our "forward-looking" information is based on various factors and was derived using numerous assumptions. In some cases, you can identify these "forward-looking statements" by words like "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "intends," "potential" or "continue" or the negative of those words and other comparable words. You should be aware that these statements only reflect our current predictions and beliefs. These statements are subject to known and unknown risks, uncertainties and other factors, and actual events or results may differ materially. Important factors that could cause our actual results to be materially different from the forward-looking statements are disclosed throughout this report, particularly under the heading "Risk Factors" in Item 1A of Part I of this annual report. You should review these risk factors for a more complete understanding of the risks associated with an investment in our securities. We undertake no obligation to revise or update any forward-looking statements. The following discussion and analysis should be read in conjunction with our "Selected Consolidated Financial Data" and consolidated financial statements and notes thereto included elsewhere in this annual report.

Overview

We are a provider of equipment, software and services that support the transport, switching, aggregation and management of voice, video and data traffic on communications networks. Our Packet-Optical Transport, Packet-Optical Switching and Carrier-Ethernet Solutions products are used, individually or as part of an integrated solution, in communications networks operated by service providers, cable operators, governments, enterprises, research and education institutions and other network operators around the globe. We are a network specialist focused on solutions that enable converged, next-generation architectures, optimized to handle a broader mix of high-bandwidth communications services. Our products allow network operators to scale capacity and increase transmission speeds, efficiently allocate network traffic, and deliver services to business and consumer end users. Our network solutions also include our integrated Ciena One software suite that provides network management capabilities that unify our product portfolio and provide automation and management features that enable efficient service delivery. To complement our hardware and software portfolio, we offer a broad range of consulting and support services that help our customers design, optimize, deploy, manage and maintain their communications networks. We believe that the close, collaborative engagement with customers enabled by our services offering is an important component of our network specialist approach and a significant differentiator with customers.

Our quarterly reports on Form 10-Q, annual reports on Form 10-K and current reports on Form 8-K filed with the SEC are available through the SEC's website at www.sec.gov or free of charge on our website as soon as reasonably practicable after we file these documents. We routinely post the reports above, recent news and announcements, financial results and other important information about Ciena on the "Investors" page of our website at www.ciena.com.

Market Opportunity and Strategy

We believe that a number of underlying drivers in the marketplace represent long-term opportunities for our business, and we expect them to result in growing demand for next-generation networking solutions in our target markets. We believe that market trends, including the proliferation of smartphones, tablets and similar devices running mobile web applications, the prevalence of video applications, and the shift of enterprise and consumer applications to cloud-based or virtualized network environments, are indicative of increasing use and dependence by consumers and enterprises upon a growing variety of high-bandwidth applications and services. We expect that these services will continue to add significant multiservice network traffic, requiring our customers to continue to invest in high-capacity network infrastructures that are more robust, programmable and efficient. These dynamics also continue to drive demand for convergence of network features, functions and layers. Our strategy to capitalize on these market dynamics, promote operational efficiency and drive profitable growth of our business includes the corporate initiatives set forth in the "Strategy" subsection of the description of our business under Item 1 of Part I of this annual report above.

Global Market Conditions and Competitive Landscape

We believe that the market opportunity described above, together with multiservice traffic growth, are driving a shift in network priorities and spending toward high-capacity, next-generation network architectures. However, during fiscal 2012 our market experienced a challenging environment including declining growth rates in spending on in the markets addressed by our packet-optical networking solutions. We believe that this reflects the macroeconomic conditions and competitive landscape encountered in our market during the year.

The sustained period of macroeconomic uncertainty and volatility in the global economy and in capital markets has resulted in a high degree of uncertainty and cautious customer behavior in our industry and markets. These dynamics, particularly in Europe, have resulted and may continue to result in lower levels of capital expenditure on communications network infrastructure. Conditions in our markets have also resulted in protracted sales cycles, lengthier network deployments and revenue recognition delays. Broad macroeconomic weakness has previously resulted in periods of decreased demand for our products and services that have adversely affected our results of operations. We remain uncertain as to how long current macroeconomic and industry conditions will persist and the magnitude of the effect of these conditions on the growth of our markets and business, as well as our results of operations.

We also continue to encounter a highly competitive marketplace, particularly within our Packet-Optical Transport segment, where we and our competitors have introduced new, high-capacity, high-speed network solutions and have aggressively sought to capture market share. In this competitive environment, securing new opportunities, particularly in international markets, often requires that we agree to less favorable initial pricing, commercial terms that can elongate the revenue recognition cycle, startup costs to operationalize our solutions in customer networks, financial commitments or performance bonds that place cash resources at risk, and other onerous contractual commitments that place a disproportionate allocation of risk upon the vendor. These terms can adversely affect our results of operations and contribute to fluctuations in our results. We expect the competitive landscape to remain challenging and dynamic as we and our competitors introduce new, competing platforms, as networking technologies or features converge, and as competitors seek customer adoption of their network architectural approaches. See the "Competition" section of Item 1, "Business," in Part I of this annual report for more information regarding our competitive landscape. We expect the level of competition to continue and potentially increase, particularly in North America, as Chinese equipment vendors seek to gain entry into the U.S. market, and other multinational competitors seek to retain incumbent positions with large customers in the region.

Financial Results for Fourth Quarter of Fiscal 2012

Revenue for the fourth quarter of fiscal 2012 was \$465.5 million, representing a sequential decrease of 1.8% from \$474.1 million in the third quarter of fiscal 2012. Revenue-related details reflecting sequential changes from the third quarter of fiscal 2012 include:

- Product revenue for the fourth quarter of fiscal 2012 decreased by \$10.2 million, primarily reflecting a decrease in Packet-Optical Switching revenue of \$17.3 million and a decrease of \$9.1 million in Packet-Optical Transport revenue. These decreases were offset by an increase of \$16.6 million in sales of Carrier-Ethernet Solutions.
- Service revenue for the fourth quarter of fiscal 2012 increased by \$1.7 million.
- Revenue from the United States for the fourth quarter of fiscal 2012 was \$249.5 million, an increase from \$237.3 million in the third quarter of fiscal 2012.
- International revenue for the fourth quarter of fiscal 2012 was \$216.0 million, a decrease from \$236.8 million in the third quarter of fiscal 2012.
- As a percentage of revenue, international revenue was 46.4% during the fourth quarter of fiscal 2012, a decrease from 49.9% during the third quarter of fiscal 2012.
- For the fourth quarter of fiscal 2012, one customer accounted for greater than 10% of revenue, representing 11.3% of total revenue. There were no customers that accounted for greater than 10% revenue in the third quarter of fiscal 2012.

Gross margin for the fourth quarter of fiscal 2012 was 41.3%, an increase from 38.2% in the third quarter of fiscal 2012. Gross margin for the fourth quarter of fiscal 2012 benefited from a favorable mix within our Packet-Optical Transport revenue, including an increased concentration of line cards for our 6500 Packet-Optical Platform, and improved margin relating to our Software and Services, Packet-Optical Switching and Carrier-Ethernet Solutions segments.

Operating expense was \$214.1 million for the fourth quarter of fiscal 2012, an increase from \$196.6 million in the third quarter of fiscal 2012. Increased operating expense for the fourth quarter described below, reflects, in part, the effect of an additional week during the fiscal period, as compared to the third quarter of fiscal 2012. See Note 1 to our Consolidated Financial Statements in Item 8 of Part II of this annual report describing our 53-week fiscal year for fiscal 2012. Fourth quarter operating expense reflects an increase of \$8.6 million in selling and marketing expense, primarily due to increased variable compensation resulting from increased order flow, and product demonstration costs. Fourth quarter operating expense also reflects an increase of \$7.5 million in research and development expense relating to employee compensation and prototype activity, and a \$1.9 million increase in general and administrative expense due to employee compensation.

In spite of margin improvement in the fourth quarter of fiscal 2012, our lower revenue and increased operating expense described above resulted in a loss from operations for the fourth quarter of fiscal 2012 of \$21.9 million, as compared to a \$15.3 million loss from operations during the third quarter of fiscal 2012. Our net loss for the fourth quarter of fiscal 2012 was \$38.8 million, or \$0.39 per share. This compares to a net loss of \$29.8 million or \$0.30 per share, for the third quarter of fiscal 2012.

We generated \$10.6 million in cash from operations during the fourth quarter of fiscal 2012, consisting of \$23.7 million provided by net losses adjusted for non-cash charges partially offset by a \$13.1 million use of cash related to changes in working capital. This compares with \$23.1 million provided by cash from operations during the third quarter of fiscal 2012, consisting of \$21.9 million from net losses adjusted for non-cash charges and \$1.2 million in cash provided by changes in working capital.

As of October 31, 2012, we had \$642.4 million in cash and cash equivalents and \$50.1 million of short-term investments in U.S. treasury securities. This compares to \$617.2 million in cash and cash equivalents and \$50.1 million of short-term investments in U.S. treasury securities at July 31, 2012. As of October 31, 2011, we had \$541.9 million in cash and cash equivalents and \$50.3 million of long-term investments in U.S. treasury securities.

As of October 31, 2012, headcount was 4,481, an increase from 4,463 as of July 31, 2012 and an increase from 4,339 and 4,201 at October 31, 2011 and 2010, respectively.

Consolidated Results of Operations

We report our results of operations based on the following operating segments:

- *Packet-Optical Transport* - includes optical transport solutions that increase network capacity and enable more rapid delivery of a broader mix of high-bandwidth services. These products are used by network operators to facilitate the cost effective and efficient transport of voice, video and data traffic in core, regional, metro and access networks. Ciena's Packet-Optical Transport products support the efficient delivery of a wide variety of consumer-oriented network services, as well as key managed service and enterprise applications. Ciena's principal products in this segment include the 6500 Packet-Optical Platform, 4200 Advanced Services Platform, Corestream® Agility Optical Transport System, 5100/5200 Advanced Services Platform, Common Photonic Layer (CPL), and 6100 Multiservice Optical Platform. This segment also includes sales from legacy SONET/SDH, transport and data networking products, as well as certain enterprise-oriented transport solutions that support storage and LAN extension, interconnection of data centers, and virtual private networks. This segment also includes operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Packet-Optical Switching* - includes optical switching platforms that enable automated optical infrastructures for the delivery of a wide variety of enterprise and consumer-oriented network services. Ciena's principal products in this segment include its family of CoreDirector® Multiservice Optical Switches, its 5430 Reconfigurable Switching System and its OTN configuration for the 5410 Reconfigurable Switching System. These products include multiservice, multi-protocol switching systems that consolidate the functionality of an add/drop multiplexer, digital cross-connect and packet switch into a single, high-capacity intelligent switching system. These products address both the core and metro segments of communications networks and support key managed services, Ethernet/TDM Private Line, Triple Play and IP services. This segment also includes sales of operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Carrier-Ethernet Solutions* - principally includes Ciena's 3000 family of service delivery switches and service aggregation switches, the 5000 series of service aggregation switches, and its Carrier Ethernet packet configuration for the 5410 Service Aggregation Switch. These products support the access and aggregation tiers of communications networks and have principally been deployed to support wireless backhaul infrastructures and business data services. Employing sophisticated Carrier Ethernet switching technology, these products deliver quality of service capabilities, virtual local area networking and switching functions, and carrier-grade operations, administration, and maintenance features. This segment also includes legacy broadband products that transition voice networks to support Internet-based (IP) telephony, video services and DSL. This segment also includes sales of operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Software and Services* - includes the Ciena One software suite, including OneControl, the integrated network and service management software designed to automate and simplify network management, operation and service delivery. These software solutions can track individual services across multiple product suites, facilitating planned network maintenance, outage detection and identification of customers or services affected by network performance. In addition to Ciena One, this segment includes the ON-Center® Network & Service Management Suite, and the OMEA and Preside platforms from the MEN Business. This segment also includes a broad range of consulting and support services, including installation and deployment, maintenance support, consulting, network design and training activities. Except for revenue from the software portion of this segment, which is included in product revenue, revenue from this segment is included in services revenue on the Consolidated Statement of Operations.

Fiscal 2011 compared to Fiscal 2012

Revenue

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

	Fiscal Year				Increase (decrease)	%**
	2011	%*	2012	%*		
Revenue:						
Packet-Optical Transport	\$ 1,121,811	64.5	\$ 1,172,159	63.9	\$ 50,348	4.5
Packet-Optical Switching	148,395	8.5	132,705	7.2	(15,690)	(10.6)
Carrier-Ethernet Solutions	127,868	7.3	131,693	7.2	3,825	3.0
Software and Services	343,896	19.7	397,366	21.7	53,470	15.5
Consolidated revenue	<u>\$ 1,741,970</u>	<u>100.0</u>	<u>\$ 1,833,923</u>	<u>100.0</u>	<u>\$ 91,953</u>	<u>5.3</u>

* Denotes % of total revenue

** Denotes % change from 2011 to 2012

- **Packet-Optical Transport revenue** increased reflecting a \$232.8 million increase in sales of our 6500 Packet-Optical Platform, largely driven by service provider demand for high-capacity, optical transport for coherent 40G and 100G network infrastructures. This increase was partially offset by sales decreases of \$82.1 million in our 4200 Advanced Services Platform, \$40.0 million of 5100/5200 Advanced Services Platform, \$25.2 million in legacy transport products, \$19.8 million in 6100 Multiservice Optical Platform and \$15.4 million of CPL. This shift in revenue reflects changing market demand as network operators adopt coherent, high-capacity network infrastructures, and our focused marketing and development investment on our next-generation 6500 Packet-Optical Platform that leverages the convergence of packet and optical networking technologies to enable a scalable, programmable solution.
- **Packet-Optical Switching revenue** decreased reflecting a \$50.2 million decrease in sales of our CoreDirector® Multiservice Optical Switches. Packet-Optical Switching revenue has historically reflected sales of our CoreDirector platform, which has a concentrated customer base. As a result, revenue and gross margin for this segment can fluctuate considerably depending upon individual customer purchasing decisions. Our Packet-Optical Switching segment is in the midst of a platform transition to our next-generation 5430 Reconfigurable Switching System and the OTN configuration for the 5410 Reconfigurable Switching System. These platforms reflect market and customer demand for solutions that consolidate network features, such as OTN switching and transport, that leverage the convergence of packet and optical networking technologies. As a result, Packet-Optical Switching benefited from a \$23.4 million increase in sales of our 5430 Reconfigurable Switching System, primarily relating to the completion of an international, solutions-based, submarine network deployment, and an \$11.1 million increase in sales of our OTN configuration for the 5410 Reconfigurable Switching System.
- **Carrier-Ethernet Solutions revenue** increased reflecting increases of \$10.1 million in sales of our 3000 and 5000 families of service delivery and aggregation switches and a \$5.9 million increase in sales of our 5410 Service Aggregation Switch to support wireless backhaul, Ethernet business services and residential broadband applications. These increases were partially offset by a \$12.2 million reduction in sales of our legacy broadband products.
- **Software and Services revenue** increased reflecting increases of \$15.2 million in network transformation consulting services, \$15.0 million in installation and deployment, \$13.3 million in maintenance and support services revenue and \$10.0 million in software sales.

Revenue from sales to customers outside of the United States is reflected as International in the geographic distribution of revenue below. The table below (in thousands, except percentage data) sets forth the changes in geographic distribution of revenue for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2011	%*	2012	%*		
United States	\$ 930,880	53.4	\$ 972,576	53.0	\$ 41,696	4.5
International	811,090	46.6	861,347	47.0	50,257	6.2
Total	<u>\$ 1,741,970</u>	<u>100.0</u>	<u>\$ 1,833,923</u>	<u>100.0</u>	<u>\$ 91,953</u>	<u>5.3</u>

* Denotes % of total revenue

** Denotes % change from 2011 to 2012

- **United States revenue** reflects increases of \$31.6 million in Software and Services revenue, \$28.7 million in Packet-Optical Transport sales and \$5.4 million in Carrier-Ethernet Solutions sales. These increases were partially offset by a decrease of \$24.0 million in Packet-Optical Switching sales.
- **International revenue** reflects increases of \$21.8 million in Software and Services revenue, \$21.7 million in Packet-Optical Transport sales and \$8.3 million in Packet-Optical Switching sales. These increases were slightly offset by a decrease of \$1.5 million in Carrier-Ethernet Solutions sales.

A sizable portion of our revenue continues to come from sales to a small number of service providers. As a result, our financial results are significantly affected by and can fluctuate depending upon spending levels and the business opportunities and challenges encountered by our service provider customers. Some of our customers have indicated a procurement strategy to reduce the number of vendors from which they purchase equipment, which could further affect our concentration of revenue where we participate in these efforts. Sales to AT&T were \$269.9 million, or 15.5% of total revenue, in fiscal 2011 and \$248.1 million, or 13.5% of total revenue, in fiscal 2012. We did not have any other customers accounting for greater than 10% of our revenue in fiscal 2011 or 2012.

Cost of Goods Sold and Gross Profit

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

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

Our gross profit as a percentage of revenue, or "gross margin," is susceptible to fluctuations due to a number of factors. In any given period, gross margin can vary significantly depending upon the mix and concentration of revenue by segment, product line within a particular segment, geography, and customers. Gross margin can also be affected by our concentration of lower margin "commons" equipment sales and higher margin channel cards, the mix of lower margin installation services within our service revenue, our introduction of new products, and changes in expense for excess and obsolete inventory and warranty obligations. We expect that gross margins will be subject to fluctuation based on our level of success in driving product cost reductions, rationalizing our supply chain and consolidating third party contract manufacturers and distribution sites as part of our effort to optimize our operations. Gross margin can also be adversely affected by the level of pricing pressure and competition that we encounter in the market. In an effort to retain or secure customers, enter new markets or capture market share, we may agree to pricing or other unfavorable commercial terms that result in lower or negative gross margins on a particular order or group of orders. These market dynamics and factors may adversely affect our gross margins and results of operations in certain periods.

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

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

	Fiscal Year				Increase (decrease)	%**
	2011	%*	2012	%*		
Total revenue	\$ 1,741,970	100.0	\$ 1,833,923	100.0	\$ 91,953	5.3
Total cost of goods sold	1,032,824	59.3	1,109,699	60.5	76,875	7.4
Gross profit	\$ 709,146	40.7	\$ 724,224	39.5	\$ 15,078	2.1

* Denotes % of total revenue

** Denotes % change from 2011 to 2012

	Fiscal Year				Increase (decrease)	%**
	2011	%*	2012	%*		
Product revenue	\$ 1,406,532	100.0	\$ 1,454,991	100.0	\$ 48,459	3.4
Product cost of goods sold	825,969	58.7	868,805	59.7	42,836	5.2
Product gross profit	<u>\$ 580,563</u>	<u>41.3</u>	<u>\$ 586,186</u>	<u>40.3</u>	<u>\$ 5,623</u>	1.0

* Denotes % of product revenue

** Denotes % change from 2011 to 2012

	Fiscal Year				Increase (decrease)	%**
	2011	%*	2012	%*		
Service revenue	\$ 335,438	100.0	\$ 378,932	100.0	\$ 43,494	13.0
Service cost of goods sold	206,855	61.7	240,894	63.6	34,039	16.5
Service gross profit	<u>\$ 128,583</u>	<u>38.3</u>	<u>\$ 138,038</u>	<u>36.4</u>	<u>\$ 9,455</u>	7.4

* Denotes % of service revenue

** Denotes % change from 2011 to 2012

- **Gross profit as a percentage of revenue** decreased as a result of the factors described below.
- **Gross profit on products as a percentage of product revenue** decreased, primarily due to a higher concentration of lower margin product revenue within our Packet-Optical Switching segment, increased warranty expense and provisions for inventory excess and obsolescence, partially offset by higher margin on our Packet-Optical Transport products.
- **Gross profit on services as a percentage of services revenue** decreased due to a higher concentration of lower margin installation and deployment services for international solutions-based projects.

Operating Expense

Operating expense consists of the component elements described below. We expect operating expense to increase in fiscal 2013 from the level reported for fiscal 2012 to support the growth of our business and fund our research and development initiatives.

Research and development expense primarily consists of salaries and related employee expense (including share-based compensation expense), prototype costs relating to design, development, and testing of our products, depreciation expense and third-party consulting costs.

Sales and marketing expense primarily consists of salaries, commissions and related employee expense (including share-based compensation expense), and sales and marketing support expense, including travel, demonstration units, trade show expense and third-party consulting costs.

General and administrative expense primarily consists of salaries and related employee expense (including share-based compensation expense), and costs for third-party consulting and other services.

Amortization of intangible assets primarily reflects purchased technology and customer relationships from our acquisitions.

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

	Fiscal Year				Increase (decrease)	%**
	2011	%*	2012	%*		
Research and development	\$ 379,862	21.8	\$ 364,179	19.9	\$ (15,683)	(4.1)
Selling and marketing	251,990	14.5	266,338	14.5	14,348	5.7
General and administrative	126,242	7.2	114,002	6.2	(12,240)	(9.7)
Acquisition and integration costs	42,088	2.4	—	—	(42,088)	(100.0)
Amortization of intangible assets	69,665	4.0	51,697	2.8	(17,968)	(25.8)
Restructuring costs	5,781	0.3	7,854	0.4	2,073	35.9
Change in fair value of contingent consideration	(3,289)	(0.2)	—	—	3,289	(100.0)
Total operating expenses	<u>\$ 872,339</u>	<u>50.0</u>	<u>\$ 804,070</u>	<u>43.8</u>	<u>\$ (68,269)</u>	<u>(7.8)</u>

* Denotes % of total revenue

** Denotes % change from 2011 to 2012

- **Research and development expense** benefited from \$6.8 million as a result of foreign exchange rates, primarily due to the strengthening of the U.S. dollar in relation to the Canadian dollar and the Indian Rupee. The \$15.7 million decrease primarily reflects decreases of \$11.0 million in employee compensation and related costs, \$4.2 million in depreciation expense and \$2.8 million in prototype expense. This was partially offset by an increase of \$3.2 million for facilities and information systems expense.
- **Selling and marketing expense** benefited from \$4.5 million due to foreign exchange rates, primarily due to the strengthening of the U.S. dollar in relation to the Euro and the Canadian dollar. The \$14.3 million increase primarily reflects increases of \$9.9 million in employee compensation, a portion of which relates to increases in variable compensation due to our level of order flow, \$4.2 million in facilities and information systems expense and \$2.1 million of travel and related costs. This increase was partially offset by decreases of \$1.0 million each in trade show and advertising expense.
- **General and administrative expense** decreased by \$12.2 million primarily related to decreases of \$4.9 million in professional services, \$4.4 million in employee compensation and related costs largely related to reduced share-based compensation expense, and \$2.3 million in facilities and information systems expense.
- **Acquisition and integration costs** principally consist of transaction, consulting and third party service fees related to the acquisition and integration of the MEN Business into the combined operations. This integration activity was substantially completed in the first half of fiscal 2011.
- **Amortization of intangible assets** decreased due to certain intangible assets from the MEN Business reaching the end of their economic lives during fiscal 2011. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II of this annual report.
- **Restructuring costs** for fiscal 2011 and 2012 primarily reflect certain severance and related expense associated with headcount reductions and restructuring activities to align our workforce and resources with market opportunities and research and development initiatives. In addition, restructuring costs for fiscal 2102 include the consolidation of certain facilities located within Maryland.
- **Change in fair value of contingent consideration** relates to the contingent refund right we received as part of the acquisition of the MEN Business associated with the early termination of the Carling lease. During the first quarter of fiscal 2011, Ciena received both notice of early termination from Nortel shortening the Carling lease to five years and as a result reported a \$3.3 million gain. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II of this annual report for additional information.

Other items

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

	Fiscal Year				Increase (decrease)	%**
	2011	%*	2012	%*		
Interest and other income (loss), net	\$ 6,022	0.3	\$ (15,200)	(0.8)	\$ (21,222)	(352.4)
Interest expense	\$ 37,926	2.2	\$ 39,653	2.2	\$ 1,727	4.6
Gain on cost method investment	\$ 7,249	0.4	\$ —	—	\$ (7,249)	100.0
Provision for income taxes	\$ 7,673	0.4	\$ 9,322	0.5	\$ 1,649	21.5

* Denotes % of total revenue

** Denotes % change from 2011 to 2012

- **Interest and other income (loss), net** decreased due to a \$7.7 million non-cash loss in fiscal 2012 related to the foreign exchange rates on assets and liabilities denominated in a currency other than the relevant functional currency as compared to a \$4.3 million non-cash gain in fiscal 2011. Interest and other income (loss), net was also affected by a \$6.6 million non-cash loss in fiscal 2012 related to the change in fair value of the embedded redemption feature associated with our 4.0% convertible senior notes due March 15, 2015, as compared to a \$2.8 million non-cash gain in fiscal 2011.
- **Interest expense** increased due to an additional week of interest expense from our convertible notes payable in fiscal 2012 and the addition of our asset backed loan commitment.
- **Gain on cost method investment** for fiscal 2011 was the result of the sale of a privately held technology company in which we held a minority equity investment.
- **Provision for income taxes** increased primarily due to increased foreign taxes related to additional foreign activity.

Fiscal 2010 compared to Fiscal 2011

On March 19, 2010, Ciena completed its acquisition (the "MEN Acquisition") of the optical networking and Carrier Ethernet assets of Nortel's Metro Ethernet Business (the "MEN Business"). As a result of this acquisition, our results of operations for fiscal 2010 do not include a full year of MEN Business activity. The MEN Acquisition materially affected our operations and financial results. These effects include:

- In fiscal 2010, we paid the \$676.8 million purchase price for the MEN Acquisition in cash and issued \$375.0 million in aggregate principal amount of 4.0% convertible senior notes due March 15, 2015, in part to fund the purchase price. See Note 2 and Note 13 of the Consolidated Financial Statements found under Item 8 of Part II of this annual report;
- Our revenue increased materially, as not all of fiscal 2010 reflects the addition of the MEN Business due to the timing of the MEN Acquisition;
- Our concentration of Packet-Optical Transport revenue and revenue from outside of the United States increased.;
- Gross margin was adversely affected by the valuation, required under accounting rules, of the acquired finished goods inventory of the MEN Business to fair value upon closing. This valuation increased marketable inventory carrying value by \$62.3 million, of which \$48.0 million and \$14.3 million were recognized in cost of goods sold during fiscal 2010 and 2011, respectively;
- Our operating expense increased materially after the MEN Acquisition, reflecting:
 - the addition of approximately 2,000 employees, nearly doubling our headcount;
 - increased operating costs associated with a significantly expanded, global business;
 - increased amortization costs relating to the acquisition of \$492.4 million in intangible assets;
 - transition service expense for services performed by a Nortel affiliate through the second quarter of fiscal 2011, relating to finance and accounting functions, supply chain and logistics management, maintenance and product support, order management and fulfillment, trade compliance, and information technology; and
 - integration-related costs, including transaction, consulting and third party service fees, severance and purchases of capitalized information technology equipment of \$122.3 million and \$59.6 million for fiscal 2010 and 2011, respectively.

In reviewing our financial results, investors should consider these and other factors in order to better understand period to period comparisons.

Revenue

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

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Revenue:						
Packet-Optical Transport	\$ 705,551	57.0	\$ 1,121,811	64.5	\$ 416,260	59.0
Packet-Optical Switching	112,058	9.1	148,395	8.5	36,337	32.4
Carrier-Ethernet Solutions	179,083	14.5	127,868	7.3	(51,215)	(28.6)
Software and Services	239,944	19.4	343,896	19.7	103,952	43.3
Consolidated revenue	<u>\$ 1,236,636</u>	<u>100.0</u>	<u>\$ 1,741,970</u>	<u>100.0</u>	<u>\$ 505,334</u>	<u>40.9</u>

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

- **Packet-Optical Transport revenue** increased reflecting a \$377.8 million increase in sales of our 6500 Packet-Optical Platform, largely driven by service provider demand for high-capacity, optical transport, including coherent 40G and 100G network infrastructures. Packet-Optical Transport revenue also benefited from sales increases of \$23.4 million in 4200 Advanced Services Platform, \$19.9 million in 6100 Multiservice Optical Platform, \$15.9 million in 5100/5200 Advanced Services Platform, and \$10.2 million in CPL. These increases were partially offset by decreases of \$25.6 million in Corestream® Agility Optical Transport System and \$5.1 million in legacy transport products.
- **Packet-Optical Switching revenue** increased reflecting a \$21.3 million increase in sales of our 5430 Reconfigurable Switching System and a \$14.1 million increase in sales of our CoreDirector® Multiservice Optical Switches. Packet-Optical Switching revenue has historically reflected sales of our CoreDirector platform, which has a concentrated customer base.
- **Carrier-Ethernet Solutions revenue** increased reflecting a \$51.6 million decrease in sales of our 3000 and 5000 families of service delivery switches and service aggregation switches and an \$8.7 million decrease in sales of our legacy metro Ethernet and broadband products. Carrier Ethernet Service Delivery revenue benefited from \$9.1 million in initial revenue from the introduction of the 5410 Service Aggregation Switch to support wireless backhaul, Ethernet business services and residential broadband applications.
- **Software and Services revenue** increased reflecting a \$66.1 million increase in maintenance support revenue and a \$42.0 million increase in installation, deployment and consulting services.

Revenue from sales to customers outside of the United States is reflected as International in the geographic distribution of revenue below. The table below (in thousands, except percentage data) sets forth the changes in geographic distribution of revenue for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
United States	\$ 744,232	60.2	\$ 930,880	53.4	\$ 186,648	25.1
International	492,404	39.8	811,090	46.6	318,686	64.7
Total	<u>\$ 1,236,636</u>	<u>100.0</u>	<u>\$ 1,741,970</u>	<u>100.0</u>	<u>\$ 505,334</u>	<u>40.9</u>

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

- **United States revenue** increased primarily due to a \$185.2 million increase in sales of Packet-Optical Transport products, a \$38.3 million increase in Software and Services revenue and a \$17.4 million increase in Packet-Optical Switching products. These increases were partially offset by a \$54.2 million decrease in Carrier Ethernet Solutions sales.
- **International revenue** increased primarily due to a \$231.1 million increase in Packet-Optical Transport revenue, a \$65.7 million increase in Software and Services revenue and an \$18.9 million increase in sales of Packet-Optical Switching products.

Cost of Goods Sold and Gross Profit

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

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Total revenue	\$ 1,236,636	100.0	\$ 1,741,970	100.0	\$ 505,334	40.9
Total cost of goods sold	739,135	59.8	1,032,824	59.3	293,689	39.7
Gross profit	<u>\$ 497,501</u>	<u>40.2</u>	<u>\$ 709,146</u>	<u>40.7</u>	<u>\$ 211,645</u>	<u>42.5</u>

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Product revenue	\$ 1,009,239	100.0	\$ 1,406,532	100.0	\$ 397,293	39.4
Product cost of goods sold	596,704	59.1	825,969	58.7	229,265	38.4
Product gross profit	<u>\$ 412,535</u>	<u>40.9</u>	<u>\$ 580,563</u>	<u>41.3</u>	<u>\$ 168,028</u>	<u>40.7</u>

* Denotes % of product revenue

** Denotes % change from 2010 to 2011

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Service revenue	\$ 227,397	100.0	\$ 335,438	100.0	\$ 108,041	47.5
Service cost of goods sold	142,431	62.6	206,855	61.7	64,424	45.2
Service gross profit	<u>\$ 84,966</u>	<u>37.4</u>	<u>\$ 128,583</u>	<u>38.3</u>	<u>\$ 43,617</u>	<u>51.3</u>

* Denotes % of service revenue

** Denotes % change from 2010 to 2011

- **Gross profit as a percentage of revenue** increased as a result of the factors described below.
- **Gross profit on products as a percentage of product revenue** increased despite less favorable product mix in fiscal 2011, largely as a result of the adverse effect, in fiscal 2010, of a number of items relating to the MEN Acquisition that increased costs of goods sold in that period. These items included \$48.0 million related to the revaluation of inventory as of the date of the MEN Acquisition and \$6.6 million in excess purchase commitment losses on Ciena's pre-

acquisition inventory relating to product rationalization decisions. Fiscal 2011 cost of goods sold included \$14.3 million related to the revaluation of inventory above and an \$8.8 million increase in amortization of intangible assets.

- **Gross profit on services as a percentage of services revenue** increased due to higher concentration of professional services as a percentage of revenue, and improved operational efficiencies.

Operating expense

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

	Fiscal Year					
	2010	%*	2011	%*	Increase (decrease)	%**
Research and development	\$ 327,626	26.5	\$ 379,862	21.8	\$ 52,236	15.9
Selling and marketing	193,515	15.6	251,990	14.5	58,475	30.2
General and administrative	102,692	8.3	126,242	7.2	23,550	22.9
Acquisition and integration costs	101,379	8.2	42,088	2.4	(59,291)	(58.5)
Amortization of intangible assets	99,401	8.0	69,665	4.0	(29,736)	(29.9)
Restructuring costs	8,514	0.7	5,781	0.3	(2,733)	(32.1)
Change in fair value of contingent consideration	(13,807)	(1.1)	(3,289)	(0.2)	10,518	(76.2)
Total operating expenses	<u>\$ 819,320</u>	<u>66.2</u>	<u>\$ 872,339</u>	<u>50.0</u>	<u>\$ 53,019</u>	<u>6.5</u>

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

- **Research and development expense** was adversely affected by \$12.2 million as a result of foreign exchange rates, primarily due to the weakening of the U.S. dollar in relation to the Canadian dollar. The \$52.2 million increase primarily reflects increases of \$47.4 million in employee compensation and related costs, \$13.6 million in facilities and information systems, \$4.8 million in depreciation expense and \$2.5 million in professional services and fees. These increases were partially offset by decreases of \$9.6 million in prototype expense and a \$5.5 million benefit related to a conditional grant from the Province of Ontario. For additional information regarding the Ontario Grant, see Note 21 of the Consolidated Financial Statements found under Item 8 of Part II of this annual report.
- **Selling and marketing expense** was adversely affected by \$2.5 million due to foreign exchange rates, primarily due to the weakening of the U.S. dollar in relation to the Euro and the Canadian dollar. The \$58.5 million increase primarily reflects increases of \$37.9 million in employee compensation and related costs, \$6.0 million in facilities and information systems, \$5.2 million in travel-related expenditures, \$4.8 million in marketing program costs, \$2.7 million in prototype expense and \$2.0 million in professional services and fees.
- **General and administrative expense** increased by \$21.5 million in employee compensation and related costs, reflecting increased administrative support service requirements relating to the growth in operations from the MEN Business and the termination of transition support services following the MEN Acquisition.
- **Acquisition and integration costs** principally consist of transaction, consulting and third party service fees related to the acquisition and integration of the MEN Business into the combined operations. This integration activity was substantially completed in the first half of fiscal 2011.
- **Amortization of intangible assets** decreased due to certain intangible assets from the MEN Acquisition reaching the end of their economic lives during fiscal 2011. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II of this annual report.
- **Restructuring costs** primarily reflect the headcount reductions and restructuring activities described in the “Overview — Acquisition of Nortel Metro Ethernet Networks Business and Effect on Results of Operations and Financial Condition ” above.

- **Change in fair value of contingent consideration** is related to the contingent refund right we received as part of the MEN Acquisition relating to the early termination of the Carling lease. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II of this annual report for additional information.

Other items

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

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Interest and other income (loss), net	\$ 3,917	0.3	\$ 6,022	0.3	\$ 2,105	53.7
Interest expense	\$ 18,619	1.5	\$ 37,926	2.2	\$ 19,307	103.7
Gain on cost method investments	\$ —	—	\$ 7,249	0.4	\$ 7,249	100.0
Gain on extinguishment of debt	\$ 4,948	0.4	\$ —	0.0	\$ (4,948)	(100.0)
Provision for income taxes	\$ 1,941	0.2	\$ 7,673	0.4	\$ 5,732	295.3

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

- **Interest and other income (loss), net** increased due to a \$2.8 million positive effect of foreign exchange rates on assets and liabilities denominated in a currency other than the relevant functional currency. Fiscal 2010 reflects a \$2.0 million charge relating to the termination of an indemnification asset upon the expiration of the statute of limitations applicable to one of the uncertain tax contingencies acquired as part of the MEN Acquisitions.
- **Interest expense** increased due to our issuance during fiscal 2010 of \$375.0 million in aggregate principal amount of 4.0% convertible senior notes due March 15, 2015 and \$350.0 million in aggregate principal amount of 3.75% convertible senior notes due October 15, 2018. See Note 13 to the Consolidated Financial Statements found under Item 8 of Part II of this annual report.
- **Gain on cost method investments** for fiscal 2011 was the result of the sale of a privately held technology company in which we held a minority equity investment.
- **Gain on extinguishment of debt** for fiscal 2010 resulted from our repurchase of \$81.8 million in aggregate principal amount of our outstanding 0.25% convertible notes in privately negotiated transactions for \$76.1 million. We recorded a gain on the extinguishment of debt in the amount of \$4.9 million, which consists of the \$5.7 million gain from the repurchase of the notes, less \$0.8 million of associated debt issuance costs.
- **Provision for income taxes** increased primarily due to increased foreign taxes.

Segment Profit (Loss)

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

	Fiscal Year			
	2011	2012	Increase (decrease)	%*
Segment profit (loss):				
Packet-Optical Transport	\$ 191,727	\$ 242,137	\$ 50,410	26.3
Packet-Optical Switching	\$ 49,286	\$ 22,842	\$ (26,444)	(53.7)
Carrier-Ethernet Solutions	\$ 10,849	\$ (4,066)	\$ (14,915)	(137.5)
Software and Services	\$ 77,422	\$ 99,132	\$ 21,710	28.0

* Denotes % change from 2011 to 2012

- **Packet-Optical Transport segment profit** increased primarily due to increased sales volume and decreased research and development costs, partially offset by decreased gross margin.
- **Packet-Optical Switching segment profit** decreased primarily due to lower gross margins related to a change in product mix as described in our operating segment revenue discussion above, and decreased sales volume, partially offset by decreased research and development costs.
- **Carrier-Ethernet Solutions segment loss** in fiscal 2012, as compared to segment profit in fiscal 2011, was primarily due to increased research and development costs and decreased gross margin, partially offset by increased sales volume.
- **Software and Services segment profit** increased primarily due to increased sales volume and decreased research and development costs, partially offset by a higher concentration of revenue from lower margin installation and deployment services for international solutions-based projects.

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

	Fiscal Year			%*
	2010	2011	Increase (decrease)	
Segment profit (loss):				
Packet-Optical Transport	\$ 69,319	\$ 191,727	\$ 122,408	176.6
Packet-Optical Switching	\$ 15,662	\$ 49,286	\$ 33,624	214.7
Carrier-Ethernet Solutions	\$ 28,742	\$ 10,849	\$ (17,893)	(62.3)
Software and Services	\$ 56,152	\$ 77,422	\$ 21,270	37.9

* Denotes % change from 2010 to 2011

- **Packet-Optical Transport segment profit** increased primarily due to higher sales volume. Segment profit during fiscal 2010 was adversely affected by the revaluation of the acquired finished goods inventory of the MEN Business to fair value upon closing and the excess purchase commitment losses on Ciena's pre-acquisition inventory relating to product rationalization decisions described above.
- **Packet-Optical Switching segment profit** increased due to higher sales volume and decreased research and development costs, partially offset by lower product gross margin.
- **Carrier-Ethernet Solutions segment profit** decreased due to lower sales volume, partially offset by higher gross margin and decreased research and development costs.
- **Software and Services segment profit** was significantly affected by the MEN Acquisition. Segment profit increased due to increased sales volume, partially offset by increased research and development costs.

Liquidity and Capital Resources

At October 31, 2012, our principal sources of liquidity were cash and cash equivalents and short-term investments in marketable debt securities, representing U.S. treasuries. The following table sets forth (in thousands) changes in our cash and cash equivalents and investments in marketable debt securities (in thousands):

	October 31,		Increase (decrease)
	2011	2012	
Cash and cash equivalents	\$ 541,896	\$ 642,444	\$ 100,548
Short-term investments in marketable debt securities	—	50,057	50,057
Long-term investments in marketable debt securities	50,264	—	(50,264)
Total cash and cash equivalents and investments in marketable debt securities	\$ 592,160	\$ 692,501	\$ 100,341

The change in total cash and cash equivalents and investments in marketable debt securities during fiscal 2012 was primarily related to the following:

- \$107.1 million cash generated by operations, consisting of \$92.6 million from net losses adjusted for non-cash charges and \$14.5 million for changes in working capital;
- \$12.2 million from proceeds of stock issuances under our employee stock purchase plan and the exercise of stock options, slightly offset by \$2.3 million of debt issuance costs and \$1.9 million for the repayment of capital lease obligations; and
- \$48.1 million for purchases of equipment, furniture, fixtures and intellectual property, partially offset by \$35.6 million transferred from restricted cash as a result of reductions in cash collateral required to support our standby letters of credit described below.

On August 13, 2012, we entered into a \$150.0 million senior secured asset-based revolving credit facility (the "Credit Facility"). See Note 14 to our Consolidated Financial Statements included in Item 8 of Part II of this annual report for a summary of the material terms and conditions of this Credit Facility. We principally expect to use the Credit Facility to support the issuance of letters of credit that arise in the ordinary course of our business and thereby to reduce our use of cash required to collateralize these instruments. As of October 31, 2012, letters of credit totaling \$50.8 million were collateralized by the Credit Facility. There were no borrowings outstanding under the Credit Facility as of October 31, 2012. Ciena expects to satisfy the financial criteria such that the Credit Facility will not early mature on January 31, 2013.

We regularly evaluate our liquidity position, debt obligations, and anticipated cash needs to fund our operating plans and may consider capital raising and other market opportunities that may be available to us. Based on past performance and current expectations, we believe that our cash, cash equivalents and investments will satisfy our working capital needs, capital expenditures, the repayment of our outstanding 0.25% convertible senior notes due May 1, 2013 and other liquidity requirements associated with our operations through at least the next 12 months.

The following sections set forth the components of our \$107.1 million of cash generated by operating activities for fiscal 2012:

Net loss adjusted for non-cash charges

The following tables set forth (in thousands) our net loss adjusted for non-cash charges during the period:

	Year ended October 31, 2012
Net loss	\$ (144,021)
Adjustments for non-cash charges:	
Change in fair value of embedded redemption feature	6,600
Depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements	59,099
Share-based compensation costs	32,394
Amortization of intangible assets	74,497
Provision for inventory excess and obsolescence	23,438
Provision for warranty	33,418
Other	7,122
Net losses adjusted for non-cash charges	<u>\$ 92,547</u>

Working Capital

Accounts Receivable, Net

Cash generated by accounts receivable during fiscal 2012, net of \$1.6 million in provision for doubtful accounts, was \$70.4 million. Our days sales outstanding (DSOs) decreased from 86 days for fiscal 2011 to 69 days for fiscal 2012. DSOs decreased largely due to improved operational efficiencies from the redesign of billing and collection processes and systems.

The following table sets forth (in thousands) changes to our accounts receivable, net of allowance for doubtful accounts, from the end of fiscal 2011 through the end of fiscal 2012:

	October 31,		Increase
	2011	2012	(decrease)
Accounts receivable, net	\$ 417,509	\$ 345,496	\$ (72,013)

Inventory

Cash used by inventory during fiscal 2012 was \$53.5 million. Our inventory turns decreased from 3.6 turns during fiscal 2011 to 3.3 turns during fiscal 2012. During fiscal 2012, changes in inventory reflect a \$23.4 million reduction related to a non-cash provision for excess and obsolescence of which \$15.2 million was scrapped. The following table sets forth (in thousands) changes to the components of our inventory from the end of fiscal 2011 through the end fiscal 2012:

	October 31,		Increase
	2011	2012	(decrease)
Raw materials	\$ 45,333	\$ 39,678	\$ (5,655)
Work-in-process	13,851	10,736	(3,115)
Finished goods	134,998	178,210	43,212
Deferred cost of goods sold	67,665	71,484	3,819
Gross inventory	261,847	300,108	38,261
Provision for inventory excess and obsolescence	(31,771)	(40,010)	(8,239)
Inventory	\$ 230,076	\$ 260,098	\$ 30,022

Prepaid expenses and other

Cash generated by prepaid expense and other during fiscal 2012 was \$1.7 million, primarily related to decreases in prepaid taxes and product demonstration units, partially offset by increases in other non-trade receivables and deferred deployment expense.

Accounts payable, accruals and other obligations

Cash generated by accounts payable, accruals and other obligations during fiscal 2012 was \$12.6 million. This amount reflects a \$49.6 million increase in our accounts payable, accruals and other obligations, and an additional \$1.2 million related to payments for previously accrued equipment purchases, less non-cash provisions of \$33.4 million related to warranties and \$4.8 million for financing activities related to unpaid capital leases. The following table sets forth (in thousands) changes in our accounts payable, accruals and other obligations from the end of fiscal 2011 through the end of fiscal 2012:

	October 31,		Increase
	2011	2012	(decrease)
Accounts payable	\$ 157,116	\$ 179,704	\$ 22,588
Accrued liabilities	197,004	209,540	12,536
Other long-term obligations	17,263	31,779	14,516
Accounts payable, accruals and other obligations	\$ 371,383	\$ 421,023	\$ 49,640

Interest Paid on Convertible Notes and Credit Facility

Interest on our outstanding 0.25% convertible senior notes, due May 1, 2013, is payable on May 1 and November 1 of each year. We paid \$0.8 million in interest on these convertible notes during fiscal 2012.

Interest on our outstanding 4.0% convertible senior notes, due March 15, 2015, is payable on March 15 and September 15 of each year. We paid \$15.0 million in interest on these convertible notes during fiscal 2012.

Interest on our outstanding 0.875% convertible senior notes, due June 15, 2017, is payable on June 15 and December 15 of each year. We paid \$4.4 million in interest on these convertible notes during fiscal 2012.

Interest on our outstanding 3.75% convertible senior notes, due October 15, 2018, is payable on April 15 and October 15 of each year. We paid \$13.1 million in interest on these convertible notes during fiscal 2012.

During fourth quarter of fiscal 2012, Ciena utilized the Credit Facility to collateralize certain standby letters of credit. We paid \$0.2 million in commitment fees, interest expense and other administrative charges relating to the Credit Facility during fiscal 2012.

For additional information about our convertible notes, see Note 13 to our Consolidated Financial Statements included in Item 8 of Part II of this annual report. See Note 22 to the Consolidated Financial Statements in Item 8 of Part II of this annual report for information relating to Ciena's pending private exchange transactions relating to a portion of our outstanding 4.0% convertible senior notes, due March 15, 2015, and the issuance of new 4.0% convertible senior notes, due December 15, 2020. For additional information about the Credit Facility, see Note 14 to our Consolidated Financial Statements included in Item 8 of Part II of this report.

Deferred revenue

Deferred revenue decreased by \$16.7 million during fiscal 2012. Product deferred revenue represents payments received in advance of shipment and payments received in advance of our ability to recognize revenue. Services deferred revenue is related to payment for service contracts that will be recognized over the contract term. The following table reflects (in thousands) the balance of deferred revenue and the change in this balance from the end of fiscal 2011 through the end of fiscal 2012:

	October 31,		Increase (decrease)
	2011	2012	
Products	\$ 42,915	\$ 29,279	\$ (13,636)
Services	80,883	77,797	(3,086)
Total deferred revenue	<u>\$ 123,798</u>	<u>\$ 107,076</u>	<u>\$ (16,722)</u>

Contractual Obligations

During fiscal 2012, we entered into a lease relating to office space for our new corporate headquarters in Hanover, Maryland, consisting of a rentable area of approximately 154,100 square feet. The future minimal rental commitments to be paid over the 15-year lease term are approximately \$61.8 million. The following is a summary of our future minimum payments under contractual obligations as of October 31, 2012 (in thousands):

	Total	Less than one year	One to three years	Three to five years	Thereafter
Interest due on convertible notes	\$ 138,395	\$ 32,770	\$ 57,500	\$ 35,000	\$ 13,125
Principal due at maturity on convertible notes	1,441,210	216,210	375,000	500,000	350,000
Operating leases (1)	145,601	31,381	48,497	19,597	46,126
Capital lease	6,328	3,040	3,288	—	—
Other obligations	1,856	879	977	—	—
Purchase obligations (2)	165,617	165,617	—	—	—
Total (3)	<u>\$ 1,899,007</u>	<u>\$ 449,897</u>	<u>\$ 485,262</u>	<u>\$ 554,597</u>	<u>\$ 409,251</u>

- (1) The amount for operating leases above does not include variable insurance, taxes, maintenance and other costs required by the applicable operating lease. These costs are not expected to have a material future impact.
- (2) Purchase obligations relate to purchase order commitments to our contract manufacturers and component suppliers for inventory. In certain instances, we are permitted to cancel, reschedule or adjust these orders. Consequently, only a portion of the amount reported above relates to firm, non-cancelable and unconditional obligations.
- (3) As of October 31, 2012, we also had approximately \$11.5 million of other long-term obligations in our Consolidated Balance Sheet for unrecognized tax positions that are not included in this table because the timing or amount of any cash settlement with the respective tax authority cannot be reasonably estimated.

Some of our commercial commitments, including some of the future minimum payments in operating leases set forth above and certain commitments to customers, are secured by standby letters of credit collateralized under our Credit Facility or restricted cash. Restricted cash balances are included in other current assets or other long-term assets depending upon the duration of the underlying letter of credit obligation. Use of restricted cash to support these standby letters of credit decreased significantly during fiscal 2012 as we utilized our Credit Facility to replace cash previously required to collateralize these obligations. See Note 14 to our Consolidated Financial Statements included in Item 8 of Part II of this annual report for a summary of the material terms and condition of the Credit Facility. The following is a summary of our commercial commitments secured by standby letters of credit by commitment expiration date as of October 31, 2012 (in thousands):

	Total	Less than one year	One to three years	Three to five years	Thereafter
Standby letters of credit	\$ 56,101	\$ 49,980	\$ 3,852	\$ 14	\$ 2,255

Off-Balance Sheet Arrangements

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

Critical Accounting Policies and Estimates

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

We believe that the following critical accounting policies reflect those areas where significant judgments and estimates are used in the preparation of our consolidated financial statements.

Revenue Recognition

We recognize 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. We assess 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. We assess 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 generally deferred and recognized ratably over the period during which the services are to be performed.

We apply the percentage of completion method to long-term arrangements where we are required to undertake significant production, customizations or modification engineering, and reasonable and reliable estimates of revenue and cost are available. Utilizing the percentage of completion method, we recognize revenue based on the ratio of actual costs incurred to date to total estimated costs expected to be incurred. In instances that do not meet the percentage of completion method criteria, recognition of revenue is deferred until there are no uncertainties regarding customer acceptance.

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 is specified by the customer, revenue is deferred until there are no uncertainties regarding customer acceptance.

We limit 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.

Accounting for multiple element arrangements entered into prior to fiscal 2011

Arrangements with customers may include multiple deliverables, including any combination of equipment, services and software. If multiple element arrangements include software or software-related elements that are essential to the equipment, we allocate the arrangement fee among separate units of accounting. Multiple element arrangements that include software are separated into more than one unit of accounting if the functionality of the delivered element(s) is not dependent on the undelivered element(s), there is vendor-specific objective evidence (“VSOE”) of the fair value of the undelivered element(s), and general revenue recognition criteria related to the delivered element(s) have been met. The amount of product and services revenue recognized is affected by our judgment as to whether an arrangement includes multiple elements and, if so, whether VSOE of fair value exists. VSOE is established based on our standard pricing and discounting practices for the specific product or service when sold separately. In determining VSOE, we require that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. Changes to the elements in an arrangement and our ability to establish VSOE for those elements could affect the timing of revenue recognition. For all other multiple element arrangements, we separate the elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, objective and reliable evidence of fair value exists for the undelivered element(s), and delivery of the undelivered element(s) is probable and substantially in our control. Revenue is allocated to each unit of accounting based on the relative fair value of each accounting unit or using the residual method if objective evidence of fair value does not exist for the delivered element(s). The revenue recognition criteria described above are applied to each separate unit of accounting. If these criteria are not met, revenue is deferred until the criteria are met or the last element has been delivered.

Accounting for multiple element arrangements entered into or materially modified after fiscal 2010

In October 2009, the Financial Accounting Standards Board, (“FASB”) amended the accounting standard for revenue recognition with multiple deliverables which provided guidance on how the arrangement fee should be allocated. The amended guidance allows the use of management's best estimate of selling price (“BESP”) for individual elements of an arrangement when VSOE or third-party evidence (“TPE”) is unavailable. Additionally, it eliminates the residual method of revenue recognition in accounting for multiple deliverable arrangements. The FASB also amended the accounting guidance for revenue arrangements with software elements to exclude from the scope of the software revenue recognition guidance, tangible products that contain both software and non-software components that function together to deliver the product's essential functionality.

We adopted the new accounting guidance on a prospective basis for arrangements entered into or materially modified on or after November 1, 2010. Under the new guidance, we separate elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, and delivery of the undelivered element(s) is probable and substantially in our control. Therefore, the new guidance allows for deliverables, for which revenue was previously deferred due to an absence of fair value, to be separated and recognized as revenue as delivered. Also, because the residual method has been eliminated, discounts offered by us are allocated to all deliverables, rather than to the delivered element(s). Our adoption of the new guidance for revenue arrangements changed the accounting for certain products that consist of hardware and software components, in which these components together provided the product's essential functionality. For transactions involving these products entered into prior to fiscal 2011, we recognized revenue based on software revenue recognition guidance.

Revenue for multiple element arrangements is allocated to each unit of accounting based on the relative selling price of each element, with revenue recognized when the revenue recognition criteria are met for each delivered element. We determine the selling price for each deliverable based upon the selling price hierarchy for multiple-deliverable arrangements. Under this hierarchy, we use VSOE of selling price, if it exists, or TPE of selling price if VSOE does not exist. If neither VSOE nor TPE of selling price exists for a deliverable, we use our BESP for that deliverable.

VSOE is established based on our standard pricing and discounting practices for the specific product or service when sold separately. In determining VSOE, which exists across certain of our service offerings, we require that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. We have generally been unable to establish TPE of selling price because our go-to-market strategy differs from that of others in our markets, and the extent of customization and differentiated features and functions varies among comparable products or services from our peers. We determine 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.

Historically, for arrangements with multiple elements, we were typically able to establish fair value for undelivered elements and so we applied the residual method. As a result, assuming the adoption of the accounting guidance above on a prospective basis for arrangements entered into or materially modified on or after November 1, 2009, the effect on revenue recognized for fiscal 2010 would have been an increase of approximately \$33.0 million.

Our total deferred revenue for products was \$42.9 million and \$29.3 million as of October 31, 2011 and October 31, 2012, respectively. Our services revenue is deferred and recognized ratably over the period during which the services are to be performed. Our total deferred revenue for services was \$80.9 million and \$77.8 million as of October 31, 2011 and October 31, 2012, respectively.

Business Combinations

We record 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 properly allocate purchase price consideration 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. Our estimates are based on historical experience, information obtained from the management of the acquired companies and, when appropriate, includes assistance from independent third-party appraisal firms. Our 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. During fiscal 2010, we completed the MEN Acquisition for a purchase price of \$676.8 million. As a result of the purchase price allocation to the assets acquired and liabilities assumed, as well as contingent consideration, there was no value assigned to goodwill. See Note 2 to the Consolidated Financial Statements included in Item 8 of Part II of this annual report.

Share-Based Compensation

We estimate the fair value of our restricted stock unit awards based on the fair value of our common stock on the date of grant. Our outstanding restricted stock unit awards are subject to service-based vesting conditions and/or performance-based vesting conditions. We recognize the estimated fair value of service-based awards, net of estimated forfeitures, as share-based expense ratably over the vesting period on a straight-line basis. Awards with performance-based vesting conditions require the achievement of certain financial or other performance criteria or targets as a condition to the vesting, or acceleration of vesting. We recognize 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 our determination of whether it is probable that the performance targets will be achieved. At each reporting period, we reassess the probability of achieving the performance targets and the performance period required to meet those targets. Determining whether the performance targets will be achieved involves judgment, and the estimate of expense may be revised periodically based on changes in 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 cost is reversed.

Because share-based compensation expense is based on awards that are ultimately expected to vest, the amount of expense takes into account estimated forfeitures. We estimate forfeitures at the time of grant and revise, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Changes in these estimates and assumptions can materially affect the measure of estimated fair value of our share-based compensation. See Note 18 to our Consolidated Financial Statements in Item 8 of Part II of this report for information regarding our assumptions related to share-based compensation and the amount of share-based compensation expense we incurred for the periods covered in this report. As of October 31, 2012, total unrecognized compensation expense was \$49.4 million: (i) \$0.2 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 0.5 year; and (ii) \$49.2 million, which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.3 years.

We recognize 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 us upon an employee's disposition of a share-based award exceeds the deferred tax asset, if any, associated with the award that we had

recorded. When assessing whether a tax benefit relating to share-based compensation has been realized, we follow the tax law “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 our 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 our 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.

Reserve for Inventory Obsolescence

We make estimates about future customer demand for our products when establishing the appropriate reserve for excess and obsolete inventory. We write down inventory that has become obsolete or unmarketable by an amount equal to the difference between the cost of inventory and the estimated market value based on assumptions about future demand and market conditions. Inventory write downs are a component of our product cost of goods sold. Upon recognition of the write down, a new lower cost basis for that inventory is established, and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis. In an effort to limit our exposure to delivery delays and to satisfy customer needs we purchase inventory based on forecasted sales across our product lines. In addition, part of our research and development strategy is to promote the convergence of similar features and functionalities across our product lines. Each of these practices exposes us to the risk that our customers will not order products for which we have forecasted sales, or will purchase less than we have forecasted. Historically, we have experienced write downs due to changes in our strategic direction, discontinuance of a product and declines in market conditions. We recorded charges for excess and obsolete inventory of \$17.3 million and \$23.4 million in fiscal 2011 and 2012, respectively. The charges in fiscal 2011 were primarily related to excess inventory due to a change in forecasted sales across our product line. The charges in fiscal 2012 were primarily related to engineering design changes and the discontinuance of certain parts and components used in the manufacture of our Packet-Optical Transport and Packet-Optical Switching products. Our inventory net of allowance for excess and obsolescence was \$230.1 million and \$260.1 million as of October 31, 2011 and October 31, 2012, respectively.

Allowance for Doubtful Accounts Receivable

Our allowance for doubtful accounts receivable is based on management's assessment, on a specific identification basis, of the collectibility of customer accounts. We perform ongoing credit evaluations of our customers and generally have not required collateral or other forms of security from customers. In determining the appropriate balance for our allowance for doubtful accounts receivable, management considers each individual customer account receivable in order to determine collectibility. In doing so, we consider creditworthiness, payment history, account activity and communication with such customer. If a customer's financial condition changes, or if actual defaults are higher than our historical experience, we may be required to take a charge for an allowance for doubtful accounts receivable which could have an adverse impact on our results of operations. Our accounts receivable, net of allowance for doubtful accounts, was \$417.5 million and \$345.5 million as of October 31, 2011 and October 31, 2012, respectively. Our allowance for doubtful accounts was \$0.7 million and \$1.5 million as of October 31, 2011 and October 31, 2012, respectively.

Long-lived Assets

Our long-lived assets include: equipment, furniture and fixtures; finite-lived intangible assets; and maintenance spares. As of October 31, 2011 and October 31, 2012 these assets totaled \$504.6 million and \$438.3 million, net, respectively. We test long-lived assets for impairment whenever events or changes in circumstances indicate that the assets' carrying amount is not recoverable from its undiscounted cash flows. Our long-lived assets are assigned to asset groups which represents the lowest level for which we identify cash flows. Due to the lack of a triggering event, no impairment analysis was performed in fiscal 2011 or 2012.

Deferred Tax Valuation Allowance

As of October 31, 2012, we have recorded a valuation allowance of \$1.5 billion which offsets nearly all our net deferred tax assets. When measuring the need for a valuation allowance, we assess both positive and negative evidence regarding the realizability of these deferred tax assets. We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. In determining net deferred tax assets and valuation allowances, management is required to make judgments and estimates related to projections of profitability, the timing and extent of the utilization of net operating loss carryforwards, applicable tax rates, transfer pricing methodologies and tax planning strategies. The valuation allowance is reviewed quarterly and is maintained until sufficient positive evidence exists to support a reversal. Because evidence such as our operating results during the most recent three-year period is afforded more weight than forecasted results for future periods,

our cumulative loss during this three-year period represents sufficient negative evidence regarding the need for nearly a full valuation allowance. We will release this valuation allowance when management determines that it is more likely than not that our deferred tax assets will be realized. Any future release of valuation allowance may be recorded as a tax benefit increasing net income or as an adjustment to paid-in capital, based on tax ordering requirements.

Warranty

Our liability for product warranties, included in other accrued liabilities, was \$47.3 million and \$55.1 million as of October 31, 2011 and October 31, 2012, respectively. Our products are generally covered by a warranty for periods ranging from one to five years. We accrue for warranty costs as part of our cost of goods sold based on associated material costs, technical support labor costs and associated overhead. Material cost is estimated based primarily upon historical trends in the volume of product returns within the warranty period and the cost to repair or replace the equipment. Technical support labor cost is estimated based primarily upon historical trends and the cost to support the customer cases within the warranty period. The provision for product warranties was \$18.5 million and \$33.4 million for fiscal 2011 and 2012, respectively. See Note 12 to the Consolidated Financial Statements included in Item 8 of Part II of this report. The provision for warranty claims may fluctuate on a quarterly basis depending upon the mix of products and customers in that period. If actual product failure rates, material replacement costs, service or labor costs differ from our estimates, revisions to the estimated warranty provision would be required. An increase in warranty claims or the related costs associated with satisfying these warranty obligations could increase our cost of sales and negatively affect our gross margin.

Effects of Recent Accounting Pronouncements

See Note 1 to our Consolidated Financial Statements in Item 8 of Part II of this report for information relating to our discussion of the effects of recent accounting pronouncements.

Unaudited Quarterly Results of Operations

The tables below (in thousands, except per share data) set forth the operating results in our consolidated statements of operations for each of the eight quarters in the period ended October 31, 2012. This information is unaudited, but in our opinion reflects all adjustments (consisting only of normal recurring adjustments) that we consider necessary for a fair statement of such information in accordance with generally accepted accounting principles. The results for any quarter are not necessarily indicative of results for any future period.

	Jan. 31, 2011	Apr. 30, 2011	Jul. 31, 2011	Oct. 31, 2011	Jan. 31, 2012	Apr. 30, 2012	Jul. 31, 2012	Oct. 31, 2012
Revenue:								
Products	\$ 352,427	\$ 336,026	\$ 350,030	\$ 368,049	\$ 333,673	\$ 384,726	\$ 373,418	\$ 363,174
Services	80,881	81,868	85,283	87,406	83,012	92,891	100,672	102,357
Total Revenue	<u>433,308</u>	<u>417,894</u>	<u>435,313</u>	<u>455,455</u>	<u>416,685</u>	<u>477,617</u>	<u>474,090</u>	<u>465,531</u>
Cost of goods sold:								
Products	214,401	202,665	198,217	210,686	197,752	234,372	225,238	211,443
Services	50,401	49,396	52,199	54,859	51,177	60,304	67,531	61,882
Total costs of goods sold	<u>264,802</u>	<u>252,061</u>	<u>250,416</u>	<u>265,545</u>	<u>248,929</u>	<u>294,676</u>	<u>292,769</u>	<u>273,325</u>
Gross profit	<u>168,506</u>	<u>165,833</u>	<u>184,897</u>	<u>189,910</u>	<u>167,756</u>	<u>182,941</u>	<u>181,321</u>	<u>192,206</u>
Operating expenses:								
Research and development	95,790	99,624	93,216	91,232	89,664	90,399	88,315	95,801
Selling and marketing	57,092	61,768	61,895	71,235	64,411	62,517	65,397	74,013
General and administrative	38,314	32,480	28,172	27,276	29,664	26,670	27,876	29,792
Acquisition and integration costs	24,185	10,741	4,822	2,340	—	—	—	—
Amortization of intangible assets	28,784	13,674	13,673	13,534	13,471	12,967	12,714	12,545
Restructuring costs	1,522	3,164	504	591	1,722	1,851	2,291	1,990
Change in fair value of contingent consideration	(3,289)	—	—	—	—	—	—	—
Total operating expenses	<u>242,398</u>	<u>221,451</u>	<u>202,282</u>	<u>206,208</u>	<u>198,932</u>	<u>194,404</u>	<u>196,593</u>	<u>214,141</u>
Loss from operations	<u>(73,892)</u>	<u>(55,618)</u>	<u>(17,385)</u>	<u>(16,298)</u>	<u>(31,176)</u>	<u>(11,463)</u>	<u>(15,272)</u>	<u>(21,935)</u>
Interest and other income (loss), net	6,265	4,229	(3,160)	(1,312)	(4,887)	(4,387)	(2,458)	(3,468)
Interest expense	(9,550)	(9,406)	(9,470)	(9,500)	(9,570)	(9,646)	(9,597)	(10,840)
Gain on cost method investment	—	—	—	7,249	—	—	—	—
Loss before income taxes	<u>(77,177)</u>	<u>(60,795)</u>	<u>(30,015)</u>	<u>(19,861)</u>	<u>(45,633)</u>	<u>(25,496)</u>	<u>(27,327)</u>	<u>(36,243)</u>
Provision for income tax	1,879	1,891	1,435	2,468	2,020	2,284	2,490	2,528
Net loss	<u>\$ (79,056)</u>	<u>\$ (62,686)</u>	<u>\$ (31,450)</u>	<u>\$ (22,329)</u>	<u>\$ (47,653)</u>	<u>\$ (27,780)</u>	<u>\$ (29,817)</u>	<u>\$ (38,771)</u>
Basic net loss per common share	<u>\$ (0.84)</u>	<u>\$ (0.66)</u>	<u>\$ (0.33)</u>	<u>\$ (0.23)</u>	<u>\$ (0.49)</u>	<u>\$ (0.28)</u>	<u>\$ (0.30)</u>	<u>\$ (0.39)</u>
Diluted net loss per potential common share	<u>\$ (0.84)</u>	<u>\$ (0.66)</u>	<u>\$ (0.33)</u>	<u>\$ (0.23)</u>	<u>\$ (0.49)</u>	<u>\$ (0.28)</u>	<u>\$ (0.30)</u>	<u>\$ (0.39)</u>
Weighted average basic common shares outstanding	<u>94,496</u>	<u>95,360</u>	<u>96,313</u>	<u>97,197</u>	<u>98,066</u>	<u>98,981</u>	<u>99,530</u>	<u>100,506</u>
Weighted average dilutive potential common shares outstanding	<u>94,496</u>	<u>95,360</u>	<u>96,313</u>	<u>97,197</u>	<u>98,066</u>	<u>98,981</u>	<u>99,530</u>	<u>100,506</u>

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The following discussion about our market risk disclosures involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. We are exposed to market risk related to changes in interest rates and foreign currency exchange rates.

Interest Rate Sensitivity. We currently hold an investment in a U.S. Government obligation that matures in January 2013. See Notes 5 and 6 to our Consolidated Financial Statements for information relating to investments and fair value. This investment is sensitive to interest rate movements, and its fair value will decline as interest rates rise and increase as interest rates decline. The estimated impact on this investment of a 100 basis point (1.0%) increase in interest rates across the yield curve from rates in effect as of the balance sheet date would be a \$0.1 million decline in value.

Foreign Currency Exchange Risk. As a global concern, our business and results of operations are exposed to movements in foreign currency exchange rates. As a result of our increased global presence, a larger percentage of our revenue is non-U.S. dollar denominated with Canadian Dollars and Euros being our most significant foreign currency revenue streams. If the U.S. dollar strengthens against these currencies, our revenues reported in U.S. dollars would decline. For our U.S. dollar denominated sales, an increase in the value of the U.S. dollar would increase the real cost to our customers of our products in markets outside the United States, which could impact our competitive position.

With regard to operating expense, our primary exposure to foreign currency exchange risk relates to operating expense incurred in Canadian Dollars, British Pounds, Euros and Indian Rupees. During fiscal 2012, approximately 52.0% of our operating expense was non-U.S. dollar denominated. If these currencies strengthen, costs reported in U.S. dollars will increase, which would increase our expenses. During fiscal 2012, research and development expense benefited from approximately \$6.8 million, inclusive of hedging, due to the strengthening of the U.S. dollar in relation to the Canadian Dollar and the Indian Rupee in comparison to fiscal 2011. Also in fiscal 2012, sales and marketing expense benefited from approximately \$4.5 million due to the strengthening of the U.S. dollar in relation to the Euro in comparison to fiscal 2011.

From time to time, we use foreign currency forward contracts to reduce part of the variability in certain forecasted non-U.S. dollar denominated cash flows. Generally, these derivatives are for maturities of 12 months or less and are designated as cash flow hedges. We consider several factors when evaluating hedges of our forecasted foreign currency exposures, such as significance of the exposure, offsetting economic exposures, potential costs of hedging, and the potential for hedge ineffectiveness. We do not enter into derivative transactions for purposes other than hedging economic exposures. During fiscal 2011 and 2012, we entered into forward contracts to reduce the variability in our Canadian Dollar and Indian Rupee denominated operating expenses which principally relate to our research and development activities.

Convertible Debt Outstanding. The fair market value of each of our outstanding issues of convertible notes is subject to interest rate and market price risk due to the convertible feature of the notes and other factors. Generally the fair market value of fixed interest rate debt will increase as interest rates fall and decrease as interest rates rise. The fair market value of the notes may also increase as the market price of our stock rises and decrease as the market price of the stock falls. Interest rate and market value changes affect the fair market value of the notes, and may affect the prices at which we would be able to repurchase such notes were we to do so. These changes do not impact our financial position, cash flows or results of operations. For additional information on the fair value of our outstanding notes, see Note 13 to our Consolidated Financial Statements included in Item 8 of Part II of this report.

Item 8. Financial Statements and Supplementary Data

The following is an index to the consolidated financial statements:

	Page Number
Report of Independent Registered Public Accounting Firm	58
Consolidated Balance Sheets	59
Consolidated Statements of Operations	60
Consolidated Statements of Changes in Stockholders' Equity (Deficit)	61
Consolidated Statements of Cash Flows	62
Notes to Consolidated Financial Statements	63

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Ciena Corporation

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Ciena Corporation and its subsidiaries (the “Company”) at October 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended October 31, 2012 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of October 31, 2012, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the Report of Management on Internal Control Over Financial Reporting under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company’s internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for revenue in fiscal 2011.

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP
Baltimore, Maryland
December 21, 2012

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

	October 31,	
	2011	2012
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 541,896	\$ 642,444
Short-term investments	—	50,057
Accounts receivable, net	417,509	345,496
Inventories	230,076	260,098
Prepaid expenses and other	143,357	117,595
Total current assets	1,332,838	1,415,690
Long-term investments	50,264	—
Equipment, furniture and fixtures, net	122,558	123,580
Intangible assets, net	331,635	257,137
Other long-term assets	114,123	84,736
Total assets	\$ 1,951,418	\$ 1,881,143
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	\$ 157,116	\$ 179,704
Accrued liabilities	197,004	209,540
Deferred revenue	99,373	79,516
Convertible notes payable	—	216,210
Total current liabilities	453,493	684,970
Long-term deferred revenue	24,425	27,560
Other long-term obligations	17,263	31,779
Long term convertible notes payable	1,442,364	1,225,806
Total liabilities	1,937,545	1,970,115
Commitments and contingencies		
Stockholders' equity (deficit):		
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; 97,440,436 and 100,601,792 shares issued and outstanding	974	1,006
Additional paid-in capital	5,753,236	5,797,765
Accumulated other comprehensive income (loss)	31	(3,354)
Accumulated deficit	(5,740,368)	(5,884,389)
Total stockholders' equity (deficit)	13,873	(88,972)
Total liabilities and stockholders' equity (deficit)	\$ 1,951,418	\$ 1,881,143

The accompanying notes are an integral part of these consolidated financial statements.

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

	Year Ended October 31,		
	2010	2011	2012
Revenue:			
Products	\$ 1,009,239	\$ 1,406,532	\$ 1,454,991
Services	227,397	335,438	378,932
Total revenue	<u>1,236,636</u>	<u>1,741,970</u>	<u>1,833,923</u>
Cost of goods sold:			
Products	596,704	825,969	868,805
Services	142,431	206,855	240,894
Total cost of goods sold	<u>739,135</u>	<u>1,032,824</u>	<u>1,109,699</u>
Gross profit	<u>497,501</u>	<u>709,146</u>	<u>724,224</u>
Operating expenses:			
Research and development	327,626	379,862	364,179
Selling and marketing	193,515	251,990	266,338
General and administrative	102,692	126,242	114,002
Acquisition and integration costs	101,379	42,088	—
Amortization of intangible assets	99,401	69,665	51,697
Restructuring costs	8,514	5,781	7,854
Change in fair value of contingent consideration	(13,807)	(3,289)	—
Total operating expenses	<u>819,320</u>	<u>872,339</u>	<u>804,070</u>
Loss from operations	(321,819)	(163,193)	(79,846)
Interest and other income (loss), net	3,917	6,022	(15,200)
Interest expense	(18,619)	(37,926)	(39,653)
Gain on cost method investments	—	7,249	—
Gain on extinguishment of debt	4,948	—	—
Loss before income taxes	<u>(331,573)</u>	<u>(187,848)</u>	<u>(134,699)</u>
Provision for income taxes	1,941	7,673	9,322
Net loss	<u>\$ (333,514)</u>	<u>\$ (195,521)</u>	<u>\$ (144,021)</u>
Basic net loss per common share	<u>\$ (3.58)</u>	<u>\$ (2.04)</u>	<u>\$ (1.45)</u>
Diluted net loss per potential common share	<u>\$ (3.58)</u>	<u>\$ (2.04)</u>	<u>\$ (1.45)</u>
Weighted average basic common shares outstanding	<u>93,103</u>	<u>95,854</u>	<u>99,341</u>
Weighted average dilutive potential common shares outstanding	<u>93,103</u>	<u>95,854</u>	<u>99,341</u>

The accompanying notes are an integral part of these consolidated financial statements.

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

	Common Stock Shares	Par Value	Additional Paid-in-Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
Balance at October 31, 2009	92,038,360	\$ 920	\$ 5,665,028	\$ 1,223	\$ (5,211,333)	\$ 455,838
Net loss	—	—	—	—	(333,514)	(333,514)
Changes in unrealized gains and losses on investments, net	—	—	—	(458)	—	(458)
Translation adjustment	—	—	—	297	—	297
Comprehensive loss	—	—	—	—	—	(333,675)
Issuance of shares from employee equity plans	2,021,940	21	1,549	—	—	1,570
Share-based compensation expense	—	—	35,560	—	—	35,560
Balance at October 31, 2010	94,060,300	941	5,702,137	1,062	(5,544,847)	159,293
Net loss	—	—	—	—	(195,521)	(195,521)
Changes in unrealized gains and losses on investments, net	—	—	—	393	—	393
Translation adjustment	—	—	—	(1,424)	—	(1,424)
Comprehensive loss	—	—	—	—	—	(196,552)
Issuance of shares from employee equity plans	3,380,136	33	13,169	—	—	13,202
Share-based compensation expense	—	—	37,930	—	—	37,930
Balance at October 31, 2011	97,440,436	974	5,753,236	31	(5,740,368)	13,873
Net loss	—	—	—	—	(144,021)	(144,021)
Changes in unrealized gains and losses on investments, net	—	—	—	(166)	—	(166)
Changes in unrealized gains and losses on foreign currency contracts, net	—	—	—	49	—	49
Translation adjustment	—	—	—	(3,268)	—	(3,268)
Comprehensive loss	—	—	—	—	—	(147,406)
Issuance of shares from employee equity plans	3,161,356	32	12,135	—	—	12,167
Share-based compensation expense	—	—	32,394	—	—	32,394
Balance at October 31, 2012	100,601,792	\$ 1,006	\$ 5,797,765	\$ (3,354)	\$ (5,884,389)	\$ (88,972)

The accompanying notes are an integral part of these consolidated financial statements.

CIENA CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended October 31,		
	2010	2011	2012
Cash flows from operating activities:			
Net loss	\$ (333,514)	\$ (195,521)	\$ (144,021)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Gain on extinguishment of debt	(4,948)	—	—
Gain on cost method investments	—	(7,249)	—
Change in fair value of embedded redemption feature	(2,510)	(2,800)	6,600
Change in fair value of contingent consideration	(13,807)	—	—
Depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements	42,789	60,154	59,099
Share-based compensation costs	35,560	37,930	32,394
Amortization of intangible assets	127,018	95,927	74,497
Provision for inventory excess and obsolescence	13,696	17,334	23,438
Provision for warranty	15,353	18,451	33,418
Other	3,570	5,541	7,122
Changes in assets and liabilities, net of effect of acquisition:			
Accounts receivable	(218,196)	(75,623)	70,366
Inventories	(40,957)	14,209	(53,460)
Prepaid expenses and other	(34,908)	(18,302)	1,748
Accounts payable, accruals and other obligations	180,814	(59,285)	12,610
Deferred revenue	1,030	18,749	(16,722)
Net cash provided by (used in) operating activities	<u>(229,010)</u>	<u>(90,485)</u>	<u>107,089</u>
Cash flows used in investing activities:			
Payments for equipment, furniture, fixtures and intellectual property	(51,207)	(52,367)	(48,098)
Restricted cash	(24,521)	10,751	35,597
Purchase of available for sale securities	(63,591)	(49,892)	—
Proceeds from maturities of available for sale securities	454,141	—	—
Proceeds from sales of available for sale securities	179,531	—	—
Proceeds from sale of cost method investment	—	6,544	524
Acquisition of business, net of cash acquired	(693,247)	—	—
Receipt of contingent consideration related to business acquisition	—	16,394	—
Net cash used in investing activities	<u>(198,894)</u>	<u>(68,570)</u>	<u>(11,977)</u>
Cash flows from financing activities:			
Proceeds from issuance of senior convertible notes payable	725,000	—	—
Repayment of capital lease obligations	—	—	(1,895)
Repayment of senior convertible notes payable	(76,065)	—	—
Debt issuance costs	(20,301)	—	(2,332)
Proceeds from issuance of common stock	1,570	13,202	12,167
Net cash provided by financing activities	<u>630,204</u>	<u>13,202</u>	<u>7,940</u>
Effect of exchange rate changes on cash and cash equivalents	682	(938)	(2,504)
Net increase (decrease) in cash and cash equivalents	202,982	(146,791)	100,548
Cash and cash equivalents at beginning of period	485,705	688,687	541,896
Cash and cash equivalents at end of period	<u>\$ 688,687</u>	<u>\$ 541,896</u>	<u>\$ 642,444</u>
Supplemental disclosure of cash flow information			
Cash paid during the period for interest	\$ 12,248	\$ 32,931	\$ 33,511
Cash paid during the period for income taxes, net	\$ 1,705	\$ 3,204	\$ 9,603
Non-cash investing and financing activities			
Purchase of equipment in accounts payable	\$ 5,259	\$ 6,431	\$ 5,202
Debt issuance costs in accrued liabilities	\$ 206	\$ —	\$ 319
Fixed assets purchased under capital leases	\$ —	\$ 1,106	\$ 6,736

The accompanying notes are an integral part of these consolidated financial statements.

CIENA CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) CIENA CORPORATION AND SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES

Description of Business

Ciena Corporation (“Ciena” or the “Company”) is a provider of communications networking equipment, software and services that support the transport, switching, aggregation and management of voice, video and data traffic. Ciena’s Packet-Optical Transport, Packet-Optical Switching and Carrier-Ethernet Solutions products are used, individually or as part of an integrated solution, in networks operated by communications service providers, cable operators, governments and enterprises around the globe. Ciena is a network specialist targeting the transition of disparate, legacy communications networks to converged, next-generation architectures, better able to handle increased traffic and deliver more efficiently a broader mix of high-bandwidth communications services. Ciena’s products, along with its embedded, network element software and unified service and transport management, enable service providers to efficiently and cost-effectively deliver critical enterprise and consumer-oriented communication services. Ciena’s principal executive offices are located at 7035 Ridge Road, Hanover, Maryland 21076.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Ciena and its wholly owned subsidiaries. All material inter-company accounts and transactions have been eliminated in consolidation.

Acquisition of MEN Business (“MEN Acquisition”)

On March 19, 2010, Ciena completed its acquisition of substantially all of the optical and carrier Ethernet assets of Nortel’s Metro Ethernet Networks Business (the “MEN Business”). Additional details regarding this transaction are set forth in Note 2 below.

Business Combinations

Ciena records business combinations such that the total purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values. The fair values assigned to the assets acquired and liabilities assumed are based on valuations using management’s best estimates and assumptions. The allocation of the purchase price as reflected in the consolidated financial statements is based on the best information available to management at the time the consolidated financial statements are issued.

Fiscal Year

Ciena has a 52 or 53 week fiscal year, which ends on the Saturday nearest to the last day of October in each year (October 30, 2010, October 29, 2011, and November 3, 2012 for the periods reported). Fiscal 2010 and fiscal 2011 consisted of a 52 week fiscal year and fiscal 2012 consisted of a 53 week fiscal year. For purposes of financial statement presentation, each fiscal year is described as having ended on October 31.

During fiscal 2012, Ciena recorded out of period adjustments that increased its revenue by \$6.8 million and decreased pre-tax loss by \$5.2 million. These adjustments related to errors in the timing of recognition of revenue, for which all required criteria had been satisfied in prior periods. Specifically, revenues for fiscal 2010 and fiscal 2011 were understated by \$1.4 million and \$5.4 million, respectively. Ciena has determined that these adjustments were not material to any prior annual or interim periods, and the resulting correction is not material to its annual results for fiscal 2012.

Use of Estimates

The preparation of the financial statements and related disclosures in conformity with accounting principles generally accepted in the United States requires management to make estimates and judgments that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates are used for selling prices for multiple element arrangements, shared-based compensation, purchase accounting, bad debts, valuation of inventories and investments, recoverability of intangible assets and other long-lived assets, income taxes, warranty obligations, restructuring liabilities, derivatives, 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 3 months or less to be cash equivalents. Restricted cash collateralizing letters of credit is included in other current assets and other long-term assets depending upon the expected duration of the underlying letter of credit.

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. Ciena recognizes losses when it determines that declines in the fair value of its investments, below their cost basis, are 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 its 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. All others are considered long-term investments.

At the end of fiscal 2010, Ciena owned a minority equity investment in a privately held technology company. This investment was carried at cost because Ciena did not have the ability to exercise significant influence over the company. During fiscal 2011, as a result of the sale of this privately held technology company, Ciena recorded a gain of \$7.2 million.

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 performance and allocates resources based on multiple factors, including segment profit (loss) information for the following product categories: (i) Packet-Optical Transport; (ii) Packet-Optical Switching; (iii) Carrier-Ethernet Solutions; and (iv) Software and Services. Operating segments are defined as components of an enterprise: that engage in business activities which 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 four product categories above to be its operating segments for reporting purposes. See Note 19 below.

Long-lived Assets

Long-lived assets include: equipment, 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 assets' 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 which represent the lowest level for which cash flows can be identified.

Equipment, Furniture and Fixtures

Equipment, 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, furniture and fixtures and the shorter of useful life or lease term for leasehold improvements.

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.

Maintenance Spares

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

Concentrations

Substantially all of Ciena's invested cash and cash equivalents are maintained at a small number of major U.S. financial institutions or in large, liquid money market funds. Deposits held with banks may exceed the amount of insurance provided on such deposits. Generally, these deposits may be redeemed upon demand and, therefore, 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 19 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 their 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 and forecast future demand, or if they fail to deliver products or components on time, Ciena's business and results of operations may be affected.

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 generally deferred and recognized ratably over the period during which the services are to be performed. Shipping and handling fees billed to customers are included in revenue, with the associated expenses included in product cost of goods sold.

Ciena applies the percentage of completion method to long-term arrangements where it is required to undertake significant production, customizations or modification engineering, and reasonable and reliable estimates of revenue and cost are available. Utilizing the percentage of completion method, Ciena recognizes revenue based on the ratio of actual costs incurred to date to total estimated costs expected to be incurred. In instances that do not meet the percentage of completion method criteria, recognition of revenue is deferred until there are no uncertainties regarding customer acceptance.

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 is 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.

Accounting for multiple element arrangements entered into prior to fiscal 2011

Arrangements with customers may include multiple deliverables, including any combination of equipment, services and software. If multiple element arrangements include software or software-related elements that are essential to the equipment, Ciena allocates the arrangement fee among separate units of accounting. Multiple element arrangements that include software are separated into more than one unit of accounting if the functionality of the delivered element(s) is not dependent on the undelivered element(s), there is vendor-specific objective evidence ("VSOE") of the fair value of the undelivered element(s), and general revenue recognition criteria related to the delivered element(s) have been met. The amount of product and services revenue recognized is affected by Ciena's judgment as to whether an arrangement includes multiple elements and, if so, whether VSOE of fair value exists. VSOE is established based on Ciena's standard pricing and discounting practices for the specific product or service when sold separately. In determining VSOE, Ciena requires that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. Changes to the elements in an arrangement and Ciena's ability to establish VSOE for those elements could affect the timing of revenue recognition. For all other multiple element arrangements, Ciena separates the elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, objective and reliable evidence of fair value exists for the undelivered element(s), and delivery of the undelivered element(s) is probable and substantially in Ciena's control. Revenue is allocated to each unit of accounting based on the relative fair value of each accounting unit or using the residual method if objective evidence of fair value does not exist for the delivered element(s). The revenue recognition criteria described above are applied to each separate unit of accounting. If these criteria are not met, revenue is deferred until the criteria are met or the last element has been delivered.

Accounting for multiple element arrangements entered into or materially modified after fiscal 2010

In October 2009, the Financial Accounting Standards Board ("FASB") amended the accounting standard for revenue recognition with multiple deliverables which provided guidance on how the arrangement fee should be allocated and allows the use of management's best estimate of selling price ("BESP") for individual elements of an arrangement when VSOE or third-

party evidence (“TPE”) is unavailable. Additionally, it eliminates the residual method of revenue recognition in accounting for multiple deliverable arrangements. The FASB also amended the accounting guidance for revenue arrangements with software elements to exclude from the scope of the software revenue recognition guidance, tangible products that contain both software and non-software components that function together to deliver the product's essential functionality.

Ciena adopted the new accounting guidance on a prospective basis for arrangements entered into or materially modified on or after November 1, 2010. Under the new guidance, Ciena separates elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, and delivery of the undelivered element(s) is probable and substantially in Ciena's control. Therefore, the new guidance allows for deliverables, for which revenue was previously deferred due to an absence of fair value, to be separated and recognized as revenue as delivered. Also, because the residual method has been eliminated, discounts offered by Ciena are allocated to all deliverables, rather than to the delivered element(s). Ciena's adoption of the new guidance for revenue arrangements changed the accounting for certain Ciena products that consist of hardware and software components, in which these components together provided the product's essential functionality. For arrangements involving these products entered into prior to fiscal 2011, Ciena recognized revenue based on software revenue recognition guidance.

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 when the revenue recognition criteria are met for each delivered element. Ciena determines the selling price for each deliverable based upon the selling price hierarchy for multiple-deliverable arrangements. Under this hierarchy, Ciena uses VSOE of selling price, if it exists, or TPE of selling price if VSOE does not exist. If neither VSOE nor TPE of selling price exists for a deliverable, Ciena uses its BEBP for that deliverable.

VSOE is established based on Ciena's standard pricing and discounting practices for the specific product or service when sold separately. In determining VSOE, which exists across certain of Ciena's service offerings, Ciena requires that a substantial majority of the selling prices for a product or service fall 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 BEBP 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.

Historically, for arrangements with multiple elements, Ciena was typically able to establish fair value for undelivered elements and so Ciena applied the residual method. As a result, assuming the adoption of the accounting guidance above on a prospective basis for arrangements entered into or materially modified on or after November 1, 2009, the effect on revenue recognized for fiscal 2010 would have been an increase of approximately \$33.0 million.

Warranty Accruals

Ciena provides for the estimated costs to fulfill customer warranty obligations upon the recognition of the related revenue. Estimated warranty costs include estimates for material costs, technical support labor costs and associated overhead. The warranty liability is included in cost of goods sold and 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 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 its customers. 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 such customer. If a customer's financial condition changes, Ciena may be required to record an allowance for doubtful accounts, which would 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, cost of prototype equipment, consulting and third party services, depreciation, facility costs and information technology.

Government Grants

Ciena accounts for proceeds from government grants as a reduction of operating expense when there is reasonable assurance that Ciena has complied with the conditions attached to the grant and that the grant proceeds will be received. Grant benefits are recorded to the line item in the Consolidated Statement of Operations to which the grant activity relates. See Note 21 below.

Advertising Costs

Ciena expenses all advertising costs as incurred.

Legal Costs

Ciena expenses legal costs associated with litigation defense 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 based on the fair value of the underlying common stock on the date of grant. In each case, Ciena only recognizes expense to its consolidated statement of operations for those options or shares 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 its determination of whether it is probable that the performance targets will be achieved. At each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets. Ciena uses the straight-line method to record expense for grants with only service-based vesting. See Note 18 below.

Income Taxes

Ciena accounts for income taxes using an asset and liability approach that 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 2007 and 2008 and in the United Kingdom for 2009. Management does not expect the outcome of these audits to have a material adverse effect on the Company's consolidated financial position, result of operations or cash flows. Ciena's major tax jurisdictions and the earliest open tax years are as follows: United States (2009), United Kingdom (2007), Canada (2006) and India (2007). However, limited adjustments can be made to Federal 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. All of the uncertain tax positions, if recognized, would decrease the effective income tax rate.

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 permanently 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 any 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 tax law "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 reasonably estimate the amount of loss, 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, see Note 13 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;

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 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 implements these restructuring plans and generally incurs the associated liability concurrently. Generally accepted accounting principles require that a liability for the cost associated with an exit or disposal activity be recognized in the period in which the liability is incurred, except for one-time employee termination benefits related to a service period of more than 60 days, which are accrued over the service period. See Note 3 below.

Foreign Currency

Some of Ciena's foreign branch offices and subsidiaries use the U.S. dollar as their functional currency because Ciena, 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 other income. The net gain (loss) on foreign currency re-measurement and exchange rate changes is immaterial for separate financial statement presentation.

Derivatives

Ciena's 4.0% convertible senior notes include a redemption feature that is accounted for as a separate embedded derivative. The embedded redemption feature is recorded at fair value on a recurring basis, and these changes are included in interest and other income, net on the Consolidated Statement of Operations.

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 twelve months or less and are designated as cash flow hedges. At the inception of the cash flow hedge, and on an ongoing basis, Ciena assesses whether the forward contract 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 the occurrence of the forecasted transaction, is subsequently reclassified to the line item in the 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.

During fiscal 2012, Ciena entered into forward contracts to reduce the variability in its Canadian Dollar and Indian Rupee denominated expense, which principally relate to research and development activities. These derivative contracts have been designated as cash flow hedges and are immaterial for separate financial statement presentation.

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 15.

Software Development Costs

Ciena develops software for sale to its customers. Generally accepted accounting principles require 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 costs qualifying for capitalization have been insignificant. Accordingly, Ciena has not capitalized any software development costs.

Newly Issued Accounting Standards

In May 2011, the FASB issued an accounting standards update that amends current fair value measurement and disclosure guidance to converge with International Financial Reporting Standards (IFRS). This update provides improved comparability of fair value measurements presented and disclosed in financial statements prepared in accordance with U.S. GAAP and IFRS. This guidance is effective for fiscal years and interim periods beginning after December 15, 2011. Early application by public companies is not permitted. Ciena will adopt this guidance in fiscal 2013 and does not expect this new guidance to have any impact on its financial condition, results of operations and cash flows.

In June 2011, the FASB issued an accounting standards update that requires an entity to present total comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements and eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity. In December 2011, the portion of this guidance related to the presentation of the reclassifications of items out of accumulated other comprehensive income was deferred. The remainder of this guidance is effective for fiscal years and interim periods beginning after December 15, 2011. Early adoption is permitted. Ciena will adopt this guidance in fiscal 2013 and does not expect this new guidance to have any impact on its financial condition, results of operations and cash flows.

(2) BUSINESS COMBINATIONS

Acquisition of MEN Business

On March 19, 2010, Ciena completed its acquisition of the MEN Business. Ciena acquired the MEN Business in an effort to strengthen its technology leadership position in next-generation, converged optical Ethernet networking, accelerate the execution of its corporate and research and development strategies and enable Ciena to better compete with larger equipment vendors. The acquisition expanded Ciena's geographic reach, customer relationships, and portfolio of network solutions.

In accordance with the agreements for the acquisition, the \$773.8 million aggregate purchase price was subsequently adjusted downward by \$80.6 million based upon the amount of net working capital transferred to Ciena at closing. As a result, Ciena paid \$693.2 million in cash for the purchase of the MEN Business.

In connection with the acquisition, Ciena entered into an agreement with Nortel to lease the "Lab 10" building on Nortel's Carling Campus in Ottawa, Canada (the "Carling lease") for a term of ten years. The lease agreement contained a provision that allowed Nortel to reduce the term of the lease, and, in exchange, Ciena could receive a payment of up to \$33.5 million. This amount was placed into escrow by Nortel in accordance with the acquisition agreements. The \$16.4 million fair value of this contingent refund right was recorded as a reduction to the consideration paid, resulting in a purchase price of \$676.8 million.

On October 19, 2010, Nortel issued a public announcement that it had entered into a sale agreement of its Carling campus with Publics Works and Government Services Canada (PWGSC) and had been directed to exercise its early termination rights under the Carling lease, shortening the lease term from ten years to five years. As a result, and based on this change in circumstances and expected outcome probability, during the fourth quarter of fiscal 2010 Ciena recorded an unrealized gain of \$13.8 million resulting in a fair value of \$30.2 million for the contingent consideration right. During the first quarter of fiscal 2011, Ciena received notice of early termination from Nortel and the corresponding \$33.5 million payment described above, resulting in a gain of \$3.3 million.

During fiscal 2010, Ciena incurred \$101.4 million in transaction, consulting and third party service fees, \$8.5 million in restructuring expense, and an additional \$12.4 million in costs primarily related to purchases of capitalized information technology equipment. During fiscal 2011, Ciena incurred \$42.1 million in transaction, consulting and third party service fees, \$6.6 million in restructuring expense, and an additional \$10.9 million in costs primarily related to purchases of capitalized information technology equipment. This integration activity was substantially completed in the first half of fiscal 2011.

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

	Final Allocation
Unbilled receivables	\$ 7,136
Inventories	146,272
Prepaid expenses and other	32,517
Other long-term assets	21,924
Equipment, furniture and fixtures	41,213
Developed technology	218,774
In-process research and development	11,000
Customer relationships, outstanding purchase orders and contracts	260,592
Trade name	2,000
Deferred revenue	(28,086)
Accrued liabilities	(33,845)
Other long-term obligations	(2,644)
Total purchase price allocation	<u>\$ 676,853</u>

Unbilled receivables represent unbilled claims for which Ciena, subsequent to the effective date of the MEN Acquisition date, invoiced customers upon completion of the acquired projects.

Under the acquisition method of accounting, Ciena recorded the acquired finished goods inventory at fair value, which was determined to be most appropriately recognized as the estimated selling price less the sum of (a) costs of disposal, and (b) a reasonable profit allowance for Ciena's selling effort.

Prepaid expenses and other include product demonstration units used to support research and development projects and indemnification assets related to uncertain tax contingencies acquired and recorded as part of other long-term obligations. Other long-term assets represent spares used to support customer maintenance commitments.

Developed technology represents purchased technology that had reached technological feasibility and for which development had been completed as of the date of the acquisition. Developed technology will be amortized on a straight line basis over its estimated useful lives of two to seven years.

In-process research and development represents development projects that had not reached technological feasibility at the time of the acquisition. This in-process research and development was completed during the fourth quarter of fiscal 2010 and is being amortized over a period of seven years. Expenditures to complete the in-process research and development were expensed as incurred.

Customer relationships, outstanding purchase orders and contracts represent agreements with existing customers of the MEN Business. These intangible assets are expected to have estimated useful lives of nine months to seven years, with the exception of \$14.6 million related to a contract asset for acquired in-process projects, which was subsequently billed by Ciena and recognized as a reduction in revenue. Trade name represents acquired product trade names that are expected to have a useful life of nine months.

Deferred revenue represents obligations assumed by Ciena to provide maintenance support services for which payment for such services had already been made to Nortel.

Accrued liabilities represent assumed warranty obligations, other customer contract obligations, and certain employee benefit plans. Other long-term obligations represent uncertain tax contingencies.

The following unaudited pro forma financial information summarizes the results of operations for the period indicated as if Ciena's acquisition of the MEN Business had been completed as of the beginning of the period presented. These pro forma amounts (in thousands) do not purport to be indicative of the results that would have actually been obtained if the acquisition occurred as of the beginning of the period presented or that may be obtained in the future.

	Fiscal Year
	2010
Pro forma revenue	<u>\$ 1,592,911</u>
Pro forma net loss	<u>\$ (536,253)</u>

(3) RESTRUCTURING COSTS

Ciena has undertaken a number of restructuring activities intended to reduce expense and better align its workforce and costs with market opportunities, product development and business strategies. The following table displays the activity and balances of the historical restructuring liability accounts for the fiscal years indicated (in thousands):

	Workforce reduction	Consolidation of excess facilities	Total
Balance at October 31, 2009	\$ 170	\$ 9,435	\$ 9,605
Additional liability recorded	9,256 (a)	—	9,256
Adjustment to previous estimates	—	(742) (a)	(742)
Cash payments	(7,850)	(2,301)	(10,151)
Balance at October 31, 2010	<u>1,576</u>	<u>6,392</u>	<u>7,968</u>
Additional liability recorded	6,627 (b)	—	6,627
Adjustment to previous estimates	—	(846) (b)	(846)
Cash payments	(8,043)	(2,253)	(10,296)
Balance at October 31, 2011	<u>160</u>	<u>3,293</u>	<u>3,453</u>
Additional liability recorded	5,484 (c)	2,370 (c)	7,854
Adjustment to previous estimates	—	—	—
Cash payments	(4,195)	(2,063)	(6,258)
Balance at October 31, 2012	<u>\$ 1,449</u>	<u>\$ 3,600</u>	<u>\$ 5,049</u>
Current restructuring liabilities	<u>\$ 1,449</u>	<u>\$ 2,067</u>	<u>\$ 3,516</u>
Non-current restructuring liabilities	<u>\$ —</u>	<u>\$ 1,533</u>	<u>\$ 1,533</u>

- (a) During fiscal 2010, Ciena recorded a charge of \$2.1 million related to a workforce reduction of approximately 70 employees, principally affecting Ciena's global product group and global field organization outside of the EMEA region and \$7.1 million related to a workforce reduction of 82 employees associated with the restructuring activities in the EMEA region described above and an adjustment of \$0.7 million associated with previously restructured facilities.

- (b) During fiscal 2011, Ciena recorded a charge of \$6.6 million of severance and other employee-related costs associated with a workforce reduction of approximately 150 employees related to a number of restructuring activities intended to reduce operating expense and better align its workforce with market opportunities. Ciena also recorded an adjustment of \$0.8 million related to its previous restructured Acton, Massachusetts facility.
- (c) During fiscal 2012, Ciena recorded a charge of \$5.5 million of severance and other employee-related costs associated with a workforce reduction of approximately 135 employees related to a number of restructuring activities intended to reduce operating expense and better align its workforce with market opportunities. Ciena also recorded an adjustment of \$2.4 million related to its consolidation of several facilities in the Linthicum, Maryland area.

(4) LONG-LIVED ASSET IMPAIRMENTS

Due to the reorganization as a result of the MEN Acquisition, Ciena performed an impairment analysis of its long-lived assets during the second quarter of fiscal 2010. Based on Ciena's estimate of future undiscounted cash flows by asset group, no impairment was required. Due to the lack of a triggering event, no impairment analysis was performed in fiscal 2011 or 2012.

(5) SHORT-TERM AND LONG-TERM INVESTMENTS

As of October 31, 2011, long-term investments are comprised of the following (in thousands):

	October 31, 2011			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
US government obligations	\$ 49,933	\$ 331	\$ —	\$ 50,264
	<u>\$ 49,933</u>	<u>\$ 331</u>	<u>\$ —</u>	<u>\$ 50,264</u>

As of October 31, 2012, short-term investments have final legal maturities of less than one year and are comprised of the following (in thousands):

	October 31, 2012			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
US government obligations	\$ 49,987	\$ 70	\$ —	\$ 50,057
	<u>\$ 49,987</u>	<u>\$ 70</u>	<u>\$ —</u>	<u>\$ 50,057</u>

(6) FAIR VALUE MEASUREMENTS

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

	October 31, 2011			
	Level 1	Level 2	Level 3	Total
Assets:				
U.S government obligations	\$ 50,264	\$ —	\$ —	\$ 50,264
Embedded redemption feature	—	—	7,020	7,020
Total assets measured at fair value	<u>\$ 50,264</u>	<u>\$ —</u>	<u>\$ 7,020</u>	<u>\$ 57,284</u>

	October 31, 2012			
	Level 1	Level 2	Level 3	Total
Assets:				
U.S. government obligations	\$ 50,057	\$ —	\$ —	\$ 50,057
Embedded redemption feature	—	—	420	420
Total assets measured at fair value	<u>\$ 50,057</u>	<u>\$ —</u>	<u>\$ 420</u>	<u>\$ 50,477</u>

As of the dates indicated, the assets above were presented on Ciena's Consolidated Balance Sheet as follows (in thousands):

	October 31, 2011			
	Level 1	Level 2	Level 3	Total
Assets:				
Long-term investments	\$ 50,264	\$ —	\$ —	\$ 50,264
Other long-term assets	—	—	7,020	7,020
Total assets measured at fair value	<u>\$ 50,264</u>	<u>\$ —</u>	<u>\$ 7,020</u>	<u>\$ 57,284</u>

	October 31, 2012			
	Level 1	Level 2	Level 3	Total
Assets:				
Short-term investments	\$ 50,057	\$ —	\$ —	\$ 50,057
Other long-term assets	—	—	420	420
Total assets measured at fair value	<u>\$ 50,057</u>	<u>\$ —</u>	<u>\$ 420</u>	<u>\$ 50,477</u>

Ciena's Level 3 assets included in other long-term assets reflect an embedded redemption feature contained within Ciena's 4.0% convertible senior notes. See Note 13 below. The embedded redemption feature is bifurcated from Ciena's 4.0% convertible senior notes using the "with-and-without" approach. As such, the total value of the embedded redemption feature is calculated as the difference between the value of the 4.0% convertible senior notes (the "Hybrid Instrument") and the value of an identical instrument without the embedded redemption feature (the "Host Instrument"). Both the Host Instrument and the Hybrid Instrument are valued using a modified binomial model. The modified binomial model utilizes a risk free interest rate, an implied volatility of Ciena's stock, the recovery rates of bonds and the implied default intensity of the 4.0% convertible senior notes.

As of the dates indicated, the following table sets forth, in thousands, the reconciliation of changes in Level 3 assets recorded at fair value:

	Level 3
Balance at October 31, 2011	\$ 7,020
Issuances	—
Settlements	—
Changes in unrealized gain	(6,600)
Transfers into Level 3	—
Transfers out of Level 3	—
Balance at October 31, 2012	<u>\$ 420</u>

(7) ACCOUNTS RECEIVABLE

Ciena has not historically experienced a significant amount of bad debt expense. The following table summarizes the activity in Ciena's allowance for doubtful accounts for the fiscal years indicated (in thousands):

Year ended October 31,	Balance at beginning of period	Provisions	Net Deductions	Balance at end of period
2010	\$ 116	\$ 1	\$ —	\$ 117
2011	\$ 117	\$ 1,696	\$ 1,112	\$ 701
2012	\$ 701	\$ 1,647	\$ 848	\$ 1,500

(8) INVENTORIES

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

	October 31,	
	2011	2012
Raw materials	\$ 45,333	\$ 39,678
Work-in-process	13,851	10,736
Finished goods	134,998	178,210
Deferred cost of goods sold	67,665	71,484
	261,847	300,108
Provision for excess and obsolescence	(31,771)	(40,010)
	<u>\$ 230,076</u>	<u>\$ 260,098</u>

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 market value based on assumptions about future demand and market conditions. During fiscal 2010 and fiscal 2011, recorded provisions for inventory reserves were primarily related to changes in forecasted sales for certain products. During fiscal 2012, recorded provisions for inventory reserves were primarily related to engineering design changes and the discontinuance of certain parts and components used in the manufacture of our Packet-Optical Transport and Packet-Optical Switching products. Deductions from the provision for excess and obsolete inventory relate to disposal activities.

The following table summarizes the activity in Ciena's reserve for excess and obsolete inventory for the fiscal years indicated (in thousands):

Year ended October 31,	Balance at beginning of period	Provisions	Disposals	Balance at end of period
2010	\$ 24,002	\$ 13,696	\$ 6,931	\$ 30,767
2011	\$ 30,767	\$ 17,334	\$ 16,330	\$ 31,771
2012	\$ 31,771	\$ 23,438	\$ 15,199	\$ 40,010

(9) PREPAID EXPENSES AND OTHER

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

	October 31,	
	2011	2012
Prepaid VAT and other taxes	\$ 44,969	\$ 37,806
Deferred deployment expense	17,839	19,449
Product demonstration equipment, net	46,996	33,144
Prepaid expenses	14,769	16,477
Restricted cash	12,533	2,030
Other non-trade receivables	6,251	8,689
	<u>\$ 143,357</u>	<u>\$ 117,595</u>

Depreciation of product demonstration equipment was \$4.3 million, \$9.7 million and \$7.8 million for fiscal 2010, 2011 and 2012, respectively.

(10) EQUIPMENT, FURNITURE AND FIXTURES

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

	October 31,	
	2011	2012
Equipment, furniture and fixtures	\$ 396,310	\$ 422,118
Leasehold improvements	50,380	61,493
	<u>446,690</u>	<u>483,611</u>
Accumulated depreciation and amortization	(324,132)	(360,031)
	<u>\$ 122,558</u>	<u>\$ 123,580</u>

During fiscal 2010, fiscal 2011 and fiscal 2012, Ciena recorded depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements of \$38.5 million, \$50.5 million and \$51.3 million, respectively.

(11) INTANGIBLE ASSETS

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

	October 31,					
	2011			2012		
	Gross Intangible	Accumulated Amortization	Net Intangible	Gross Intangible	Accumulated Amortization	Net Intangible
Developed technology	\$ 417,833	\$ (234,393)	\$ 183,440	\$ 417,833	\$ (279,195)	\$ 138,638
Patents and licenses	46,538	(45,320)	1,218	46,538	(45,566)	972
Customer relationships, covenants not to compete, outstanding purchase orders and contracts	323,573	(176,596)	146,977	323,573	(206,046)	117,527
Total intangible assets	<u>\$ 787,944</u>	<u>\$ (456,309)</u>	<u>\$ 331,635</u>	<u>\$ 787,944</u>	<u>\$ (530,807)</u>	<u>\$ 257,137</u>

The aggregate amortization expense of intangible assets was \$127.0 million, \$95.9 million and \$74.5 million for fiscal 2010, fiscal 2011 and fiscal 2012, respectively. Expected future amortization of intangible assets for the fiscal years indicated is as follows (in thousands):

	Year Ended October 31,
2013	\$ 71,309
2014	57,151
2015	52,879
2016	52,879
2017	22,783
Thereafter	136
	<u>\$ 257,137</u>

(12) OTHER BALANCE SHEET DETAILS

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

	October 31,	
	2011	2012
Maintenance spares inventory, net	\$ 50,442	\$ 57,548
Deferred debt issuance costs, net	23,481	20,575
Embedded redemption feature	7,020	420
Restricted cash	27,507	2,413
Other	5,673	3,780
	<u>\$ 114,123</u>	<u>\$ 84,736</u>

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 related debt. Amortization of debt issuance costs related to our convertible notes payable, which is included in interest expense, was \$3.8 million, \$5.3 million and \$5.3 million for fiscal 2010, fiscal 2011 and fiscal 2012, respectively.

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

	October 31,	
	2011	2012
Warranty	\$ 47,282	\$ 55,132
Compensation, payroll related tax and benefits	51,808	48,885
Vacation	27,808	29,581
Current restructuring liabilities	664	3,516
Interest payable	4,248	4,404
Other	65,194	68,022
	<u>\$ 197,004</u>	<u>\$ 209,540</u>

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

Year ended	Beginning				Balance at end
October 31,	Balance	Acquired	Provisions	Settlements	of period
2010	\$ 40,196	\$ 24,041	\$ 15,353	\$ 25,218	\$ 54,372
2011	\$ 54,372	\$ —	\$ 18,451	\$ 25,541	\$ 47,282
2012	\$ 47,282	\$ —	\$ 33,418	\$ 25,568	\$ 55,132

As a result of the substantial completion of integration activities related to the MEN Business, Ciena consolidated certain support operations and processes during fiscal 2011, resulting in a reduction in costs to service future warranty obligations. As a result of the lower expected costs, Ciena reduced its warranty liability by \$6.9 million, which had the effect of reducing the provisions in the table above. The increase in fiscal 2012 warranty provision was driven primarily by sales that included longer-term support obligations and technical support requirements from additional geographies.

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

	October 31,	
	2011	2012
Products	\$ 42,915	\$ 29,279
Services	80,883	77,797
	<u>123,798</u>	<u>107,076</u>
Less current portion	(99,373)	(79,516)
Long-term deferred revenue	<u>\$ 24,425</u>	<u>\$ 27,560</u>

(13) CONVERTIBLE NOTES PAYABLE

Outstanding Convertible Notes Payable

Ciena has four issuances of convertible notes payable outstanding. The notes are senior unsecured obligations of Ciena and rank equally with all of Ciena's other existing and future senior unsecured debt. The indentures governing Ciena's notes provide for customary events of default which include (subject in certain cases to customary grace and cure periods), among others, the following: nonpayment of principal or interest; breach of covenants or other agreements in the indenture; defaults in or failure to pay certain other indebtedness; and certain events of bankruptcy or insolvency. Generally, if an event of default occurs and is continuing, the trustee or the holders of at least 25% in aggregate principal amount of the notes may declare the principal of, accrued interest on, and premium, if any, on all the notes immediately due and payable. Under the indentures, if Ciena undergoes a "fundamental change" (as that term is defined in the indenture governing the notes to include certain change in control transactions), holders of notes will have the right, subject to certain exemptions, to require Ciena to purchase for cash any or all of their notes at a price equal to the principal amount, plus accrued interest. If the holder elects to convert his or her notes in connection with a specified fundamental change, in certain circumstances, Ciena will be required to increase the applicable conversion rate, depending on the price paid per share for Ciena common stock and the effective date of the fundamental change transaction.

0.25% Convertible Senior Notes due May 1, 2013

On April 10, 2006, Ciena completed a public offering of 0.25% convertible senior notes due May 1, 2013, in aggregate principal amount of \$300.0 million. Interest is payable on May 1 and November 1 of each year.

At the election of the holder, notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 25.3001 shares per \$1,000 in principal amount, which is equivalent to an initial conversion price of \$39.5255 per share. The notes may be redeemed by Ciena if the closing sale price of Ciena's common stock for at least 20 trading days in any 30 consecutive trading day period ending on the date one day prior to the date of the notice of redemption exceeds 130% of the conversion price. Ciena may redeem the notes in whole or in part, at a redemption price in cash equal to the principal amount to be redeemed, plus accrued and unpaid interest.

Ciena used approximately \$28.5 million of the net proceeds of this offering to purchase a call spread option on its common stock that is intended to limit exposure to potential dilution from the conversion of the notes. See Note 16 below for a description of this call spread option.

During the fourth quarter of fiscal 2010, Ciena repurchased \$81.8 million in aggregate principal amount of its outstanding 0.25% convertible senior notes in privately negotiated transactions, which resulted in a gain of approximately \$4.9 million. As of October 31, 2012, the outstanding principal on these notes was \$216.2 million.

4.0% Convertible Senior Notes, due March 15, 2015

On March 15, 2010, Ciena completed a private placement of 4.0% convertible senior notes due March 15, 2015, in aggregate principal amount of \$375.0 million. Interest is payable on the notes on March 15 and September 15 of each year, beginning on September 15, 2010.

At the election of the holder, the notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 49.0557 shares per \$1,000 in principal amount, which is equivalent to an initial conversion price of approximately \$20.38 per share. The notes may be redeemed by Ciena on or after March 15, 2013 if the closing sale price of Ciena's common stock for at least 20 trading days in any 30 consecutive trading day period ending on the date one day prior to the date of the notice of redemption exceeds 150% of the conversion price. Ciena may redeem the notes in whole or in part, at a redemption price in cash equal to the principal amount to be redeemed, plus accrued and unpaid interest, including any additional interest to, but excluding, the redemption date, plus a make-whole premium payment. The "make whole premium" payment will be made in cash and equal the present value of the remaining interest payments, to maturity, computed using a discount rate equal to 2.75%. The make-whole premium is paid to holders whether or not they convert the notes following Ciena's issuance of a redemption notice. For accounting purposes, this redemption feature is an embedded derivative that is not clearly and closely related to the notes. Consequently, it was initially bifurcated from the indenture and separately recorded at its fair value as an asset with subsequent changes in fair value recorded through earnings. As of October 31, 2012, the fair value of the embedded redemption feature was \$0.4 million and is included in other long-term assets on the Consolidated Balance Sheet. Changes in fair value of the embedded redemption feature in the amount of \$6.6 million are reflected as interest and other income (loss), net in the Consolidated Statement of Operations during fiscal 2012.

The net proceeds from the offering of the notes were \$364.3 million after deducting the placement agents' fees and other fees and expenses. Ciena used \$243.8 million of this amount to fund its payment election to replace its contractual obligation to issue convertible notes to Nortel as part of the aggregate purchase price for the acquisition of the MEN Business. The remaining proceeds were used to reduce the cash on hand required to fund the aggregate purchase price of the MEN Business. See Note 2 above.

0.875% Convertible Senior Notes due June 15, 2017

On June 11, 2007, Ciena completed a public offering of 0.875% convertible senior notes due June 15, 2017, in aggregate principal amount of \$500.0 million. Interest is payable on June 15 and December 15 of each year, beginning on December 15, 2007.

At the election of the holder, notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 26.2154 shares per \$1,000 in principal amount, which is equivalent to an initial conversion price of approximately \$38.15 per share. The notes are not redeemable by Ciena prior to maturity.

Ciena used approximately \$42.5 million of the net proceeds of this offering to purchase a call spread option on its common stock that is intended to limit exposure to potential dilution from conversion of the notes. See Note 16 below for a description of this call spread option.

3.75% Convertible Senior Notes, due October 15, 2018

On October 18, 2010, Ciena completed a private placement of 3.75% convertible senior notes due October 15, 2018, in aggregate principal amount of \$350.0 million. Interest is payable on the notes on April 15 and October 15 of each year, beginning on April 15, 2011.

At the election of the holder, the notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 49.5872 shares per \$1,000 in principal amount, which is equivalent to an initial conversion price of approximately \$20.17 per share.

The net proceeds from the offering were approximately \$340.4 million after deducting the placement agents' fees and other fees and expenses. Ciena used \$76.1 million of the net proceeds to effect the repurchase of its 0.25% convertible senior notes due 2013 described above.

The following table sets forth, in thousands, the carrying value and the estimated current fair value of Ciena's outstanding convertible notes:

Description	October 31, 2012	
	Carrying Value	Fair Value
0.25% Convertible Senior Notes due May 1, 2013	\$ 216,210	\$ 213,237
4.0% Convertible Senior Notes, due March 15, 2015 ⁽¹⁾	375,806	397,885
0.875% Convertible Senior Notes due June 15, 2017	500,000	425,625
3.75% Convertible Senior Notes, due October 15, 2018	350,000	360,063
	<u>\$ 1,442,016</u>	<u>\$ 1,396,810</u>

(1) Includes unamortized bond premium related to embedded redemption feature

The fair value reported above is based on the quoted market price for the notes on the date above.

(14) CREDIT FACILITY

On August 13, 2012 (the "Closing Date"), Ciena and certain of its subsidiaries, including Ciena Communications, Inc. and Ciena Canada, Inc. (with Ciena, collectively, the "Borrowers"), entered into asset-based lending (ABL) facility and executed an ABL Credit Agreement (the "Credit Agreement") with the lenders party thereto, including Deutsche Bank AG New York Branch, as administrative agent and collateral agent (the "Agent"), Bank of America, N.A., as Syndication Agent, and Morgan Stanley Senior Funding, Inc. and Wells Fargo Bank, National Association, as Co-Documentation Agents. The Credit Agreement provides for a senior secured asset-based revolving credit facility of up to \$150 million (the "Credit Facility"). Ciena has the option to increase the total commitment under the Credit Facility to \$200 million, subject to certain conditions, including obtaining commitments from one or more lenders. The Credit Agreement provides that the entire amount of the Credit Facility is available for issuances of letters of credit, and allows for both swingline loans, and Canadian dollar denominated loans to Ciena's Canadian subsidiary (the "Canadian Borrower") in an amount not to exceed \$20 million. Ciena principally expects to use the 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 to support and collateralize these instruments. As of October 31, 2012, letters of credit totaling \$50.8 million were collateralized by the Credit Facility. There are no borrowings outstanding under the Credit Facility as of October 31, 2012.

Availability under the Credit Facility is based upon monthly (or weekly, in certain cases) borrowing base certifications valuing the Borrowers' eligible inventory and eligible accounts receivable, as reduced by certain reserves in effect from time to time. Outstanding borrowings under the Credit Facility accrue interest at floating rates plus an applicable margin ranging from 2.00% to 2.50% for LIBOR rate loans, and 1.00% to 1.50% for base rate loans. The commitment fee payable on the unused portion of the Credit Facility equals 0.50% or 0.375% based on utilization of the Credit Facility and Borrowers will pay customary letter of credit fees.

The Credit Facility matures on August 13, 2015, provided that it will mature early on (i) January 31, 2013, if any of Ciena's 0.25% senior convertible notes due May 1, 2013 are then outstanding and Ciena is unable to meet certain financial criteria with respect to its cash position at that time, or (ii) December 15, 2014, if any of Ciena's 4.00% senior convertible notes due March 15, 2015 are then outstanding. Ciena expects to satisfy the financial criteria such that the Credit Facility will not early mature on January 31, 2013.

On the Closing Date, Ciena and Ciena Communications, Inc. entered into a U.S. Guaranty in favor of the Agent, providing an unconditional guaranty of all amounts owing under the Credit Facility. Ciena Canada entered into a similar guaranty in favor of the Agent with respect to the Canadian Borrower's obligations. These agreements may require additional subsidiary guarantors in the future. In addition, Ciena, the other domestic Borrowers and the Agent entered into a Security Agreement and a Pledge Agreement on the Closing Date. Pursuant to the Security Agreement and Pledge Agreement, the obligations of Ciena and the other domestic Borrowers and the guarantees by the domestic guarantors are secured by first priority security interests (subject only to customary permitted liens and certain other permitted liens) in substantially all current assets of Ciena, the other domestic Borrowers and the domestic guarantors, such property consisting of accounts receivable, inventory, cash, deposit and securities accounts, chattel paper, promissory notes and payment intangibles and, to the extent evidencing or otherwise related to such property, all general intangibles, licenses, letter of credit rights, commercial tort claims, instruments, supporting obligations and documents. Pursuant to a Canadian Security Agreement entered into on the Closing Date by and between Ciena Canada and the Agent, similar assets of the Canadian Borrower secure the obligations of the Canadian Borrower.

The Credit Agreement contains customary covenants that limit, absent lender approval, the ability of Ciena and certain of its affiliates to, among other things, pay cash dividends, incur debt, create liens and encumbrances, redeem or repurchase stock, enter into certain acquisition transactions or transactions with affiliates, merge, dissolve, repay certain indebtedness, change the nature of Ciena's business, make investments or dispose of assets. In some cases, these restrictions are subject to certain negotiated exceptions or permit Ciena to undertake otherwise restricted activities if it satisfies certain required conditions. In addition, Ciena will be required to maintain a minimum fixed charge coverage ratio of not less than 1.0 to 1.0 as of the end of any period of four fiscal quarters when excess availability under the Credit Facility is less than the greater of (i) 12.5% of availability or (ii) \$15,000,000. Ciena is also required to maintain at all times at least \$200 million in the aggregate of unrestricted cash and cash equivalents.

If (x) excess availability under the Credit Facility is less than the greater of (i) 12.5% of availability or (ii) \$15,000,000 or (y) there exists an event of default, amounts in any of the Borrowers' or subsidiary guarantors' designated core deposit accounts will be transferred daily into a blocked account held by the Agent and applied to reduce outstanding amounts under the Credit Facility.

The Credit Agreement contains customary events of default including, among other things, failure to pay obligations when due, initiation of bankruptcy or insolvency proceedings, defaults on certain other indebtedness, change of control, incurrence of certain material judgments that are not stayed, satisfied, bonded or discharged within 30 days, certain ERISA events, invalidity of the credit documents, and violation of affirmative and negative covenants or breach of representations and warranties set forth in the Credit Agreement. Upon an event of default, the lenders may, subject to various customary cure rights, require the immediate payment of all amounts outstanding and foreclose on collateral.

Ciena recorded \$2.7 million of debt issuance costs related to the credit facility agreement of which \$2.3 million has been paid.

(15) EARNINGS (LOSS) 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 (loss) per common share ("Basic EPS") and the diluted net income (loss) per potential common share ("Diluted EPS"). Since the numerator reflects net losses for the fiscal years indicated, both Basic EPS and Diluted EPS are computed using the weighted average number of common shares outstanding. If the numerator reflected net income, Diluted

EPS would also include, to the extent the effect is not anti-dilutive, the following: (i) shares issuable upon vesting of restricted stock units, (ii) shares issuable under Ciena's employee stock purchase plan and upon exercise of outstanding stock options, using the treasury stock method; and (iii) shares underlying Ciena's outstanding convertible notes.

Numerator

	Year Ended October 31,		
	2010	2011	2012
Net loss	\$ (333,514)	\$ (195,521)	\$ (144,021)

Denominator

	Year Ended October 31,		
	2010	2011	2012
Basic weighted average shares outstanding	93,103	95,854	99,341
Dilutive weighted average shares outstanding	93,103	95,854	99,341

EPS

	Year Ended October 31,		
	2010	2011	2012
Basic EPS	\$ (3.58)	\$ (2.04)	\$ (1.45)
Diluted EPS	\$ (3.58)	\$ (2.04)	\$ (1.45)

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 fiscal years indicated (in thousands):

	Year Ended October 31,		
	2010	2011	2012
Shares underlying stock options and restricted stock units	7,397	6,141	5,726
0.25% Convertible Senior Notes due May 1, 2013	7,454	5,470	5,470
4.00% Convertible Senior Notes due March 15, 2015	11,605	18,395	18,395
0.875% Convertible Senior Notes due June 15, 2017	13,108	13,108	13,108
3.75% Convertible Senior Notes due October 15, 2018	717	17,356	17,355
Total excluded due to anti-dilutive effect	40,281	60,470	60,054

(16) STOCKHOLDERS' EQUITY

Call Spread Options

Ciena holds two call spread options on its common stock relating to the shares issuable upon conversion of two issues of convertible notes. These call spread options are designed to mitigate exposure to potential dilution from the conversion of these notes. Ciena purchased a call spread option relating to the 0.25% convertible senior notes due May 1, 2013 for \$28.5 million during the second quarter of fiscal 2006. Ciena purchased a call spread option relating to the 0.875% convertible senior notes due June 15, 2017 for \$42.5 million during the third quarter of fiscal 2007. In each case, the call spread options were purchased at the time of the notes offering from an affiliate of the underwriter. The cost of each call spread option was recorded as a reduction in paid-in capital.

Each call spread option is exercisable, upon maturity of the relevant issue of convertible notes, for such number of shares of Ciena common stock issuable upon conversion of that series of notes in full. Each call spread option has a "lower strike price" equal to the conversion price for the notes and a "higher strike price" that serves to cap the amount of dilution protection provided. At its election, Ciena can exercise the call spread options on a net cash basis or a net share basis. The value of the consideration of a net share settlement will be equal to the value upon a net cash settlement and can range from \$0, if the market price per share of Ciena common stock upon exercise is equal to or below the lower strike price, to approximately \$45.7 million (in the case of the April 2006 call spread option) or approximately \$76.1 million (in the case of the June 2007 call spread option), if the market price per share of Ciena common stock upon exercise is at or above the higher strike price. If the market price on the date of exercise is between the lower strike price and the higher strike price, in lieu of a net settlement, Ciena may elect to receive the full number of shares underlying the call spread option by paying the aggregate option exercise

price, which is equal to the original principal outstanding on that series of notes. Should there be an early unwind of the call spread option, the amount of cash or shares to be received by Ciena will depend upon the existing overall market conditions, and on Ciena's stock price, the volatility of Ciena's stock and the remaining term of the call spread option. The number of shares subject to the call spread options, and the lower and higher strike prices, are subject to customary adjustments.

(17) INCOME TAXES

For the periods indicated, the provision (benefit) for income taxes consists of the following (in thousands):

	October 31,		
	2010	2011	2012
Provision for income taxes:			
Current:			
Federal	\$ (918)	\$ (194)	\$ —
State	223	(518)	857
Foreign	1,936	8,202	8,465
Total current	<u>1,241</u>	<u>7,490</u>	<u>9,322</u>
Deferred:			
Federal	700	160	—
State	—	23	—
Foreign	—	—	—
Total deferred	<u>700</u>	<u>183</u>	<u>—</u>
Provision for income taxes	<u>\$ 1,941</u>	<u>\$ 7,673</u>	<u>\$ 9,322</u>

For the periods indicated, income (loss) before provision for income taxes consists of the following (in thousands):

	October 31,		
	2010	2011	2012
United States	\$ (317,899)	\$ (240,244)	\$ (151,958)
Foreign	(13,674)	52,396	17,259
Total	<u>\$ (331,573)</u>	<u>\$ (187,848)</u>	<u>\$ (134,699)</u>

For the periods indicated, the tax provision (benefit) reconciles to the amount computed by multiplying income or loss before income taxes by the U.S. federal statutory rate of 35% as follows:

	October 31,		
	2010	2011	2012
Provision at statutory rate	35.00 %	35.00 %	35.00 %
State taxes	(0.07)%	0.27 %	(0.64)%
Foreign taxes	(4.56)%	2.32 %	(5.09)%
Research and development credit	2.54 %	11.03 %	10.21 %
Non-deductible compensation and other	(1.43)%	(3.96)%	(4.92)%
Valuation allowance	(32.07)%	(48.74)%	(41.48)%
Effective income tax rate	<u>(0.59)%</u>	<u>(4.08)%</u>	<u>(6.92)%</u>

The significant components of deferred tax assets and liabilities are as follows (in thousands):

	October 31,	
	2011	2012
Deferred tax assets:		
Reserves and accrued liabilities	\$ 30,637	\$ 44,128
Depreciation and amortization	259,899	276,710
NOL and credit carry forward	1,154,571	1,142,647
Other	22,304	25,509
Gross deferred tax assets	1,467,411	1,488,994
Valuation allowance	(1,467,411)	(1,488,994)
Net deferred tax asset	\$ —	\$ —

A reconciliation of the beginning and ending amount of unrecognized tax benefits, excluding interest and penalties, is as follows (in thousands):

Unrecognized tax benefits at October 31, 2009	\$ 6,189
Increase related to positions taken in prior period	26
Increase related to positions taken in current period	3,383
Reductions related to expiration of statute of limitations	(2,156)
Unrecognized tax benefits at October 31, 2010	7,442
Increase related to positions taken in prior period	(450)
Increase related to positions taken in current period	1,847
Reductions related to expiration of statute of limitations	(249)
Unrecognized tax benefits at October 31, 2011	8,590
Increase related to positions taken in prior period	(12)
Increase related to positions taken in current period	2,866
Reductions related to expiration of statute of limitations	(392)
Unrecognized tax benefits at October 31, 2012	\$ 11,052

As of October 31, 2011 and 2012, Ciena had accrued \$1.1 million and \$1.4 million, respectively, of interest and some minor penalties related to unrecognized tax benefits within other long-term liabilities in the Consolidated Balance Sheets. A charge of \$0.2 million, a benefit of \$0.3 million, and a charge of \$0.3 million of interest were recorded to the provision for income taxes during fiscal 2010, 2011 and 2012, respectively. If recognized, the entire balance of unrecognized tax benefits would impact the effective tax rate. Over the next 12 months, Ciena does not estimate any material changes in unrecognized income tax benefits.

During fiscal 2002, Ciena established a valuation allowance against its deferred tax assets. Ciena intends to maintain a valuation allowance until sufficient positive evidence exists to support a reversal. Any future release of the valuation allowance may be recorded as a tax benefit increasing net income or as an adjustment to paid-in capital, based on tax ordering requirements. The following table summarizes the activity in Ciena's valuation allowance against its gross deferred tax assets (in thousands):

Year ended October 31,	Balance at beginning of period	Additions	Deductions	Balance at end of period
2010	\$ 1,198,067	\$ 165,426	\$ —	\$ 1,363,493
2011	\$ 1,363,493	\$ 103,918	\$ —	\$ 1,467,411
2012	\$ 1,467,411	\$ 21,583	\$ —	\$ 1,488,994

As of October 31, 2012, Ciena had a \$2.8 billion net operating loss carry forward and a \$0.1 billion income tax credit carry forward which begin to expire in fiscal year 2018 and 2013, respectively. Ciena's ability to use net operating losses and credit carry forwards is subject to limitations pursuant to the ownership change rules of the Internal Revenue Code Section 382.

The income tax provision does not reflect the tax savings resulting from deductions associated with Ciena's equity compensation and the call spread option associated with Ciena's convertible debt. The cumulative tax benefit through October 31, 2012 of approximately \$78.0 million will be credited to additional paid-in capital when realized. For deductions associated with Ciena's equity compensation, credits to paid-in capital will be recorded when those tax benefits are used to reduce taxes payable.

(18) SHARE-BASED COMPENSATION EXPENSE

Ciena grants equity awards under its 2008 Omnibus Incentive Plan and the Amended and Restated Employee Stock Purchase Plan ("ESPP").

2008 Plan

The 2008 Omnibus Incentive Plan (the "2008 Plan") 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 2008 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 2008 Plan to vest, unless the awards are continued or substituted for in connection with the transaction.

The 2008 Plan reserves 18.5 million shares of common stock for issuance, subject to increase from time to time by the number of shares: (i) subject to outstanding awards granted under Ciena's prior equity compensation plans that terminate without delivery of any stock (to the extent such shares would have been available for issuance under such prior plan), and (ii) subject to awards assumed or substituted in connection with the acquisition of another company. The 2008 Plan includes a fungible share feature that counts each share of common stock underlying full value awards, such as restricted stock units, as 1.31 shares for purposes of calculating the shares remaining available under the 2008 Plan. As of October 31, 2012, approximately 7.0 million shares remained available for issuance under the 2008 Plan.

Stock Options

Outstanding stock option awards to employees are generally subject to service-based vesting restrictions and vest incrementally over a four-year period. The following table is a summary of Ciena's stock option activity for the periods indicated (shares in thousands):

	Shares Underlying Options Outstanding	Weighted Average Exercise Price
Balance as of October 31, 2009	5,538	\$ 45.80
Granted	86	12.42
Exercised	(103)	5.21
Canceled	(519)	95.00
Balance as of October 31, 2010	5,002	40.96
Granted	—	—
Exercised	(411)	14.88
Canceled	(901)	97.64
Balance as of October 31, 2011	3,690	30.01
Granted	—	—
Exercised	(56)	6.72
Canceled	(427)	51.28
Balance as of October 31, 2012	<u>3,207</u>	<u>\$ 27.58</u>

The total intrinsic value of options exercised during fiscal 2010, fiscal 2011 and fiscal 2012 was \$0.9 million, \$3.4 million and \$0.5 million, respectively. The weighted average fair value of each stock option granted by Ciena during fiscal 2010 was \$6.94. There were no stock options granted by Ciena during fiscal 2011 or fiscal 2012.

The following table summarizes information with respect to stock options outstanding at October 31, 2012, based on Ciena's closing stock price on the last trading day of Ciena's fiscal 2012 (shares and intrinsic value in thousands):

Range of Exercise Price	Options Outstanding at October 31, 2012				Vested Options at October 31, 2012			
	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
	\$ 0.94 — \$ 16.31	318	5.03	\$ 8.44	\$ 1,445	286	4.84	\$ 8.16
\$ 16.52 — \$ 17.29	389	2.68	16.68	—	389	2.68	16.68	—
\$ 17.43 — \$ 24.50	529	2.48	20.46	—	529	2.48	20.46	—
\$ 24.69 — \$ 28.28	406	3.67	27.00	—	406	3.67	27.00	—
\$ 28.61 — \$ 31.43	195	3.20	29.80	—	195	3.20	29.80	—
\$ 31.71 — \$ 32.55	506	0.31	31.72	—	506	0.31	31.72	—
\$ 33.00 — \$ 37.10	345	3.89	35.19	—	345	3.89	35.19	—
\$ 37.31 — \$ 47.32	487	1.93	44.83	—	487	1.93	44.83	—
\$ 47.53 — \$ 55.79	32	0.80	49.35	—	32	0.80	49.35	—
\$ 0.94 — \$ 55.79	<u>3,207</u>	2.66	\$ 27.58	<u>\$ 1,445</u>	<u>3,175</u>	2.62	\$ 27.75	<u>\$ 1,387</u>

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. During fiscal 2010, Ciena estimated the fair value of each option award on the date of grant using the Black-Scholes option-pricing model. Ciena did not grant any option-based awards during fiscal 2011 or fiscal 2012. The following table lists the assumptions used in valuing option-based awards granted in fiscal 2010:

	Year Ended October 31, 2010
Expected volatility	61.9%
Risk-free interest rate	2.0%-3.0%
Expected term (years)	5.3-5.5
Expected dividend yield	0.0%

Ciena considered the implied volatility and historical volatility of its stock price in determining its expected volatility, and, finding both to be equally reliable, determined that a combination of both would result in the best estimate of expected volatility.

The risk-free interest rate assumption is based upon observed interest rates appropriate for the expected term of Ciena's employee stock options.

The expected life of employee stock options represents the weighted-average period the stock options are expected to remain outstanding. Ciena uses historical information about specific exercise behavior of its grantees to determine the expected term.

The dividend yield assumption is based on Ciena's history and expectation of dividend payouts.

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. Ciena relies upon historical experience in establishing forfeiture rates. If actual forfeitures differ from current estimates, total unrecognized share-based compensation expense will be adjusted for future changes in estimated forfeitures.

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. 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 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 as of October 31, 2009	3,716	\$ 14.67	\$ 43,591
Granted	3,643		
Vested	(1,846)		
Canceled or forfeited	(322)		
Balance as of October 31, 2010	5,191	13.81	71,681
Granted	2,064		
Vested	(2,466)		
Canceled or forfeited	(491)		
Balance as of October 31, 2011	4,298	16.28	59,399
Granted	2,433		
Vested	(1,912)		
Canceled or forfeited	(416)		
Balance as of October 31, 2012	<u>4,403</u>	\$ 14.16	\$ 56,267

The total fair value of restricted stock units that vested and were converted into common stock during fiscal 2010, fiscal 2011 and fiscal 2012 was \$25.7 million, \$45.3 million and \$27.0 million, respectively. The weighted average fair value of each restricted stock unit granted by Ciena during fiscal 2010, fiscal 2011 and fiscal 2012 was \$13.43, \$19.73 and \$11.28, 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 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 cost is reversed.

2003 Employee Stock Purchase Plan

Under the ESPP, eligible employees may enroll in a twelve-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 the Company 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. In March 2012, Ciena stockholders approved an amendment and restatement of the ESPP, extending the term to January 24, 2023 and increasing by 5.0 million the number of shares authorized for issuance thereunder. 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 0.6 million shares, provided that the total number of shares available at that time shall not exceed 8.2 million.

During fiscal 2010, fiscal 2011 and fiscal 2012, Ciena issued 0.1 million, 0.5 million and 1.2 million shares under the ESPP, respectively. At October 31, 2012, 7.6 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):

	Year Ended October 31,		
	2010	2011	2012
Product costs	\$ 2,140	\$ 2,269	\$ 2,156
Service costs	1,717	1,881	1,462
Share-based compensation expense included in cost of goods sold	3,857	4,150	3,618
Research and development	9,310	10,149	8,567
Sales and marketing	10,950	12,182	11,558
General and administrative	9,959	11,140	8,691
Acquisition and integration costs	1,342	308	7
Share-based compensation expense included in operating expense	31,561	33,779	28,823
Share-based compensation expense capitalized in inventory, net	142	1	(47)
Total share-based compensation	\$ 35,560	\$ 37,930	\$ 32,394

As of October 31, 2012, total unrecognized compensation expense was \$49.4 million: (i) \$0.2 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 0.5 years; and (ii) \$49.2 million, which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.3 years.

(19) SEGMENT AND ENTITY WIDE DISCLOSURES

Segment Reporting

Ciena's chief operating decision maker, its chief executive officer, evaluates performance and allocates resources based on multiple factors, including segment profit (loss) information for the following product categories:

- Packet-Optical Transport* — includes optical transport solutions that increase network capacity and enable more rapid delivery of a broader mix of high-bandwidth services. These products are used by network operators to facilitate the cost effective and efficient transport of voice, video and data traffic in core, regional, metro and access networks. Ciena's Packet-Optical Transport products support the efficient delivery of a wide variety of consumer-oriented network services, as well as key managed service and enterprise applications. Ciena's principal products in this segment include the 6500 Packet-Optical Platform, 4200 Advanced Services Platform, Corestream® Agility Optical Transport System, 5100/5200 Advanced Services Platform, Common Photonic Layer (CPL), and 6100 Multiservice Optical Platform. This segment also includes sales from legacy SONET/SDH, transport and data networking products, as well as certain enterprise-oriented transport solutions that support storage and LAN extension, interconnection of data centers, and virtual private networks. This segment also includes operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.

- *Packet-Optical Switching* — includes optical switching platforms that enable automated optical infrastructures for the delivery of a wide variety of enterprise and consumer-oriented network services. Ciena's principal products in this segment include its family of CoreDirector® Multiservice Optical Switches, its 5430 Reconfigurable Switching System and its OTN configuration for the 5410 Reconfigurable Switching System. These products include multiservice, multi-protocol switching systems that consolidate the functionality of an add/drop multiplexer, digital cross-connect and packet switch into a single, high-capacity intelligent switching system. These products address both the core and metro segments of communications networks and support key managed services, Ethernet/TDM Private Line, Triple Play and IP services. This segment also includes sales of operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Carrier-Ethernet Solutions* - principally includes Ciena's 3000 family of service delivery switches and service aggregation switches, the 5000 series of service aggregation switches, and its Carrier Ethernet packet configuration for the 5410 Service Aggregation Switch. These products support the access and aggregation tiers of communications networks and have principally been deployed to support wireless backhaul infrastructures and business data services. Employing sophisticated Carrier Ethernet switching technology, these products deliver quality of service capabilities, virtual local area networking and switching functions, and carrier-grade operations, administration, and maintenance features. This segment includes legacy broadband products that transition legacy voice networks to support Internet-based (IP) telephony, video services and DSL. This segment also includes sales of operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Software and Services* - includes the Ciena One software suite, including OneControl, the integrated network and service management software designed to automate and simplify network management, operation and service delivery. These software solutions can track individual services across multiple product suites, facilitating planned network maintenance, outage detection and identification of customers or services affected by network troubles. In addition to Ciena One, this segment includes the ON-Center® Network & Service Management Suite, and the OMEA and Preside platforms from the MEN Business. This segment also includes a broad range of consulting and support services, including installation and deployment, maintenance support, consulting, network design and training activities. Except for revenue from the software portion of this segment, which is included in product revenue, revenue from this segment is included in services revenue on the Consolidated Statement of Operations.

Reportable segment asset information is not disclosed because it is not reviewed by the chief operating decision maker for purposes of evaluating performance and allocating resources.

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

	Fiscal Year		
	2010	2011	2012
Revenues:			
Packet-Optical Transport	\$ 705,551	\$ 1,121,811	\$ 1,172,159
Packet-Optical Switching	112,058	148,395	132,705
Carrier Ethernet Solutions	179,083	127,868	131,693
Software and Services	239,944	343,896	397,366
Consolidated revenue	<u>\$ 1,236,636</u>	<u>\$ 1,741,970</u>	<u>\$ 1,833,923</u>

Segment Profit (Loss)

Segment profit (loss) is determined based on internal performance measures used by the chief executive officer to assess the performance of each operating segment in a given period. In connection with that assessment, the chief executive officer excludes the following items: selling and marketing costs; general and administrative costs; acquisition and integration costs; amortization of intangible assets; restructuring costs; change in fair value of contingent consideration; interest and other income (net); interest expense; equity investment gains or losses and provisions (benefit) for income taxes.

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

	Fiscal Year		
	2010	2011	2012
Segment profit:			
Packet-Optical Transport	\$ 69,319	\$ 191,727	\$ 242,137
Packet-Optical Switching	15,662	49,286	22,842
Carrier-Ethernet Solutions	28,742	10,849	(4,066)
Software and Services	56,152	77,422	99,132
Total segment profit	<u>169,875</u>	<u>329,284</u>	<u>360,045</u>
Less: non-performance operating expenses			
Selling and marketing	193,515	251,990	266,338
General and administrative	102,692	126,242	114,002
Acquisition and integration costs	101,379	42,088	—
Amortization of intangible assets	99,401	69,665	51,697
Restructuring costs	8,514	5,781	7,854
Change in fair value of contingent consideration	(13,807)	(3,289)	—
Add: other non-performance financial items			
Interest expense and other income (loss), net	(14,702)	(31,904)	(54,853)
Gain on cost method investments	—	7,249	—
Gain on extinguishment of debt	4,948	—	—
Less: Provision for income taxes	1,941	7,673	9,322
Consolidated net loss	<u>\$ (333,514)</u>	<u>\$ (195,521)</u>	<u>\$ (144,021)</u>

Entity Wide Reporting

The following table reflects Ciena's geographic distribution of revenue based on the location of the purchaser, with any country accounting for at least 10% of total revenue in the period specifically identified. Revenue attributable to geographic regions outside of the United States is reflected as International revenue. For the periods below, Ciena's geographic distribution of revenue was as follows (in thousands, except percentage data):

	Fiscal Year		
	2010	2011	2012
United States	\$ 744,232	\$ 930,880	\$ 972,576
International	492,404	811,090	861,347
Total	<u>\$ 1,236,636</u>	<u>\$ 1,741,970</u>	<u>\$ 1,833,923</u>

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

	October 31,		
	2010	2011	2012
United States	\$ 63,675	\$ 60,848	\$ 64,653
Canada	45,103	47,424	48,376
Other International	11,516	14,286	10,551
Total	<u>\$ 120,294</u>	<u>\$ 122,558</u>	<u>\$ 123,580</u>

For the periods below, customers accounting for at least 10% of Ciena's revenue were as follows (in thousands, except percentage data):

	Fiscal Year		
	2010	2011	2012
AT&T	\$ 267,422	\$ 269,858	\$ 248,123

(20) OTHER EMPLOYEE BENEFIT PLANS

Effective March 1, 2010, Ciena has a Defined Contribution Pension Plan that covers all of its Canada-based employees who are not part of an excluded group. Total contributions (employee and employer) cannot exceed the lesser of 18% of participant earnings and an annual dollar limit (CAD\$23,820 for 2012). This plan includes a required employer contribution of 1% for all participants and a 50% matching of participant contributions up to a total annual maximum of CAD\$3,000 per employee. During fiscal 2010, 2011 and 2012, Ciena made matching contributions of approximately CAD\$2.5 million, CAD\$4.3 million and CAD\$4.0 million, respectively.

Ciena has a 401(k) defined contribution profit sharing plan. The plan covers all U.S. based employees who are not part of an excluded group. Participants may contribute up to 60% of pre-tax compensation, subject to certain limitations. The plan includes an employer matching contribution equal to 50% of the first 6% an employee contributes each pay period. Ciena may also make discretionary annual profit contributions up to the IRS regulated limit. Ciena has made no profit sharing contributions to date. During fiscal 2010, 2011 and 2012, Ciena made matching contributions of approximately \$3.4 million, \$3.9 million and \$4.1 million, respectively.

(21) COMMITMENTS AND CONTINGENCIES

Ontario Grant

Ciena was awarded a conditional grant from the Province of Ontario in June 2011. Under this strategic jobs investment fund grant, Ciena can receive up to an aggregate of CAD\$25.0 million in funding for eligible costs relating to certain next-generation, coherent optical transport development initiatives over the period from November 1, 2010 to October 31, 2015. Ciena anticipates receiving disbursements, approximating CAD\$5.0 million per fiscal year over the period above. Amounts received under the grant are subject to recoupment in the event that Ciena fails to achieve certain minimum investment, employment and project milestones. Ciena recorded a CAD\$5.3 million and a CAD\$5.6 million benefit, as a reduction in research and development expenses, in fiscal 2011 and 2012, respectively. As of October 31, 2011 and 2012, amounts receivable from this grant were CAD\$0.3 million and CAD\$2.5 million, respectively.

Foreign Tax Contingencies

Ciena has received assessment notices from the Mexican tax authorities asserting deficiencies in payments between 2001 and 2005 related primarily to income taxes and import taxes and duties. Ciena has filed judicial petitions appealing these assessments. As of October 31, 2011 and 2012, Ciena had accrued liabilities of \$1.4 million and \$1.7 million related to these contingencies, which are reported as a component of other current accrued liabilities. As of October 31, 2012, Ciena estimates that it could be exposed to possible losses of up to \$5.8 million, for which it has not accrued liabilities. Ciena has not accrued the additional income tax liabilities because it does not believe that such losses are more likely than not. Ciena has not accrued the additional import taxes and duties because it does not believe the incurrence of such losses are probable. Ciena continues to evaluate the likelihood of probable and reasonably possible losses, if any, related to these assessments. As a result, future increases or decreases to accrued liabilities may be necessary and will be recorded in the period when such amounts are estimable and more likely than not (for income taxes) or probable (for non-income taxes).

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

Litigation

On July 29, 2011, Cheetah Omni LLC filed a complaint in the United States District Court for the Eastern District of Texas against Ciena and several other defendants, alleging, among other things, that certain of the parties' products infringe upon multiple U.S. patents relating to certain reconfigurable optical add-drop multiplexer (ROADM) technologies. The complaint seeks injunctive relief and damages. On November 8, 2011, Ciena filed an answer and counterclaims to Cheetah Omni's

amended complaint. The parties are currently engaged in discovery. Ciena believes that it has valid defenses to the lawsuit and intends to defend it vigorously.

On May 29, 2008, Graywire, LLC filed a complaint in the United States District Court for the Northern District of Georgia against Ciena and four other defendants, alleging, among other things, that certain of the parties' products infringe U.S. Patent 6,542,673 (the "'673 Patent'"), relating to an identifier system and components for optical assemblies. The complaint seeks injunctive relief and damages. In July 2009, upon request of Ciena and certain other defendants, the U.S. Patent and Trademark Office ("PTO") granted the defendants' inter partes application for reexamination with respect to certain claims of the '673 Patent, and the district court granted the defendants' motion to stay the case pending reexamination of all of the patents-in-suit. In December 2010, the PTO confirmed the validity of some claims and rejected the validity of other claims of the '673 Patent, to which Ciena and other defendants filed an appeal. On March 16, 2012, the PTO on appeal rejected multiple claims of the '673 Patent, including the two claims on which Ciena is alleged to infringe. Subsequently, the plaintiff requested a reopening of the prosecution of the '673 Patent, to which Ciena and the other defendants filed an opposition. The case currently remains stayed, and there can be no assurance as to whether or when the stay will be lifted.

As a result of its June 2002 acquisition of ONI Systems Corp., Ciena became a defendant in a securities class action lawsuit filed in the United States District Court for the Southern District of New York in August 2001. On January 9, 2012, the final appellant in this securities class action lawsuit withdrew and dismissed its appeal with prejudice in accordance with the terms of the settlement agreement. Ciena was not required to pay any amount toward the settlement or to make any other payments to plaintiffs in connection with the resolution of this matter.

In addition to the matters described above, Ciena is subject to various legal proceedings and claims arising in the ordinary course of business, including claims against third parties that may involve a contractual indemnification obligation on the part of Ciena. Ciena does not expect that the ultimate costs to resolve these matters will have a material effect on its results of operations, financial position or cash flows.

Operating Lease Commitments

Ciena has certain minimum obligations under non-cancelable operating leases expiring on various dates through 2027 for equipment and facilities. During fiscal 2012, the Company entered into a lease relating to office space for its new corporate headquarters in Hanover, Maryland, consisting of a rentable area of approximately 154,100 square feet. The future minimal rental commitments to be paid over the 15-year lease term are approximately \$61.8 million. Future annual minimum operating lease commitments under non-cancelable operating leases at October 31, 2012 are as follows (in thousands):

	Year ended October 31,	
2013		\$ 31,381
2014		26,569
2015		21,928
2016		12,967
2017		6,630
Thereafter		46,126
Total		<u>\$ 145,601</u>

Rental expense for fiscal 2010, fiscal 2011 and fiscal 2012 was approximately \$22.2 million, \$25.5 million and \$21.7 million, respectively. In addition, Ciena paid approximately \$2.2 million, \$2.4 million and \$1.4 million during fiscal 2010, fiscal 2011 and fiscal 2012, respectively, related to rent costs for restructured facilities and unfavorable lease commitments, which were offset against Ciena's restructuring liabilities and unfavorable lease obligations. The amount for operating lease commitments above does not include variable expenses relating to insurance, taxes, maintenance and other costs required by the applicable operating lease. These costs are not expected to have a material impact on Ciena's financial condition, results of operations or cash flows.

(22) SUBSEQUENT EVENTS

On December 19, 2012, Ciena entered into separate, privately negotiated exchange agreements under which it will retire \$187.5 million in aggregate principal amount of its outstanding 4.0% Convertible Senior Notes due 2015 (the "2015 Notes") in exchange for its issuance of a new series of 4.0% Convertible Senior Notes due 2020 (the "2020 Notes") in an aggregate original principal amount of \$187.5 million (collectively, the "Exchange Transactions"). Following the Exchange Transactions,

there will be a total of \$187.5 million in aggregate principal amount of 2015 Notes outstanding, with terms unchanged by the Exchange Transactions, and \$187.5 million in aggregate principal amount of 2020 Notes outstanding. The 2015 Notes and the 2020 Notes will be the Company's senior unsecured obligations and will rank equally with all of the Company's other existing and future senior unsecured debt. The 2020 Notes will be issued pursuant to an indenture between the Company and Bank of New York Mellon to be entered into in connection with the closing of the Exchange Transactions.

The 2020 Notes will pay interest semi-annually at a rate of 4.0% per year in respect of each \$1,000 original principal amount of 2020 Notes. The 2020 Notes will mature on December 15, 2020. The principal amount of the 2020 Notes will also accrete at a rate of 1.85% per year commencing December 27, 2012, compounding on a semi-annual basis. The accreted portion of the principal payable at maturity does not bear interest and is not convertible into shares of the Company's common stock.

The 2020 Notes may be converted prior to maturity (unless earlier repurchased), at the option of the holder, into shares of the Company's common stock at an initial conversion rate of 49.0557 shares of Ciena common stock per \$1,000 in original principal amount, which is equal to an initial conversion price of \$20.385 per share. In addition, upon satisfaction of certain conditions, the Company may elect to convert the 2020 Notes in whole or in part, prior to maturity. An aggregate of 9,197,944 shares of the Company's common stock issuable upon conversion of the 2020 Notes have been reserved for issuance. If the Company elects to convert the 2020 Notes on or before maturity, holders will also receive a make-whole premium payable in the Company's common stock, or its cash equivalent, at the election of the Company.

Upon certain fundamental changes, holders of the 2020 Notes have the option to require the Company to purchase the 2020 Notes at a price equal to the accreted principal amount of the 2020 Notes delivered for repurchase plus any accrued and unpaid interest on the original principal amount of such 2020 Notes. Upon a holder's election to convert the 2020 Notes in connection with certain fundamental changes, such holder will receive a make-whole premium payable in the Company's common stock, or its cash equivalent, at the election of the Company.

Ciena expects the Exchange Transactions to close on December 27, 2012.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

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

Changes in Internal Control over Financial Reporting

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

Report of Management on Internal Control Over Financial Reporting

The management of Ciena Corporation is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934).

The internal control over financial reporting at Ciena Corporation was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of Ciena Corporation;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America;
- provide reasonable assurance that receipts and expenditures of Ciena Corporation are being made only in accordance with authorization of management and directors of Ciena Corporation; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management of Ciena Corporation assessed the effectiveness of the company’s internal control over financial reporting as of October 31, 2012. Management based this assessment on criteria for effective internal control over financial reporting described in “Internal Control — Integrated Framework” issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management determined that, as of October 31, 2012, Ciena Corporation maintained effective internal control over financial reporting. Management reviewed the results of its assessment with the Audit Committee of our Board of Directors.

PricewaterhouseCoopers LLP, independent registered public accounting firm, who audited and reported on the consolidated financial statements of Ciena Corporation included in this annual report, has also audited the effectiveness of Ciena Corporation’s internal control over financial reporting as of October 31, 2012, as stated in its report appearing under Item 8 of Part II of this annual report.

/s/ Gary B. Smith

Gary B. Smith
President and Chief Executive Officer
December 21, 2012

/s/ James E. Moylan, Jr.

James E. Moylan, Jr.
Senior Vice President and Chief Financial Officer
December 21, 2012

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information relating to Ciena's directors and executive officers is set forth in Part I of this annual report under the caption Item 1. "Business—Directors and Executive Officers."

Additional information concerning our Audit Committee and regarding compliance with Section 16(a) of the Exchange Act responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2013 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

As part of our system of corporate governance, our board of directors has adopted a code of ethics that is specifically applicable to our chief executive officer and senior financial officers. This Code of Ethics for Senior Financial Officers, as well as our Code of Business Conduct and Ethics, applicable to all directors, officers and employees, are available on the corporate governance page of our web site at <http://www.ciena.com>. We intend to satisfy any disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of the Code of Ethics for Senior Financial Officers, by posting such information on our web site at the address above.

Item 11. Executive Compensation

Information responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2013 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2013 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2013 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

Item 14. Principal Accountant Fees and Services

Information responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2013 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

PART IV

Item 15. Exhibits and Financial Statement Schedules

- (a)
 - 1. The information required by this item is included in Item 8 of Part II of this annual report.
 - 2. The information required by this item is included in Item 8 of Part II of this annual report.
 - 3. Exhibits: See Index to Exhibits, which is incorporated by reference in this Item. The Exhibits listed in the accompanying Index to Exhibits are filed or incorporated by reference as part of this annual report.
- (b) Exhibits. See Index to Exhibits, which is incorporated by reference in this Item. The Exhibits listed in the accompanying Index to Exhibits are filed or incorporated by reference as part of this annual report.
- (c) Not applicable.

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Here- with (X)
		Form and Registration or Commission No.	Exhibit	Filing Date	
2.1	Amended & Restated Asset Sale Agreement by and among Nortel Networks Corporation, Nortel Networks Limited, Nortel Networks, Inc. and certain other entities identified therein as sellers and Ciena Corporation, dated as of November 24, 2009 (“Nortel ASA”)+	10-K (000-21969)	2.1	12/22/2009	
2.2	Amendment No. 1 to Nortel ASA dated as of December 3, 2009+	10-K (000-21969)	2.2	12/22/2009	
2.3	Amendment No. 2 to Nortel ASA dated as of December 23, 2009+	10-Q (000-21969)	2.1	3/5/2010	
2.4	Amendment No. 3 to Nortel ASA dated as of March 15, 2010	10-Q (000-21969)	2.1	6/10/2010	
2.5	Amendment No. 4 to the Nortel ASA dated as of March 15, 2010+	10-Q (000-21969)	2.2	6/10/2010	
2.6	Amendment No. 5 to the Nortel ASA dated as of March 19, 2010+	10-Q (000-21969)	2.3	6/10/2010	
2.7	Asset Sale Agreement (relating to the sale and purchase of certain Nortel assets in Europe, the Middle East and Africa) by and among the Nortel affiliates, Joint Administrators and Joint Israeli Administrators named therein and Ciena Corporation, dated as of October 7, 2009 (“Nortel EMEA ASA”)+	10-K (000-21969)	2.3	12/22/2009	
2.8	Deed of Amendment, dated October 20, 2009, relating to the Nortel EMEA ASA+	10-K (000-21969)	2.4	12/22/2009	
2.9	Amending Agreement dated November 24, 2009 relating to the Nortel EMEA ASA+	10-K (000-21969)	2.5	12/22/2009	
2.10	Amending Agreement dated December 16, 2009 relating to the Nortel EMEA ASA+	10-K (000-21969)	2.6	12/22/2009	
2.11	Deed of Amendment (Amendment No. 4) dated January 13, 2010 relating to Nortel EMEA ASA+	10-Q (000-21969)	2.2	3/5/2010	
2.12	Deed of Amendment (Amendment No. 5) dated March 19, 2010 relating to Nortel EMEA ASA+	10-Q (000-21969)	2.1	6/10/2010	
3.1	Amended and Restated Certificate of Incorporation	8-K (333-17729)	3.1	3/27/2008	
3.2	Amended and Restated By-Laws of Ciena Corporation	8-K (000-21969)	3.1	8/28/2008	
4.1	Specimen Stock Certificate	10-K (000-21969)	4.1	12/27/2007	
4.2	Indenture dated as of April 10, 2006 between Ciena Corporation and The Bank of New York, as trustee, for 0.25% Convertible Senior Notes due 2013, including the Form of Global Note attached as Exhibit A thereto	8-K (000-21969)	4.7	4/10/2006	
4.3	Indenture dated June 11, 2007 between Ciena Corporation and The Bank of New York, as trustee, for 0.875% Convertible Senior Notes due 2017, including the Form of Global Note attached as Exhibit A thereto	8-K (000-21969)	4.7	6/12/2007	

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Here- with (X)
		Form and Registration or Commission No.	Exhibit	Filing Date	
4.4	Indenture dated March 15, 2010 between Ciena Corporation and The Bank of New York Mellon, as trustee, for 4.0% Convertible Senior Notes due 2015, including the Form of Global Note attached as Exhibit A thereto	8-K (000-21969)	4.1	3/19/2010	
4.5	Indenture dated as of October 18, 2010 between Ciena Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee, for 3.75% Convertible Senior Notes due 2018, including the Form of Global Note attached as Exhibit A thereto	8-K (000-21969)	4.1	10/21/2010	
10.1	1999 Non-Officer Stock Option Plan and Form of Stock Option Agreement*	10-K (000-21969)	10.22	12/10/1999	
10.2	Amendment No. 1 to 1999 Non-Officer Stock Option Plan*	10-K (000-21969)	10.25	12/3/2001	
10.3	Catena Networks, Inc. 1998 Equity Incentive Plan, as amended*	10-Q (000-21969)	10.38	5/20/2004	
10.4	Internet Photonics, Inc. Amended and Restated 2000 Corporate Stock Option Plan*	10-Q (000-21969)	10.39	5/20/2004	
10.5	Ciena Corporation 2000 Equity Incentive Plan (Amended and Restated ONI Systems Corp. 2000 Equity Incentive Plan)*	10-K (000-21969)	10.37	12/11/2003	
10.6	Form of Stock Option Award Agreement for executive officers under Ciena Corporation 2000 Equity Incentive Plan*	8-K (000-21969)	10.1	11/4/2005	
10.7	Form of Restricted Stock Unit Agreement for executive officers under Ciena Corporation 2000 Equity Incentive Plan*	8-K (000-21969)	10.2	11/4/2005	
10.8	Form of Performance Stock Unit Award Agreement for executive officers under Ciena Corporation 2000 Equity Incentive Plan*	8-K (000-21969)	10.3	11/4/2005	
10.9	Form of Stock Option Award Agreement for directors under Ciena Corporation 2000 Equity Incentive Plan*	8-K (000-21969)	10.4	11/4/2005	
10.10	Form of Restricted Stock Unit Award Agreement for directors under Ciena Corporation 2000 Equity Incentive Plan*	8-K (000-21969)	10.5	11/4/2005	
10.11	Amended and Restated 2003 Employee Stock Purchase Plan (as amended on May 30, 2006 and September 10, 2010)*	10-K (000-21969)	10.11	12/22/2011	
10.12	1996 Outside Directors Stock Option Plan*	S-1 (333-17729)	10.4	12/12/1996	
10.13	Forms of 1996 Outside Directors Stock Option Agreement*	S-1 (333-17729)	10.5	12/12/1996	

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Here-with (X)
		Form and Registration or Commission No.	Exhibit	Filing Date	
10.14	Third Amended and Restated 1994 Stock Option Plan*	S-1 (333-17729)	10.2	12/12/1996	
10.15	Amended and Restated 1994 Stock Option Plan Forms of Employee Stock Option Agreement*	S-1 (333-17729)	10.3	12/12/1996	
10.16	2008 Omnibus Incentive Compensation Plan*	8-K (000-21969)	10.1	3/27/2008	
10.17	Amendment to Ciena Corporation 2008 Omnibus Incentive Plan*	8-K (000-21969)	10.1	4/15/2010	
10.18	Amendment to Ciena Corporation 2008 Omnibus Incentive Plan dated March 21, 2012	8-K (000-21969)	10.1	3/23/2012	
10.19	Form of 2008 Omnibus Incentive Plan Restricted Stock Unit Agreement (Employee)*	10-K (000-21969)	10.18	12/22/2011	
10.20	Form of 2008 Omnibus Incentive Plan Non-Qualified Stock Option Agreement (Employee)*	10-Q (000-21969)	10.2	6/4/2009	
10.21	Form of 2008 Omnibus Incentive Plan Restricted Stock Unit Agreement (Director)*	10-Q (000-21969)	10.3	6/4/2009	
10.22	World Wide Packets, Inc. 2000 Stock Incentive Plan, as amended*	S-8 (333-149520)	10.1	3/4/2008	
10.23	Form of Indemnification Agreement with Directors and Executive Officers*	10-Q (000-21969)	10.1	3/3/2006	
10.24	Amended and Restated Change in Control Severance Agreement between Ciena Corporation and Gary B. Smith*	10-K (000-21969)	10.23	12/22/2010	
10.25	Form of Amended and Restated Change in Control Severance Agreement between Ciena and Executive Officers*	10-K (000-21969)	10.24	12/22/2010	
10.26	Ciena Corporation Directors Restricted Stock Deferral Plan*	10-Q (000-21969)	10.1	8/31/2007	
10.27	Ciena Corporation Amended and Restated Incentive Bonus Plan, as amended December 15, 2011*	10-K (000-21969)	10.26	12/22/2011	
10.28	Ciena Corporation 2010 Inducement Equity Award Plan*	10-K (000-21969)	10.35	12/22/2009	
10.29	Form of 2010 Inducement Equity Award Plan Restricted Stock Unit Agreement*	10-Q (000-21969)	10.2	3/25/2009	
10.30	U.S. Executive Severance Benefit Plan*	10-Q (000-21969)	10.1	6/9/2011	
10.31	Lease Agreement dated as of March 19, 2010 between Ciena Canada, Inc. and Nortel Networks Technology Corp.#	10-Q (000-21969)	10.1	6/10/2010	
10.32	Lab 10 Lease Amending Agreement dated February 13, 2012 between Ciena Canada, Inc. and Public Works and Government Services Canada	8-K (000-21969)	1.1	2/15/2012	
10.33	Transition Services Agreement, dated as of March 19, 2010 between Ciena Corporation and Nortel Networks Corporation and certain affiliated entities#	10-Q (000-21969)	10.2	6/10/2010	
10.34	Intellectual Property License Agreement dated as of March 19, 2010 between Ciena Luxembourg S.a.r.l. and Nortel Networks Limited#	10-Q (000-21969)	10.3	6/10/2010	
10.35	Employee Stock Purchase Plan Enrollment Agreement*	10-K (000-21969)	10.33	12/22/2011	
10.36	Amended & Restated Employee Stock Purchase Plan dated March 21, 2012	8-K (000-21969)	10.2	3/23/2012	

10.37	Lease Agreement dated November 3, 2011 between Ciena Corporation and W2007 RDG Realty, L.L.C.	10-K (000-21969)	10.34	12/22/2011
10.38	ABL Credit Agreement, dated August 13, 2012, by and among Ciena Corporation, Ciena Communications, Inc. and Ciena Canada, Inc., as the borrowers, the lenders party thereto, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, Bank of America, N.A., as syndication agent, and Morgan Stanley Senior Funding, Inc. and Wells Fargo Bank, National Association, as co-documentation agents +	10-Q (000-21969)	10.1	9/5/2012
10.39	Amendment to Credit Agreement, dated August 24, 2012, by and among Ciena Corporation, Ciena Communications, Inc. and Ciena Canada, Inc., as he borrowers, and Deutsche Bank AG New York Branch, as administrative agent +	10-Q (000-21969)	10.2	9/5/2012
10.40	Security Agreement, dated August 13, 2012, by and among Ciena Corporation and Ciena Communications, Inc., as assignors, and Deutsche Bank AG New York Branch, as collateral agent +	10-Q (000-21969)	10.3	9/5/2012
10.41	Pledge Agreement, dated August 13, 2012, by and among Ciena Corporation and Ciena Communications, Inc., as pledgers, and Deutsche Bank AG New York Branch, as collateral agent and pledgee +	10-Q (000-21969)	10.4	9/5/2012
10.42	U.S. Guaranty, dated August 13, 2012, by and among Ciena Corporation and Ciena Communications, Inc., as guarantors, and Deutsche Bank AG New York Branch, as administrative agent +	10-Q (000-21969)	10.5	9/5/2012
10.43	Canadian Security Agreement, dated August 13, 2012, by and between Ciena Canada, Inc., as assignor, and Deutsche Bank AG New York Branch, as collateral agent +	10-Q (000-21969)	10.6	9/5/2012
10.44	Canadian Guaranty, dated August 13, 2012, by and between Ciena Canada, Inc., as guarantor, and Deutsche Bank AG New York Branch, as administrative agent +	10-Q (000-21969)	10.7	9/5/2012

12.1	Computation of Earnings to Fixed Charges	—	—	—	X
21.1	Subsidiaries of registrant	—	—	—	X
23.1	Consent of Independent Registered Public Accounting Firm	—	—	—	X
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934 as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	—	—	—	X
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934 as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	—	—	—	X
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	—	—	—	X
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	—	—	—	X
101.I NS**	XBRL Instance Document	—	—	—	X
101.S CH**	XBRL Taxonomy Extension Schema Document	—	—	—	X
101. CAL **	XBRL Taxonomy Extension Calculation Linkbase Document	—	—	—	X
101. DEF* *	XBRL Taxonomy Extension Definition Linkbase Document	—	—	—	X
101.L AB**	XBRL Taxonomy Extension Label Linkbase Document	—	—	—	X
101.P RE**	XBRL Taxonomy Extension Presentation Linkbase Document	—	—	—	X

* Represents management contract or compensatory plan or arrangement

** In accordance with Regulation S-T, XBRL (Extensible Business Reporting Language) related information in Exhibit No. (101) to this Annual Report on Form 10-K shall be deemed “furnished” and not “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, and shall not be incorporated by reference into any registration statement pursuant to the Securities Act of 1933, as amended.

+ Pursuant to Item 601(b)(2) of Regulation S-K certain schedules and exhibits referenced in the table of contents have been omitted. Ciena hereby agrees to furnish supplementally a copy of any omitted exhibit or schedule to the SEC upon request. In addition, representations and warranties included in these agreements, as amended, were made by the parties to one another in connection with a negotiated transaction. These representations and warranties were made as of specific dates, only for purposes of these agreements and for the benefit of the parties thereto. These representations and warranties were subject to important exceptions and limitations agreed upon by the parties, including being qualified by confidential disclosures, made for the purposes of allocating contractual risk between the parties rather than establishing these matters as facts. These agreements are filed with this report only to provide investors with information regarding its terms and conditions, and not to provide any other factual information regarding Ciena or any other party thereto. Accordingly, investors should not rely on the representations and warranties contained in these agreements or any description thereof as characterizations of the actual state of facts or condition of any party, its subsidiaries or affiliates. The information in these agreements should be considered together with Ciena’s public reports filed with the SEC.

Certain portions of these documents have been omitted based on a request for confidential treatment submitted to the SEC. The non-public information that has been omitted from these documents has been separately filed with the SEC. Each redacted portion of these documents is indicated by a “[*]” and is subject to the request for confidential treatment submitted to the SEC. The redacted information is confidential information of the Registrant.

corporate information

corporate headquarters

Ciena Corporation
7035 Ridge Road
Hanover, MD 21076
Telephone: (800) 921-1144
or (410) 694-5700
www.Ciena.com

virtual annual meeting

Ciena's annual meeting of shareholders will be held at 3:00 PM (Eastern) on Wednesday, March 20, 2013. Please visit www.shareholdermeeting.com/ciena at least 10 minutes prior to the start time.

independent registered public accounting firm

PricewaterhouseCoopers LLP
Baltimore, MD

outside counsel

Hogan Lovells US LLP
Baltimore, MD

transfer agent

Computershare Trust Company, N.A.
P.O. Box 43078
Providence, RI 02940-3078
Stockholder Inquiries: (781) 575-2879
www.Computershare.com

common stock market data

Since its initial public offering on February 7, 1997, Ciena's Common Stock has traded on the Nasdaq Stock Market under the symbol "CIEN".

investor relations

For additional copies of this report or other financial information, contact:
Investor Relations
Ciena Corporation
7035 Ridge Road
Hanover, MD 21076
Telephone: (877) 243-6273
or (410) 694-5700

Additional information is available on Ciena's website at www.Ciena.com.

operating executive officers

Patrick H. Nettles, Ph.D.
Executive Chairman of the Board of Directors

Gary B. Smith
President, Chief Executive Officer and Director

James E. Moylan, Jr.
Chief Financial Officer, Senior Vice President, Finance

Stephen B. Alexander
Chief Technology Officer, Senior Vice President, Products and Technology

Rick Dodd
Senior Vice President, Global Marketing

James Frodsham
Senior Vice President, Chief Strategy Officer

François Locoh-Donou
Senior Vice President, Global Products Group

Philippe Morin
Senior Vice President, Global Field Operations

Andrew Petrik
Vice President and Controller

David M. Rothenstein
Senior Vice President, General Counsel and Secretary

outside board members

Harvey B. Cash
General Partner
InterWest Partners

Bruce L. Clafin
Chairman
AMD Corporation

Lawton W. Fitt
Retired Partner
Goldman Sachs

Patrick T. Gallagher
Independent Telecoms Industry Advisor

Judith M. O'Brien
Partner
King & Spalding LLP

Michael J. Rowny
Chairman
Rowny Capital

ciena : the network specialist

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