

Redefining data networking.

CIENA's portfolio of networking systems and software is the basis of LightWorks™ architecture, an intelligent, flexible solution for all-service networking. LightWorks is a blueprint that can help service providers create a unified, automated, edge-to-core network with operational efficiency and service flexibility. CIENA helps service providers deliver and manage advanced and traditional data services. LightWorks evolves the current network model by: Sharing software intelligence across network elements to automate network operations. Consolidating network elements into multi-function systems to collapse network layers. Integrating data networking capabilities into the existing transport layer to avoid building separate data networks. Leveraging the reliability of the SONET/SDH transport network to enable a new breed of carrier-class data services. The result is a streamlined, automated network that maximizes the existing infrastructure, capitalizes on new markets, and drives down the costs of building and operating the network. LightWorks' sophisticated network intelligence, integrated data functionality, and inherent transport reliability allow service providers to manage many services on one fluid and dynamic network. With LightWorks, service providers can transform the challenges of explosive growth and increasing traffic volatility into real market opportunities.

Intelligent Network CIENA's suite of core networking systems helps service providers extract maximum value from their current SONET/SDH network architectures, while minimizing the risk and cost of integrating new services. Our solutions offer the superior switching functionality and long-haul transport capabilities service providers need to position the creation of a new set of carrier-class data services. CIENA's Intelligent, Flexible

carriers to evolve their service portfolios to meet changing market requirements.

Multiservice Networking CIENA delivers market-leading platforms for core and metropolitan network multiservice aggregation. Together, these multiservice switches create an end-to-end solution for enhanced bandwidth efficiency, provisioning, and scalability converging traditional and emerging data services such as ATM, DSL, Frame Relay, TDM/CTES, and IP/MPLS in the network core and at the edge. By integrating these multiservice switches into the existing ATM infrastructure, CIENA offers a safe migration path to IP/MPLS, while simultaneously supporting existing legacy services.

Multiservice Edge Switching CIENA delivers increased optical bandwidth to the network edge. Because of its small footprint and enhanced scalability, CIENA's multiservice edge switching platform helps service providers deliver a wide variety of new data services at significantly reduced costs. The multiservice edge switching family features the following products:

DN Product Family Multiservice Platform The DN Product Family offers switching capabilities across the entire network span, from the network edge to the core. Service providers can now deliver customized services based on customer demand and service area density, all at lower price points than any product on the market today.

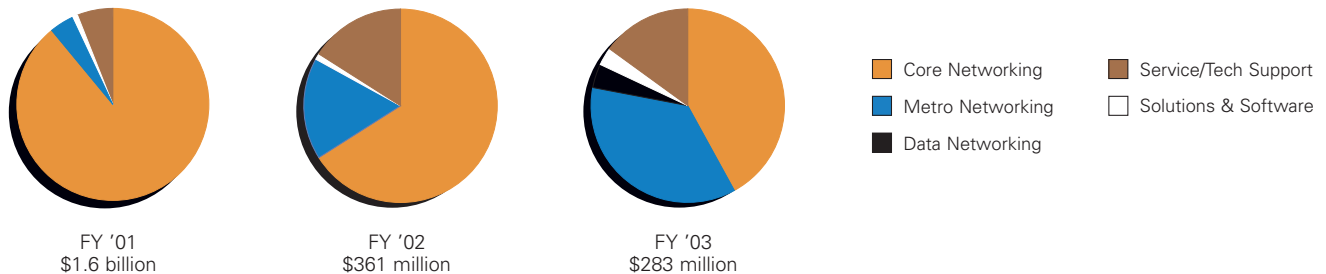
ON-Center™ DN 7000 Manager™ Software for LightWorks ON-Center® Management Suite ON-Center DN 7000 Manager Software enables the rapid commissioning and configuration of CIENA's DN Multiservice Switching Product Family and facilitates provisioning, monitoring, and troubleshooting of network services.

transformING

CIENA Corporation delivers innovative networking solutions to the world's largest service providers and enterprises, increasing the cost-efficiency of current voice and data services while enabling the creation of new carrier-class data services built upon the existing network infrastructure.

Revenue/Product Diversification

Transforming into a comprehensive networking solutions provider



and responsive. They can be easily implemented within an existing SONET/SDH network to help service providers to quickly provision the data services their customers demand.

Metropolitan Transport CIENA's metropolitan transport solutions successfully meet all service provider and enterprise requirements.

ONLINE Metro™ Multiservice DWDM Transport Platform Designed for enterprises and service providers who want to provide their customers a variety of managed services over a single optical infrastructure.

ONLINE Edge™ Multiservice CWDM Transport Platform Designed for enterprises and service providers who want to offer high-bandwidth services over a single optical infrastructure.

DN 2000™ Storage Extension Platform Customer premise device for extending data and storage applications over distance to meet business continuity/disaster recovery goals.

MultiWave Metro® Dense Wavelength Division Multiplexing System

MultiWave Metro™ optical transport system designed for use in metropolitan ring applications.

MultiWave Metro One™ Dense Wavelength Division Multiplexing System Part of the MultiWave Metro™ family of DWDM optical networking systems designed for customer premise applications.

Metropolitan Switching CIENA's metropolitan switching solutions provide a platform to aggregate, groom and add/drop services to maximize bandwidth efficiency throughout a carrier's metro network – from access to core. The metropolitan switching product line offers a comprehensive package of options to support TDM, ATM, and Ethernet switching capabilities, which help enterprises and service providers generate revenue from traditional private line services. They also enable new revenue streams from emerging switched data services. The metropolitan switching family features the following product:

SDH, DWDM, CWDM, or dark fiber.

Network Management CIENA's network management system offers an integrated suite of solutions to simplify and streamline how service providers manage and operate their equipment within their network. The modular offering covers the entire CIENA portfolio from edge to core, including all transport and switching products. Carrier-class fault, configuration, accounting, performance, and security management functionalities seamlessly interoperate to help service providers optimize their network operations.

LightWorks ON-Center® Management Suite CIENA's next-generation intelligent optical network management system creates a powerful opportunity for service providers to distinguish themselves from the competition, based on its ability to rapidly provision and continuously monitor new revenue-generating optical services, while increasing the efficiency of existing or new networks.

CIENA Support Services The BEST Service & Support. CIENA offers the best support and client service in the industry. Our award-winning programs ensure reliable and timely implementation of end-to-end network solutions that help bridge the gap between the capabilities of carrier networks and the evolving communications needs of enterprises. Our experienced, degreed engineers and network designers are familiar with the deployment, operation, analysis, and optimization of advanced high-speed networks. They deliver expert consultations in DWDM, optical switching, SONET, ATM, packet-based switching, routing, and digital loop carrier systems.

CIENA's automated, data-efficient networks and talented support team continually deliver excellence 24 hours a day every day of the year. Our clients expect the best, and CIENA we deliver it.

Fellow Shareholders:

During another difficult year in the telecommunications equipment industry, CIENA held firm to the course we set at the onset of the telecom downturn, and as a result, we made meaningful strides toward profitability.

When CIENA's service provider customers began to dramatically reduce their capital spending three years ago, we embarked on a strategy designed to increase our addressable market through a combination of internal development, acquisitions and strategic alliances. Simultaneously, we also began to take steps to stabilize and improve our gross margin, as well as to reduce our operating expenses and align our continued investment in our business with emerging market opportunities. We continue to believe that it is the combination of these actions, as opposed to any one action alone, that will restore long-term, sustained profitability to our business.

Let's review our progress:

Driving Future Revenue Growth

While CIENA had revenue of \$283 million for its fiscal year ended October 31, 2003, a decrease of 22% when compared with fiscal 2002 revenue of \$361 million, we believe we have taken significant steps to set the stage for future revenue growth, including winning new customers, selling more products to existing customers and entering new markets.

- For the year, we recorded revenue from sales to a total of 110 customers representing an increase of more than 42% over 2002's customer base of 77.
- Among the new customers added were incumbent carriers such as BT, SBC and SingTel. In all, we can point to 15 new product wins in our tier one accounts, which builds our presence with the kind of important customers that will drive industry recovery and CIENA's future growth.
- As a result of the acquisitions of WaveSmith Networks and Akara Corporation, and our strategic partnerships with Laurel Networks and Luminous Networks, we estimate we have increased our addressable market by \$3.8 billion, bringing our total addressable market in 2005 to an estimated \$11.6 billion.
- The combination of the two acquisitions and two strategic partnerships added nine new products to our arsenal, expanding our portfolio to 20 products.
- As a result of a broader product set, we were able to expand our reach within key existing accounts, and we sold new or additional products to 40% more customers than in the previous year.
- We also expanded our sales channels beyond direct sales to service providers, developing a growing number of partnerships and other strategic relationships that target enterprise and government customers. During the year, we added 22 new worldwide channel partners, enabling us to address new geographic regions and market segments.

Improving Gross Margins

We successfully improved our gross margin from 13.8% in the fourth quarter of fiscal 2002 to 31.2% in the fourth quarter of fiscal 2003. This improvement came as a result of:

- Significantly reducing our fixed cost overhead as a result of increased outsourcing;
- Adding more profitable product platforms to our portfolio;
- Meaningfully improving the profitability of our services business; and
- An ongoing focus on product cost reductions.

Reducing Costs

In parallel with the steps to increase our addressable market, and to improve our gross margin, we also have executed a program to reduce and restructure our costs, better aligning them with our market opportunities and changing product mix.

- Since the fourth quarter of fiscal 2001, we have reduced our quarterly research and development, selling and marketing, and general and administrative expenses (exclusive of deferred stock compensation) by 37%, from \$127.2 million to \$79.9 million.
- In the last year, these expenses have declined 25%, despite the addition of costs associated with two acquisitions.

Additionally, we've announced our intention to reduce our ongoing operating expenses further still in fiscal 2004. Given our expanded market and product focus, cost reduction must happen simultaneously with steps to ensure we are spending strategically, and in line with market and revenue opportunities.

Preserving Balance Sheet Strength

In addition to the steps we've taken to restore profitability to our business, during 2003 we also took steps to improve an already-strong balance sheet, reducing our long-term debt by \$113.2 million. Since the end of the fiscal year, we have taken steps to reduce long-term debt by an additional \$48 million with the redemption of the 5% convertible notes originally issued by ONI Systems. As a result, we continue to have a stronger net cash position than many of our peers and competitors.

CIENA's Transformation

We have taken deliberate steps to evolve from a company that, just two years ago, derived more than 80% of its revenue from a single product line into a comprehensive network solutions provider—one that can offer a wider range of customer solutions that span from the optical core of the network to the edge where services are created and delivered. As a result, our revenues have diversified significantly, with more than 50% of our 2003 revenue coming from sources outside our historic focus of core networking.

Many of the new solutions we've added to our portfolio in the last year are focused on data applications and the network edge. As a result, we've grown our revenues in these areas from zero to 7% year over year. For 2004, our goal is for data/edge products to contribute more than 30% of total revenues.

This transformation is about more than product and revenue diversification. In fact, it extends to every facet of our business, from the products we sell to how we sell them to the way we receive and process orders to the way we prioritize and spend R&D dollars.

This transformation is not an option. If CIENA is going to thrive in today's telecom environment, we believe that we cannot simply cost-cut our way back to sustained profitability. We believe restoring long-term growth and profitability to our business requires the combination of expanding our addressable markets while simultaneously reducing and realigning our investment with the opportunities we see emerging. We have made solid progress thus far, but there is more to be done.

The Data Challenge

The major challenge service providers face is evolving their networks to process efficiently and deliver profitably a growing range of data services. The networks of most carriers were designed to carry voice traffic and deliver voice services. As the demand for data services grew, these carriers built separate data networks and operated them concurrently with their existing voice networks. Revenue from data services continues to grow, but in most cases not nearly as fast as data traffic. It is estimated that in 1999 data services represented 13% of network traffic and accounted for 13% of revenue. In contrast, analysts estimate data services will represent 54% of network traffic in 2004 but will generate only 16% of revenue. Moreover, data services are, in general, less profitable than traditional voice services.

With data surpassing voice as the dominant network traffic but lagging in terms of profitability, carriers are looking for more cost-effective and efficient ways to deliver the range of voice and data services that their customers are demanding. Most have concluded that the only way to offer advanced voice, data, video and other services profitably is to consolidate their separate voice and data networks onto a single converged network, one that is capable of delivering multiple services over a single infrastructure.

While this vision of eventual network convergence is widely shared, there are divergent perceptions regarding how it will come about. Some equipment vendors envision that the

converged network will be based on a completely new network infrastructure. We believe, however, that the transition to a converged all-service network will be an evolutionary process, one in which carriers will leverage the reliability and investment in their existing networks.

Going Forward

In the last year, we have substantially increased CIENA's addressable market and, we believe, our future revenue and earnings potential by entering new markets where we anticipate growth, predominantly as a result of the demand for this emerging, all-service network. Going forward, we will look for additional opportunities to expand our solution portfolio and increase our addressable market further still through both additional partnerships and acquisitions. We also will remain focused on following through on the steps that are necessary to restore long-term profitability and positive operating cash flow to our business.

Our team is confident that, as the market continues to stabilize over the course of 2004, the opportunities are there for CIENA. On behalf of myself and all the employees of CIENA, I thank our customers and our shareholders for their continued support.



GARY B. SMITH
President,
Chief Executive Officer and Director



EDM available, which optimizes variability and fiber capacity of the network used for your applications, while increasing bandwidth flexibility for emerging data services (e.g. Gigabit Ethernet) and extended Storage Area Networks (SANs).

Switching CIENA's core switching software supports differentiated carrier services effectively combining in a single platform many different protection options and flexible bandwidth management capabilities. The core switching family features the following products:

- Director® Intelligent Optical Core Switches** CoreDirector switches are designed to fully address a wide range of differentiated, end-to-end optical carrier services. The switch uses flexible protection options and maintains operational simplicity.
- Transport** CIENA's core transport solutions provide a flexible platform with a set of options that allows service providers to cost-effectively implement long-haul ultra-long-haul DWDM applications within a single platform. The core transport line features the following products:

area density, all at lower price points than any product on the market today.

- ON-Center™ OS 7000 Manager™ Software for LightPacks OS-Center® Main** mode mode OS-Center OS 7000 Manager Software enables the rapid commissioning, configuration of CIENA's OS Multiaccess Switching Product Family and facilitates performance, monitoring, and troubleshooting of network services.
- Enterprise Networking Products of High Performance Solutions to Meet Business C** onstant, Disaster Recovery and Data Center Consolidation. CIENA's products pro- motes the industry's most cost-effective, highest performance solutions for ultra- extension and data connectivity requirements. CIENA has a complete set of network solutions including the OS 2000™ Storage Extension Platform, ONLINE Edge™ M- service Platform and ONLINE Main™ DWDM Platform. CIENA's products meet needs of all enterprise to deliver proven, proven business solutions, shared across

FORM 10-K

ically suited for long-haul applications that require low cost, scalable capacity. Multi- mode Soney 1000 systems support advanced carrier service providers to meet SONET/SDH, ATM and Fast IP traffic on a common optical network.

- Wave Soney® 1000 Transmission System Dense Wavelength Division Multiplexing System** MultiWave Soney 1000 delivers DWDM throughput up to 40 Gbps. This architecture service providers to only SONET/SDH, ATM, Fast IP and applications and on a common optical network. In addition to providing the highest performance option, transport layer available for traditional SONET/SDH based networks. Soney enables coexistence of ATM and Fast IP networks without an intervening synchronous layer.
- Impedance Networking** CIENA's LightWorks™ Architecture helps service providers cost- and maintainable, multiple layers of the network to deliver data-efficient networking across metropolitan areas. CIENA's metropolitan switching and transport solutions are flexible solutions. They can be easily implemented within an existing SONET/SDH network to

an optical network, provide complete connectivity and are available in all sizes, configurations, and allow for connectivity about any distance.

- The **ONLINE Edge** is a high performance, multiaccess DWDM platform that connects Storage, Video, T1, UDS and OC-n services onto Dark Fiber. Including the complete set of data center connectivity requirements across the network.
- The **ONLINE Main** is a very high density DWDM platform that can easily scale to support hundreds of storage and core storage connections for enterprises with large capacity requirements. CIENA can help enterprises consolidate their disparate storage data- base connectivity requirements, both increasing tape backup, cloning, SAN, storage LAN expansion, multiple connections, and others across a single WAN connection. Scalability CIENA's strong industry partnerships, proven interoperability, simplified work management and unmatched operational model combine to provide a cost- optimal and second-to-none solution for your critical business applications.

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, 2003

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)

(State or other jurisdiction of incorporation or organization) **Delaware**

(I.R.S. Employer Identification No.) **23-2725311**

(Address of principal executive offices) **1201 Winterson Road, Linthicum, MD**

(Zip Code) **21090-2205**

(Registrant's telephone number, including area code) **(410) 865-8500**

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

Securities registered pursuant to Section 12(g) of the Act: **Common Stock**

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 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 an accelerated filer (as defined in Exchange Act Rule 12b-2).

Yes

No

The aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant was \$2,287,132,422, based on the closing price of the Common Stock on the Nasdaq Stock Market on May 2, 2003.

The number of shares of Registrant's Common Stock, par value \$0.01 outstanding as of December 9, 2003 was 473,795,871.

Documents Incorporated by Reference

Part III of the Form 10-K incorporates by reference certain portions of the Registrant's proxy statement for its 2004 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.

PART I

The information in this Form 10-K contains certain forward-looking statements, including statements related to markets for the Company's products and trends in its business that involve risks and uncertainties. The Company's actual results may differ materially from the results discussed in the forward-looking statements. Factors that might cause such a difference include those discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors" and "Business" as well as those discussed elsewhere in this Form 10-K.

Item 1. Business

General

Overview

CIENA is a leading global provider of innovative network solutions to telecommunications service providers and enterprises worldwide. Our customers include long distance carriers, local exchange carriers, cable operators, Internet service providers, wireless and wholesale carriers, resellers, governments, large businesses and non-profit institutions.

CIENA was incorporated in Delaware in November 1992, and we completed our initial public offering on February 7, 1997. CIENA's principal executive offices are located at 1201 Winterson Road, Linthicum, Maryland 21090. Our telephone number is (410) 865-8500, 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 our web site as soon as reasonably practicable after we file these reports with the Securities and Exchange Commission.

In fiscal 2001, CIENA's annual revenue reached \$1.6 billion, based largely on the success of a single product line, long-distance optical transport. In early 2001, the telecommunications industry began a severe decline, which has affected almost all of its participants, including equipment suppliers like CIENA. This decline caused the market for networking equipment to shrink substantially, with a resulting adverse impact on our revenue and profitability. In response, we embarked upon a strategy designed to increase our addressable market through a combination of internal development, acquisitions and strategic alliances. Since 2001, we have entered new markets by expanding our network solution offerings and worked to increase our market share by adding new features to our existing products. We also have taken steps to expand our sales channels beyond direct sales to service providers, developing a growing number of partnerships and other strategic relationships that target enterprise and government customers. We plan to continue this strategy, with particular emphasis on offering products to enable delivery of data communications services, because we expect a large portion of capital spending to occur in this area over the next few years. In general, our intent is to continue to evolve from a vendor of optical networking equipment into a strategic provider of networking solutions.

During fiscal 2003, as part of our efforts to implement our strategy, we completed the acquisitions of WaveSmith Networks, Inc. and Akara Corporation. WaveSmith was a privately held corporation offering a multi-service switching product designed to be deployed at the edge of carrier networks. Akara was a privately held corporation providing SONET/SDH-based extended storage solutions.

CIENA had revenue of \$283 million for its fiscal year ended October 31, 2003, a decrease of 22% when compared with fiscal 2002 revenue of \$361 million. CIENA recorded a net loss of \$387 million in fiscal 2003 compared with a net loss of \$1.6 billion for fiscal 2002. For the fiscal year ended October 31, 2003, CIENA recorded revenue from sales to a total of 110 customers. This represents an increase of more than 42% over 2002's customer base of 77. During fiscal 2003, AT&T and Qwest each represented more than 10% of CIENA's total revenue.

Over the last two years, in parallel with the steps to increase our addressable market, we have also executed a program to reduce and restructure our costs, aligning them better with our market opportunities and changing product mix. Since the fourth quarter of fiscal 2001, we have reduced our quarterly research and development, selling and marketing, and general and administrative expenses (exclusive of deferred stock compensation) by 37%, from \$127.2 million to

\$79.9 million. Consistent with our overall strategy, we plan to reduce these expenses further in fiscal 2004, in order to strike an appropriate balance between ongoing strategic investment in our business and careful expense control and prudent cash management.

The matters discussed in this section should be read in conjunction with the Consolidated Financial Statements found under Part II, Item 8 of this Annual Report on Form 10-K.

Industry Background

General

Deregulation in the United States and privatization in many other countries during the 1990's began a transition from a telecommunications industry characterized by a small number of heavily regulated large service providers to one in which numerous new competitors began to emerge. Rapid traffic growth and readily available capital further fueled the growth in the number of service providers, as emerging carriers built networks and fought to take market share from the incumbent carriers. The rapid adoption of the Internet prompted service providers and enterprises to construct large-scale data networks as overlays to existing legacy voice networks. During this time, CIENA's revenue grew to \$1.6 billion in fiscal 2001, predominantly from the sale of a single product category, long-distance optical transport equipment.

Beginning in late 2000, capital markets tightened. Service providers responded by curtailing network build-outs and dramatically reducing their overall capital spending, significantly affecting the revenue and profitability of equipment providers like CIENA. In addition, many carriers found that they had built networks in anticipation of demand that failed to materialize, and the industry, as a whole, faced a market in which there was significant over-capacity. Some carriers, with inadequate revenue and no access to additional capital, failed. Others reorganized or are still in the process of working through restructurings, leading to a climate of uncertainty.

After several years of significantly lower capital spending, most service providers' operating costs remain high while their revenue is growing slowly, if at all. In the United States, the incumbent local exchange carriers (ILECs) are losing revenue to wireless and cable substitution, and interexchange carriers (IXCs) are losing long-distance revenue to ILECs and wireless carriers. Overseas, incumbent carriers, mostly former post, telephone and telegraph enterprises (PTTs), are experiencing intense price pressure from new players in their respective markets. As a result of this environment, we expect most service providers to strive to hold aggregate capital spending flat for the next several years and focus on reducing overall network ownership costs and on generating new, higher margin data services.

The Data Challenge

Currently, the major challenge service providers face is evolving their networks to process efficiently and deliver profitably a growing range of data services. The networks of most ILECs, IXCs and PTTs were designed to carry voice traffic and to deliver voice services. As the demand for data services grew, these carriers built separate data networks and operated them concurrently with their existing voice networks. Revenue from data services continues to grow, but in most cases not nearly as fast as data traffic. It is estimated that in 1999 data services represented 13% of network traffic and accounted for 13% of revenue. In contrast, analysts estimate data services will represent 54% of network traffic in 2004 but will generate only 16% of revenue. Moreover, data services are, in general, less profitable than traditional voice services.

With data surpassing voice as the dominant network traffic but lagging in terms of profitability, carriers are looking for more cost-effective and efficient ways to deliver the range of voice and data services that their customers are demanding. Most have concluded that the only way to offer advanced voice, data, video and other services profitably is to consolidate their separate voice and data networks onto a single converged network, one that is capable of delivering multiple services over a single infrastructure.

While this vision of eventual network convergence is widely shared, there are divergent perceptions regarding how it will come about. Some equipment vendors envision that the converged network will be based on a completely new network infrastructure. We believe, however, that the transition to a converged all-service network will be an evolutionary process, one in which carriers will leverage their existing network investment. The majority of our strategic initiatives, partnerships and investments are intended to capitalize on this evolution.

Strategy

In fiscal 2001, nearly 80% of CIENA's revenue came from a single product category, long-haul optical transport. Since then, through internal development, acquisition and partnerships, we have significantly diversified our product portfolio and with it, our customer base. Our strategy is based on leveraging our key strengths to capitalize on service providers' focus on operational savings and on their move toward converged voice and data networks. We see these strengths as:

- A solid base of major customers;
- A position as an industry technology leader; and
- Our experience in successfully introducing economically-driven network innovation.

Since the decline in the telecommunications equipment market began, our strategy has been to enhance our competitive position by continuing to invest in our business. This strategy entails taking steps to:

- Expand our addressable market by adding new data-focused products to our portfolio through internal development, acquisition and partnerships.
- Increase our market share within our existing markets by enhancing the features and functions of current products and focusing on product cost reductions.
- Expand our customer base by directing increased sales efforts toward incumbent carriers, developing new sales channels and increasing our sales efforts with enterprises and government customers.
- Increase sales to existing customers by leveraging our new features, products and partnerships to establish CIENA as a strategic and attractive supplier.

We believe restoring sustained profitability to CIENA requires simultaneous revenue growth and an internal transformation of our business and processes. Our efforts toward this transformation are well underway and will continue. They include:

- Balancing continued strategic investment with careful cost control and prudent cash management;
- Closely aligning investment with opportunity;
- Reducing costs through outsourcing;
- Improving gross margin by adding products with higher software content to the product portfolio;
- Expanding our service offerings and delivering them more profitably;
- Managing our cash prudently; and
- Modifying our business processes to match the demands of our evolving customer base and product portfolio.

CIENA's Solutions

CIENA's solutions harness innovation to deliver improved network economics. Our intelligent networking solutions are designed to enable service providers to transition from inefficient, legacy, voice-centric networks to more efficient, data-friendly networks. CIENA's systems and their intelligent networking software address the network scalability and capital spending challenges and the escalating operational costs faced by service providers.

- CIENA's equipment can replace multiple legacy network elements with fewer, more intelligent network elements, thereby simplifying the network and lowering carriers' initial capital costs and ongoing operating expenses.
- The software functionality of CIENA's equipment creates a network environment in which distributed intelligence—intelligence at the network element level—takes the place of centralized network intelligence. As a result, CIENA networks can "think" for themselves, making dynamic decisions without human intervention thereby facilitating provisioning and protection capabilities and lowering associated operating costs.
- CIENA's equipment is designed to reduce network operating costs by enabling carriers to manage network traffic and network bandwidth more efficiently.
- CIENA's equipment is designed to enable carriers to shorten the time it takes to provision services, in some cases from months to nearly real-time, thereby accelerating revenue generation.
- In addition to capital and operational cost savings, CIENA's equipment and network management software is designed to enable carriers to offer new, revenue-generating and service-differentiating services.

Our networking product portfolio, which is targeted at the critical areas of our customers' networks, includes the following solutions:

Core Networking

CIENA's suite of core networking systems helps service providers extract maximum value from their current SONET/SDH network architectures, while minimizing the risk and cost of integrating new services. Our solutions offer the switching functionality and long-haul transport capabilities service providers need to enable the creation of new carrier-class data services.

Core Transport

CIENA's core transport solutions provide a flexible platform with a menu of options that allows service providers to cost-effectively implement long-haul and ultra long-haul dense wavelength division multiplexing (DWDM) applications within a single platform. The core transport family features the following products:

- CoreStream™ Long-Haul Optical Transmission System
- MultiWave Sentry® 4000 Transport System
- MultiWave Sentry® 1600 Transport System
- CoreStream™ System Optical Add/Drop Multiplexers (OADMs)

Core Switching

CIENA's core switching solutions support differentiable carrier service offerings by combining, in a single combined switching and transport platform, many different protection options and flexible bandwidth management capabilities. The core switching family features the CoreDirector® family of intelligent optical core switches.

Metropolitan Networking

CIENA's suite of metropolitan networking systems helps service providers and enterprises collapse and streamline multiple layers of the network to deliver efficient networking across the metropolitan area for data voice and video services.

Metropolitan Transport

CIENA's metropolitan transport solutions target both service provider and enterprise requirements.

- ONLINE Metro™ Multiservice DWDM Transport Platform—provides customers a variety of managed services over a single optical infrastructure
- ONLINE Edge™ Multiservice CWDM Platform—provides a platform to offer high-bandwidth services over a single optical infrastructure
- CN 2000™ Storage Extension Platform—customer premise device for extending data and storage applications over distance to meet business continuance/disaster recovery goals
- MultiWave Metro® Transmission System—DWDM optical transport system designed for use in metropolitan ring applications
- MultiWave Metro One™ Transmission System—part of the MultiWave Metro™ family of DWDM optical networking systems designed for customer premise applications

Metropolitan Switching

CIENA's metropolitan switching solution, the MetroDirector K2™ Multiservice Platform, provides a platform to aggregate, groom and add or drop services to maximize bandwidth efficiency throughout a carrier's metro network—from access to core. The MetroDirector K2 offers a comprehensive package of options to support TDM, ATM, and Ethernet switching capabilities, which help enterprise and service providers generate revenue from traditional private line services. It also enables new revenue streams from emerging switched data services.

Multiservice Networking

CIENA delivers market-leading platforms for metropolitan network multiservice aggregation. CIENA's DN multiservice edge switching platform enhances bandwidth efficiency, provisioning, and scalability by converging traditional and emerging data services such as ATM, DSL, Frame Relay, TDM/CES, and IP/MPLS in the network core and at the edge. The platform also offers a safe migration path to IP/MPLS, while simultaneously supporting existing legacy services.

LightWorks ON-Center® Management Suite

CIENA's next-generation intelligent optical network management system allows service providers to rapidly provision and continuously monitor new revenue generating optical services, while increasing the efficiency of existing or new networks. The management suite consists of an integrated network manager, a service layer management tool, element management systems for each product and planning tools.

Partnerships

In addition to those products developed internally or added through acquisition, CIENA has executed reseller agreements with both Laurel Networks and Luminous Networks. Under the agreement with Laurel, which is exclusive as to certain designated customers, CIENA markets, sells and supports Laurel Networks' ST200™ Service Edge Router to service providers worldwide. Under the agreement with Luminous, CIENA markets, sells and supports Luminous Networks' entire PacketWave™ family of products.

Services

CIENA provides a comprehensive portfolio of service and support offerings for its products. Our offerings include:

- Deployment services including network design, product installation, network integration testing and acceptance testing;
- Maintenance services including parts exchange, engineering dispatch, advanced technical support and hardware and software warranty extensions; and
- Training and documentation services including product training, service partner training and documentation services.

Product Development

We believe that to be successful, we must continue to enhance our existing products, maintain our technological competitiveness and develop new products that meet our customers' evolving needs. As a result, CIENA has continued to pursue strategic investment in our products and their feature sets despite the downturn in the communications industry. Research and development expenses (exclusive of stock compensation cost of \$12.8, \$15.7 and \$17.8 million) were \$199.7 million, \$239.6 million and \$235.8 million for fiscal 2003, 2002 and 2001, respectively. For more information regarding our research and development expenses, see Item 7. "Management's Discussion and Analysis of Financial Conditions and Results of Operations."

We plan to continue to make investments in research and development on enhancements of our existing products that we believe will enable service providers and enterprises to increase revenue or improve operating costs. We also have engineering efforts underway focused on cost reductions for our products. In addition, we plan to continue to invest in the development of new products, especially products that operate at the edge of the network and products that enable sophisticated services beyond transport and switching.

Our product development process is driven by market demand and a close collaboration among our marketing, sales and product development organizations. We also incorporate feedback from our customers in the product development process. In some cases, we will work with and invest in partners to develop new or modify existing products. In addition, we participate in industry and standards organizations where appropriate and incorporate information from these contacts throughout the product development process.

Marketing and Distribution

We are focused on selling our innovative network solutions by building long-term relationships with service providers, enterprises, governments and other customers through our direct sales efforts and channel partnerships. We maintain a direct sales presence in locations throughout the United States, Latin America, Canada, Europe and Asia. Through these offices we sell and support our network solutions to service provider, enterprise and government customers. We also maintain a channel program with a dedicated team that works with resellers, systems integrators and service providers to sell and market our solutions to service providers, enterprises and governments.

In support of its worldwide sales efforts, CIENA conducts marketing communications programs intended to position and promote its products within the telecommunications industry. Marketing personnel also coordinate our participation in trade shows and conduct media relations activities with trade and general business publications.

Manufacturing

CIENA relies on contract manufacturers to assemble and test most of its products. We work closely with these manufacturers to manage quality, cost and delivery times. We continue to perform much of the assembly and testing of our core transport products, but outsource all of the printed circuit board assembly and some of the optical assembly and module functional testing. We manufacture in-house all the in-fiber Bragg gratings used in our core transport products. All products undergo a final system test performed by us in our Maryland facility. We will continue to evaluate the extent to which third party manufacturers can do even more of our manufacturing and testing on a reliable and cost-effective basis.

Competition

Competition in the telecommunications equipment industry is intense, and became increasingly so as the market for communications networking equipment declined. CIENA's competition is dominated by a small number of very large, usually multi-national, vertically integrated companies each of which has substantially greater financial, technical and marketing resources, and greater manufacturing capacity as well as better established relationships with the incumbent carriers than CIENA. Included among CIENA's competitors are: Alcatel, Cisco Systems, Inc. ("Cisco"), Fujitsu Group ("Fujitsu"), Hitachi Ltd. ("Hitachi"), Huawei Technologies Co. Ltd ("Huawei"), Lucent Technologies Inc. ("Lucent"), Marconi Corporation ("Marconi"), NEC Corporation ("NEC"), Nortel Networks ("Nortel"), Siemens AG ("Siemens"), Telefon AB LM Ericsson ("Ericsson"), and Tellabs, Inc. ("Tellabs"). There are also several smaller, but established companies, such as ADVA AG Optical Networking, and Sycamore Networks, Inc., that offer one or more products that compete directly or indirectly with our offerings. In addition, there are a variety of earlier-stage companies with products targeted at the communications networking market in some stage of development or deployment, most of them employing advanced technology that could offer advantages over products offered by CIENA.

Patents and Other Intellectual Property Rights

As of November 30, 2003, CIENA had received 154 United States patents and had pending 260 U.S. patent applications. We also have a number of foreign patents and patent applications. Of the United States patents that have been issued to CIENA, the earliest any will expire is 2015. In addition, CIENA has licensed patents from third parties. CIENA also licenses from third parties certain software components for its network management products. These licenses are perpetual but will generally terminate after an uncured breach of the agreement by CIENA. CIENA also relies on contractual rights, trade secrets and copyrights to establish and protect its proprietary rights in its products.

CIENA enforces its intellectual property rights vigorously against infringement or misappropriation. CIENA's practice is to require its employees and consultants to execute non-disclosure and proprietary rights agreements upon commencement of employment or consulting arrangements with CIENA. These agreements acknowledge CIENA's exclusive ownership of all intellectual property developed by the individual during the course of his or her work with CIENA, and require that all proprietary information disclosed to the individual will remain confidential. CIENA's employees generally also sign agreements not to compete, in jurisdictions where these agreements are enforceable, with CIENA for a period of twelve months following any termination of employment.

We are currently engaged in two patent lawsuits. See Item 3. "Legal Proceedings." In addition, parties who claim that we may be infringing one or more of their patents approach us from time to time demanding that we take a license from them. We are currently engaged in several discussions regarding such assertions. As part of a settlement of a suit brought by Nortel, we have agreed to attempt to negotiate a patent cross-license agreement with it.

Employees

As of October 31, 2003, CIENA and its subsidiaries employed 1,816 persons, of whom 787 were primarily engaged in research and development activities, 265 in manufacturing, 198 in installation services and customer support, 354 in sales and marketing related activities, and 212 in administration. None of CIENA's employees are currently represented by a labor union. CIENA considers its relations with its employees to be good.

Directors and Executive Officers

The table below sets forth certain information concerning each of the directors and executive officers of CIENA:

Name	Age	Position
Patrick H. Nettles, Ph.D. ⁽¹⁾	60	Executive Chairman of the Board of Directors
Gary B. Smith ⁽¹⁾	43	President, Chief Executive Officer and Director
Stephen B. Alexander	44	Senior Vice President, Chief Technology Officer
Steve W. Chaddick	52	Senior Vice President, Corporate Strategy and Marketing
Joseph R. Chinnici	49	Senior Vice President, Finance and Chief Financial Officer
James F. Collier III	45	Senior Vice President, Corporate Development
Nicholas S. Jeffery	35	Senior Vice President, World Wide Sales
Jesús León	59	Senior Vice President, Chief Development Officer
Edward A. Ogonek	41	Senior Vice President, General Manager of Metro and Enterprise Solutions
Robert A. O'Neil	45	Senior Vice President, General Manager of Data Networking
Arthur Smith, Ph.D.	37	Senior Vice President, Global Operations
Russell B. Stevenson, Jr.	62	Senior Vice President, General Counsel and Secretary
Andrew C. Petrik	40	Vice President, Controller and Treasurer
Stephen P. Bradley, Ph.D. ⁽¹⁾⁽³⁾⁽⁴⁾	62	Director
Harvey B. Cash ⁽¹⁾⁽²⁾⁽⁴⁾	65	Director
Don H. Davis, Jr. ⁽¹⁾⁽²⁾	64	Director
John R. Dillon ⁽¹⁾⁽³⁾	62	Director
Lawton W. Fitt ⁽¹⁾⁽³⁾	50	Director
Judith M. O'Brien ⁽¹⁾⁽²⁾⁽⁴⁾	53	Director
Gerald H. Taylor ⁽¹⁾⁽²⁾	62	Director

(1) The Company's Directors hold staggered terms of office, expiring as follows: Ms. O'Brien and Messrs Cash and Smith in 2005; Ms. Fitt and Messrs. Dillon and Nettles in 2004; Messrs. Bradley, Davis and Taylor in 2006

(2) Member of the Compensation Committee

(3) Member of the Audit Committee

(4) Member of the Governance and Nominations Committee

Patrick H. Nettles, Ph.D. has served 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, and he was President, Chief Executive Officer and Director from April 1994 to October 2000. Dr. Nettles serves as a Trustee for the California Institute of Technology and also serves on the Advisory Board to the President at Georgia Institute of Technology. Dr. Nettles also serves on the board of directors of Axcelis Technologies, Inc.

Gary B. Smith has served as Chief Executive Officer since May 2001; President, Chief Operating Officer and Director since October 2000; and Senior Vice President, Chief Operating Officer from August 1999 to October 2000.

Mr. Smith served as Senior Vice President, Worldwide Sales from September 1998 to August 1999, and was previously Vice President of International Sales since joining the Company in November 1997. He currently serves on the board of directors for the American Electronics Association and as a commissioner for Global Information Infrastructure Commission.

Stephen B. Alexander has served as Senior Vice President and Chief Technology Officer of CIENA since January 2000. He served as CIENA's Vice President and Chief Technology Officer from September 1998 to January 2000.

Steve W. Chaddick was appointed CIENA's Chief Strategy Officer in May 2001, in addition to his existing responsibilities as Senior Vice President, Systems and Technology, a role he has held since February 2000. Between July 1999 and February 2000, Mr. Chaddick served as President of CIENA's Core Switching Division. From August 1998 to July 1999, he served as the Company's Senior Vice President, Strategy and Corporate Development.

Joseph R. Chinnici has served as CIENA's Senior Vice President, Finance and Chief Financial Officer since August 1997. From May 1995 to August 1997, Mr. Chinnici served as the Company's Vice President, Finance and Chief Financial Officer. Mr. Chinnici joined CIENA in September 1994 as its Controller. Mr. Chinnici serves on the board of directors for Guilford Pharmaceuticals Inc.

James F. Collier III has served as Senior Vice President, Corporate Development since June 2003. He served as CIENA's Vice President, North American Sales between May 2002 and May 2003. Prior to joining CIENA, Mr. Collier was employed by Nortel as Vice President of Major Accounts between April 2001 and April 2002 and Vice President of Business Management, Wireless Networks Division from January 1997 to April 2001.

Nicholas S. Jeffery has served as Senior Vice President, World Wide Sales since November 2003. He served as CIENA's Vice President, International Sales from September 2003 to November 2003 and Managing Director and Vice President, Europe, Middle East and Africa from June 2003 to September 23. Prior to joining CIENA, Mr. Jeffery founded and was director of Microfone UK Ltd., a reseller of voice services, from January 2003 to June 2003. Mr. Jeffery remains a director of Microfone. From April 2003 to January 2003, Mr. Jeffery was the Chief Executive Officer of the Markets Group of Cable & Wireless Global. Prior to holding this position, Mr. Jeffery served in a variety of other senior sales and management positions with Cable & Wireless Global and other Cable & Wireless Group Companies.

Jesús León has served as Senior Vice President, Chief Development Officer since August 2002. Mr. León served as Senior Vice President, Metro Transport and Metro Switching from August 2001 to August 2002, Senior Vice President, Metro Transport from May 2001 to August 2001, Senior Vice President, Products and Technology between March 1999 and May 2001, and Vice President, Products and Technology between September 1998 and March 1999.

Edward A. Ogonek has served as Senior Vice President, General Manager of Metro and Enterprise Solutions since November 2003. He served as Senior Vice President, General Manager of Enterprise Solutions for CIENA between August 2003 and November 2003. From November 2000 until he joined CIENA, Mr. Ogonek served as President and Chief Executive Officer of Akara Corporation, which was acquired by CIENA in August 2003. Before joining Akara, Mr. Ogonek was employed by Alcatel, serving as Senior Vice President and General Manager, Edge Data Networks from May 2000 to November 2000. From May 1997 to May 2000, Mr. Ogonek served in a variety of senior management positions with Newbridge Networks and Alcatel.

Robert A. O'Neil has served as Senior Vice President, General Manager of Data Networking since November 2003. He served as Vice President of Data Networking for CIENA between June 2003 and November 2003. From November 2002 until he joined CIENA, Mr. O'Neil served as Vice President of Sales of WaveSmith Networks, which was acquired by CIENA in June 2003. From January 2001 to November 2002, Mr. O'Neil was a Venture Partner of Bessemer Venture Partners, a venture capital firm. From April 1998 to December 2002, Mr. O'Neil served as the Vice President of Sales, Network Access Division of Nortel.

Arthur Smith, Ph.D. has served as Senior Vice President, Global Operations since September 2003. Previously, Dr. Smith served as Senior Vice President, Worldwide Customer Services and Support from June 2002 to September 2003 and as Senior Vice President, Core Transport Division from May 2001 through June 2002. Prior to May 2001, he held engineering management positions in CIENA's Transport Division since joining the company in May 1997.

Russell B. Stevenson, Jr. has served as Senior Vice President, General Counsel and Secretary since joining CIENA in August 2001. From March 2000 to August 2001, he was Executive Vice President, General Counsel and Secretary of ARBROS Communications, Inc., an integrated communications provider. From 1996 to 2000, Mr. Stevenson was Executive Vice President and General Counsel of CyberCash, Inc.

Andrew C. Petrik has served as Vice President, Controller and Treasurer of CIENA since August 1997.

Stephen P. Bradley, Ph.D. has served as Director of the Company since April 1998. Professor Bradley is the William Ziegler Professor of Business Administration and the Chairman of the Program for Management Development at the Harvard Business School. A member of the Harvard faculty since 1968, Professor Bradley is also Chairman of Harvard's Executive Program in Competition and Strategy.

Harvey B. Cash has served as Director of the Company since April 1994. Mr. Cash is a general partner of InterWest Partners, a venture capital firm in Menlo Park, California that he joined in 1985. Mr. Cash serves on the board of directors of i2 Technologies Inc., Silicon Laboratories, Inc., Microtune, Inc., Liberté Investors Inc., and Airspan Networks, Inc. In addition, he is a member of the boards of several private corporations.

Don H. Davis, Jr. has served as Director of the Company since March 2002. Mr. Davis has been Chairman and CEO of Rockwell Automation, Inc. since 1998. (Rockwell International Corporation changed its name to Rockwell Automation, Inc. on June 29, 2001.) He previously served as Executive Vice President and Chief Operating Officer with responsibility for Rockwell International's automation and former semiconductor systems and automotive components businesses. In addition to the Rockwell Automation board, Mr. Davis serves on the boards of Illinois Tool Works, Inc. and Apogent Technologies Inc. He is also a member of the Business Council, the Business Roundtable, and The Conference Board. He is also a past chairman of the Board of Governors of the National Electrical Manufacturers Association, Washington, DC.

John R. Dillon has served as Director of the Company since October 1999. Mr. Dillon has served in a variety of positions at The Coca-Cola Company, Scientific-Atlanta, Inc. and Fuqua National. Mr. Dillon joined Cox Enterprises in 1980 and, until his retirement in 1996, served as Senior Vice President, Chief Financial Officer and director.

Lawton W. Fitt has served as Director of the Company since November 2000. Ms. Fitt was appointed Secretary (Chief Executive) of the Royal Academy of Arts in London in October 2002. Responsible for the day-to-day operation of the Royal Academy, she is the first woman and the first American to have been appointed Secretary in the Academy's history. Prior to her appointment, Ms. Fitt was an investment banker with Goldman Sachs & Co. from 1979 to October 2002, where she was a partner from 1994 and a managing director from 1996 to October 2002. Ms. Fitt is a trustee of the Darden School Foundation.

Judith M. O'Brien has served as Director of the Company since July 2000. Since February 2001, Ms. O'Brien has been a Managing Director at INCUBIC L.L.C., a venture capital firm in Mountain View, California. From 1984 until 2001, she was a partner with Wilson Sonsini Goodrich & Rosati, where she specialized in corporate finance, mergers and acquisitions and general corporate matters.

Gerald H. Taylor has served as Director of the Company since January 2000. Mr. Taylor serves as a Managing Member of MortonsGroup, LLC and serves on the board of directors of Lafarge North America Inc. From 1996 to 1998, Mr. Taylor was Chief Executive Officer of MCI Communications Corporation.

Trademarks

"CIENA," "MultiWave" and "MultiWave Sentry" are registered trademarks of CIENA. "CoreDirector," "CoreDirector CI," "CoreStream," "Fastmesh," "Fastpath," "Flexible Concatenation," "JEM," "LightWorks," "LightWorks OS," "LightWorks ONCenter," "LightWorks Toolkit," "MultiWave CoreDirector," "MultiWave CoreStream," "MultiWave Metro," "MultiWave Metro One," "ONCenter," "OSRP," "SmartSpan," "SmartSupport," "SmartTools," "VLSR," "ONLINE," "OPTX," and "ONWAVE" are trademarks of CIENA under federal and state law.

Item 2. Properties

As of October 31, 2003, all of CIENA's properties are leased. CIENA's principal executive offices are located in Linthicum, Maryland. We lease nine facilities related to ongoing operations, including the five buildings located at various sites near

Linthicum, Maryland, one as an engineering facility, three as manufacturing facilities, and one as an administrative and sales facility. The Company also has engineering and/or service facilities located in Alpharetta, Georgia; San Jose, California; Durham, North Carolina; Acton, Massachusetts; and Ottawa, Ontario. The Company also leases various small offices in the United States and abroad to support its sales and services. We believe the facilities we are now using are adequate and suitable for business requirements.

CIENA leases a number of properties that we no longer occupy. As part of its restructuring costs, CIENA provides for the estimated cost of the net lease expense for these facilities. The cost is based on the future minimum lease payments under contractual obligations offset by estimated future sublease payments. As of October 31, 2003, CIENA's accrued restructuring liability related to these properties was \$63.7 million. If actual market conditions are less favorable than those projected by management, additional restructuring costs associated with these facilities may be required. For additional information regarding the Company's lease obligations, See Item 8. "Financial Statements and Supplementary Data."

Item 3. Legal Proceedings

On October 3, 2000, Stanford University and Litton Systems filed a complaint in the United States District Court for the Central District of California alleging that optical fiber amplifiers incorporated into CIENA's products infringe U.S. Patent No. 4,859,016 (the "016 Patent"). The complaint seeks injunctive relief, royalties and damages. We believe that we have valid defenses to the lawsuit and intend to defend it vigorously. On October 10, 2003, the court stayed the case pending final resolution of matters before the U.S. Patent and Trademark Office (the "PTO"), including a request for and disposition of a reexamination of the 016 Patent. On October 16, 2003, the PTO granted reexamination of the 016 Patent, thus resulting in a continuation of the stay of the case.

On July 19, 2000, CIENA and CIENA Properties, Inc., a wholly owned subsidiary of CIENA, filed a complaint in the United States District Court for the District of Delaware requesting damages and injunctive relief against Corvis Corporation ("Corvis"). The suit charged Corvis with infringing four patents relating to CIENA's optical networking communication systems and technology. A jury trial to determine whether Corvis is infringing these patents commenced on February 10, 2003. On February 24, 2003, the jury decided that Corvis was infringing one of the patents and not infringing two others. The jury was deadlocked with respect to infringement on the fourth patent. This trial was immediately followed by a trial on Corvis' affirmative defenses based on the validity of two of the patents. On February 28, 2003, the jury in this trial determined that the patents were valid. In April 2003, following a third trial, another jury decided that Corvis had infringed the fourth patent on which the previous jury had deadlocked. Based on these favorable verdicts collectively holding that Corvis is infringing two valid CIENA patents, CIENA has moved for an injunction to prohibit the sale by Corvis of the infringing products. The court has not yet ruled on this motion.

As a result of the merger with ONI Systems Corp. ("ONI"), we became a defendant in a securities class action lawsuit. Beginning in August 2001, a number of substantially identical class action complaints alleging violations of the federal securities laws were filed in the United States District Court for the Southern District of New York. These complaints name ONI, Hugh C. Martin, ONI's former chairman, president and chief executive officer; Chris A. Davis, ONI's former executive vice president, chief financial officer and administrative officer; and certain underwriters of ONI's initial public offering as defendants. The complaints were consolidated into a single action, and a consolidated amended complaint was filed on April 24, 2002. The amended complaint alleges, among other things, that the underwriter defendants violated the securities laws by failing to disclose alleged compensation arrangements (such as undisclosed commissions or stock stabilization practices) in the initial public offering's registration statement and by engaging in manipulative practices to artificially inflate the price of our common stock after the initial public offering. The amended complaint also alleges that ONI and the named former officers violated the securities laws on the basis of an alleged failure to disclose the underwriters' alleged compensation arrangements and manipulative practices. No specific amount of damages has been claimed. Similar complaints have been filed against more than 300 other issuers that have had initial public offerings since 1998, and all of these actions have been included in a single coordinated proceeding. Mr. Martin and Ms. Davis have been dismissed from the action without prejudice pursuant to a tolling agreement. In July 2002, ONI and other issuers in the consolidated cases filed motions to dismiss the amended complaint for failure to state a claim, which was

denied as to ONI on February 19, 2003. CIENA has participated, together with the other issuer defendants in these cases, in mediated settlement negotiations that have led to a preliminary agreement among the plaintiffs, the issuer defendants and their insurers. The settlement, which is subject to court approval, would result in the dismissal of the plaintiffs' cases against the issuers. CIENA has agreed in principle to the terms of this settlement. Draft settlement documents were circulated for preliminary review in October 2003.

As a result of the merger with ONI, we also became a defendant in two substantially identical purported class actions on behalf of ONI security holders originally brought against ONI and members of its board of directors. The complaints allege that the director defendants breached their fiduciary duties to ONI in approving the merger with CIENA and seek declaratory, injunctive and other relief permitted by equity. The plaintiffs failed to obtain an injunction against completion of the merger. The first of these cases was filed on February 20, 2002, in the Superior Court of the State of California, County of San Mateo, and is encaptioned K.W. Sams, On Behalf of Himself and All Others Similarly Situated v. ONI Systems Corporation, et al. The second case was brought on March 19, 2002, in the Superior Court of the State of California, County of Santa Clara, and is encaptioned Steven Myeary, On Behalf of Himself and All Others Similarly Situated v. ONI Systems Corporation. On April 14, 2003, the plaintiffs in these cases filed a consolidated amended complaint and named four additional defendants: CIENA Corporation, James F. Jordan, Kleiner Perkins Caufield & Byers and Mohr Davidow Ventures. CIENA and the other defendants subsequently filed a demurrer and served a motion for sanctions on plaintiffs based on factual inaccuracies in the consolidated amended complaint. In response, the plaintiffs filed a corrected consolidated amended complaint, the demurrer to which is scheduled to be heard by the court in December 2003. We believe that these lawsuits are without merit and will continue to defend them vigorously.

Item 4. Submission of Matters to a Vote of Security Holders

No matters were submitted to a vote of security holders in the fourth quarter of fiscal 2003.

PART II

Item 5. Market for Registrant's Common Stock and Related Stockholder Matters

CIENA's Common Stock is traded on the NASDAQ National Market under the symbol CIEN. The following table sets forth for the fiscal periods indicated the high and low sales prices of the Common Stock, as reported on the NASDAQ National Market.

	Price Range of Common Stock	
	High	Low
Fiscal Year 2002		
First Quarter ended January 31	\$21.71	\$12.60
Second Quarter ended April 30	\$12.95	\$ 7.03
Third Quarter ended July 31	\$ 7.53	\$ 3.60
Fourth Quarter ended October 31	\$ 4.90	\$ 2.41
Fiscal Year 2003		
First Quarter ended January 31	\$ 7.74	\$ 3.49
Second Quarter ended April 30	\$ 6.12	\$ 4.19
Third Quarter ended July 31	\$ 6.74	\$ 4.80
Fourth Quarter ended October 31	\$ 7.45	\$ 5.10

The market price of CIENA's Common Stock has fluctuated significantly and may be subject to significant fluctuations in the future. See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations."

As of December 9, 2003, there were approximately 2,473 holders of record of CIENA's Common Stock and 473,795,871 shares of Common Stock outstanding.

CIENA has never paid cash dividends on its capital stock. If and when we return to profitability, we intend to retain earnings for use in our business, and we do not anticipate paying any cash dividends in the foreseeable future.

On August 29, 2003, we issued 2,343,015 shares of CIENA common stock to stockholders of Akara Corporation as partial consideration for all outstanding shares of Akara. Our issuance of these shares was exempt from registration pursuant to Rule 506 promulgated under the Securities Act of 1933, and/or Section 4(2) of the Securities Act.

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." CIENA has 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 1999, 2000, 2002 and 2003 comprised 52 weeks and fiscal 2001 comprised 53 weeks.

(in thousands)	As of October 31,				
	1999	2000	2001	2002	2003
Balance Sheet Data:					
Cash, cash equivalents, short-term and long-term investments	\$262,396	\$ 238,318	\$1,795,141	\$2,078,464	\$1,626,218
Total assets	677,835	1,027,201	3,317,301	2,751,022	2,378,165
Long-term obligations, excluding current portion	4,881	4,882	869,865	999,935	861,149
Stockholders' equity	\$530,473	\$ 809,835	\$2,128,982	\$1,527,269	\$1,330,817

(in thousands, except per share data)	Year Ended October 31,				
	1999	2000	2001	2002	2003
Statement of Operations Data:					
Revenue	\$482,085	\$858,750	\$ 1,603,229	\$ 361,155	\$ 283,136
Excess and obsolete inventory costs (benefit)	6,534	15,022	68,411	286,475	(5,296)
Cost of goods sold	293,235	462,371	836,138	309,559	215,387
Gross profit (loss)	182,316	381,357	698,680	(234,879)	73,045
Operating expenses:					
Research and development	101,006	125,434	235,831	239,619	199,699
Selling and marketing	61,603	90,922	146,949	130,276	103,193
General and administrative	22,696	33,960	57,865	52,612	38,478
Settlement of accrued contract obligation	—	(8,538)	—	—	—
Deferred stock compensation costs:					
Research and development	—	—	17,783	15,672	12,824
Selling and marketing	—	—	8,378	3,560	2,728
General and administrative	40	40	15,206	1,092	1,225
Amortization of goodwill	3,197	3,197	177,786	—	—
Amortization of intangible assets	438	438	4,413	8,972	17,870
In-process research and development	—	—	45,900	—	2,800
Restructuring costs	—	—	15,439	225,429	31,155
Goodwill and intangible impairment	—	—	1,719,426	557,286	29,596
Merger related costs	13,021	—	—	—	—
Provision (benefit) for doubtful accounts	250	28,010	(6,579)	14,813	—
Total operating expenses	202,251	273,463	2,438,397	1,249,331	439,568
Income (loss) from operations	(19,935)	107,894	(1,739,717)	(1,484,210)	(366,523)
Interest and other income, net	14,448	13,020	63,579	61,145	42,959
Interest expense	(504)	(340)	(30,591)	(45,339)	(36,331)
Loss on equity investments, net	—	—	—	(15,677)	(4,760)
Loss on extinguishment of debt	—	—	—	(2,683)	(20,606)
Income (loss) before income taxes	(5,991)	120,574	(1,706,729)	(1,486,764)	(385,261)
Provision (benefit) for income taxes	(2,067)	39,187	87,333	110,735	1,256
Net income (loss)	\$ (3,924)	\$ 81,387	\$(1,794,062)	\$(1,597,499)	\$(386,517)
Basic net income (loss) per common share	\$ (0.01)	\$ 0.29	\$ (5.75)	\$ (4.37)	\$ (0.87)
Diluted net income (loss) per common and dilutive potential common share	\$ (0.01)	\$ 0.27	\$ (5.75)	\$ (4.37)	\$ (0.87)
Weighted average basic common shares outstanding	267,042	281,621	311,815	365,202	446,696
Weighted average basic common and dilutive potential common shares outstanding	267,042	299,662	311,815	365,202	446,696

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

The following discussion and analysis should be read in conjunction with "Selected Consolidated Financial Data" and the Company's consolidated financial statements and notes thereto included elsewhere in this report on Form 10-K.

Overview

CIENA is a leading global provider of innovative network solutions to service providers and enterprises worldwide. Our customers include long-distance carriers, local exchange carriers, cable operators, Internet service providers, wireless and wholesale carriers, resellers, governments, large businesses and non-profit institutions.

For several years, the market for our equipment was influenced by the entry of a substantial number of new companies into the communications services business. In the United States, this was largely due to changes in the regulatory environment, in particular those brought about by the Telecommunications Act of 1996. These new companies raised billions of dollars in capital, much of which they invested in capital improvements, causing acceleration in the growth of the market for telecommunications equipment.

The last three years have seen a reversal of this trend, including the failure of a large number of the new entrants and a sharp contraction of the availability of capital to the industry. Several of the more established carriers also have experienced significant financial distress. These developments have caused a substantial reduction in demand for telecommunications equipment, including our products. This industry trend was compounded by the slowing not only of the United States economy, but the economies in virtually all of the countries in which we are marketing our products. The combination of factors caused our customers to become more conservative in their capital investment plans and more uncertain about their future purchases. As a consequence, we are facing a market that is both reduced in size and more difficult to predict and plan for.

These trends have had a number of significant effects on our business during fiscal 2003 and 2002, including the reduction of revenue by \$1,320.1 million since fiscal 2001, the incurrence of \$286.5 million of costs related to obsolete inventory and excess purchase commitments during fiscal 2002, restructuring charges of \$31.2 million and \$225.4 million during fiscal 2003 and 2002, respectively, goodwill and intangible asset impairment charges of \$29.6 million and \$557.3 million during fiscal 2003 and 2002, respectively, provisions for bad debt expense of \$14.8 million during fiscal 2002, \$4.8 million and \$15.7 million in losses on equity investments during fiscal 2003 and 2002, respectively, and a net income tax charge of approximately \$110.7 million during fiscal 2002 to establish a valuation allowance against our deferred tax assets. Our net losses of \$386.5 million and \$1,597.5 million, in fiscal 2003 and 2002, respectively, were primarily attributable to the factors listed above.

In response to the deterioration of our market, we have, since 2001, entered new markets by expanding our network solution offerings and worked to increase our market share by adding new features to our existing products. We also have taken steps to expand our sales channels beyond direct sales to service providers to include partnerships and other strategic relationships targeting enterprise and government customers. We plan to continue to pursue this strategy by adding new products and features to our portfolio, primarily targeting delivery of data communications services because we expect a large portion of carrier spending to occur in this area over the next few years.

As part of our efforts to implement our strategy, during fiscal 2003, we completed the acquisitions of WaveSmith Networks, Inc. and Akara Corporation. WaveSmith was a privately held corporation offering a multi-service switching product designed to be deployed at the edge of carrier networks. Akara was a privately held corporation providing SONET/SDH-based extended storage solutions.

As of October 31, 2003, CIENA and its subsidiaries employed approximately 1,816 persons, which was a net reduction of 302 persons from the approximate 2,118 employed on October 31, 2002.

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements requires CIENA to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities.

On an ongoing basis, CIENA re-evaluates its estimates, including those related to bad debts, inventories, investments, intangible assets, goodwill, income taxes, warranty obligations, restructuring, contingencies and litigation. CIENA bases its 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. CIENA believes the following critical accounting policies affect its more significant judgments and estimates used in the preparation of its consolidated financial statements.

Revenue Recognition

CIENA recognizes product revenue in accordance with the terms of the contract of sale and where collection is reasonably assured. For transactions in which sales are not complete until the customer has accepted the product, revenue is not recognized until the terms of acceptance are satisfied. Revenue for installation services is recognized as the services are performed unless the terms of the supply contract combine product acceptance with installation, in which case, revenue from installation services is recognized when the terms of acceptance are satisfied and installation is completed. Amounts received in excess of revenue recognized are included as deferred revenue in the balance sheet. For transactions involving the sale of software, revenue is recognized in accordance with Statement of Position No. 97-2 ("SOP 97-2"), "Software Revenue Recognition," including deferral of revenue recognition in instances where vendor specific objective evidence for undelivered elements is not determinable. For distributor sales where risks of ownership have not transferred, CIENA recognizes revenue when the product is shipped through to the end user.

Allowances for Doubtful Accounts

CIENA maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. If the financial condition of CIENA's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. As of October 31, 2003, our accounts receivable balance, net of allowances for doubtful accounts of \$1.5 million, was \$43.6 million, which included three customers that accounted for 23.6%, 12.5%, and 10.1% of the net trade accounts receivable.

Warranties

CIENA provides for the estimated cost of product warranties at the time revenue is recognized. CIENA engages in extensive product quality programs and processes including actively monitoring and evaluating the quality of its component suppliers and third-party contractors. CIENA's warranty obligation is affected by product failure rates and material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from CIENA's estimates, revisions to the estimated warranty liability would be required.

Reserve for Inventory Obsolescence

CIENA writes down its inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based on assumptions about future demand and market conditions. During the fiscal year ended October 31, 2003, CIENA recorded a benefit for inventory reserves of \$5.3 million primarily related to the realization of sales from previously reserved excess inventory. If actual market conditions differ from those CIENA has projected, CIENA may be required to take additional inventory write-downs or to record additional benefits.

Restructuring

As part of its restructuring costs, CIENA provides for the estimated cost of the net lease expense for facilities that are no longer being utilized. The provision is equal to the future minimum lease payments under contractual obligations offset by estimated future sublease payments. As of the end of fiscal 2003, CIENA's accrued restructuring liability related to net consolidation of excess facilities is \$63.7 million. If actual market conditions are less favorable than those CIENA has projected, CIENA may be required to recognize additional restructuring costs associated with these facilities.

Minority Investments

CIENA holds minority interests in several companies having operations or technology in areas within its strategic focus. As of October 31, 2003, \$21.3 million of these investments are included in other long-term assets. CIENA records an investment impairment charge when it believes an investment has experienced a decline in value that is other than temporary. During fiscal 2003, CIENA recorded a charge of \$4.8 million associated with the impairment of one of these investments. Future adverse changes in market conditions or poor operating results of underlying investments could result in losses or an inability to recover the carrying value of the investments that may not be reflected in an investment's current carrying value, thereby possibly requiring an impairment charge in the future.

Impairment of Goodwill and Other Long-Lived Assets

Effective November 1, 2001, CIENA adopted Statement of Financial Accounting Standard No. 142, "Goodwill and Other Intangible Assets" ("SFAS 142") and ceased to amortize goodwill. As of October 31, 2003, CIENA's assets include \$336.0 million related to goodwill. SFAS 142 requires that we cease to amortize goodwill and to test it for impairment on an annual basis, and between annual tests if an event occurs or circumstances change that would, more likely than not, reduce the fair value of CIENA below its carrying value. Since no event occurred or circumstances changed during fiscal 2003 that would, more likely than not, reduce the fair value of CIENA below its carrying value, no impairment was recorded in fiscal 2003. If actual market conditions are less favorable than those we have projected or if an event occurs or circumstances change that would, more likely than not, reduce the fair value of CIENA below its carrying value, we may be required to recognize additional goodwill impairment charges.

As part of CIENA's review of financial results for fiscal 2003, CIENA performed an assessment of the carrying value of the Company's long-lived assets, including other intangible assets. The assessment was performed pursuant to Statement of Financial Accounting Standards No. 144 "Accounting for the Impairment or Disposal of Long-Lived Assets" (SFAS 144). As a result, CIENA recorded a charge of \$29.6 million during fiscal 2003, related to the impairment of MetroDirector K2 technology acquired in the Cyrus transaction. This charge was based on the amount by which the carrying amount of the developed technology exceeded its fair value. Fair value was determined based on discounted future cash flows derived from the developed technology, which had separately identifiable cash flows. The assumptions supporting the estimated future cash flows, including the discount rate reflect management's best estimates. If actual market conditions are less favorable than those we have projected or if an event occurs or circumstances change that would, more likely than not, reduce the fair value of our long-lived assets below their carrying value, we may be required to recognize additional impairment charges.

Deferred Tax Valuation Allowance

As of October 31, 2003, CIENA has recorded a valuation allowance of \$894.2 million against our gross deferred tax assets of \$894.2 million. We calculated the valuation allowance in accordance with the provisions of Statement of Financial Accounting Standard No. 109, "Accounting for Income Taxes" ("SFAS 109") which requires an assessment of both positive and negative evidence when measuring the need for a valuation allowance. Positive evidence, such as operating results during the most recent three-year period, is given more weight when due to our current lack of visibility, there is a greater degree of uncertainty that the level of future profitability needed to record the deferred assets will be achieved. Our results over the most recent three-year period were heavily affected by our recent deliberate and planned business restructuring activities. Our cumulative loss in the most recent three-year period represents sufficient negative evidence to require a valuation allowance under the provisions of SFAS 109. We intend to maintain a valuation allowance until sufficient positive evidence exists to support its reversal.

Accounting for Stock Options

In October 1995, the Financial Accounting Standards Board issued SFAS 123, "Accounting for Stock-Based Compensation." SFAS 123 allows companies to account for stock-based compensation either under the new provisions of SFAS 123 or using the intrinsic value method provided by Accounting Principles Board Opinion No. 25 ("APB 25"),

"Accounting for Stock Issued to Employees," but requires pro forma disclosure in the footnotes to the financial statements as if the measurement provisions of SFAS 123 had been adopted.

In December 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure" ("SFAS 148"). SFAS 148 amends SFAS 123, to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS 148 amends the disclosure requirements of SFAS 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. SFAS 148 is effective for financial statements for fiscal years ending after December 15, 2002.

We have elected to continue to account for stock-based compensation in accordance with the provisions of APB 25 as interpreted by FASB Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation, an Interpretation of APB Opinion No. 25," ("FIN 44") and present the pro forma disclosures required by SFAS 123 as amended by SFAS 148.

Results of Operations

Fiscal Years Ended 2003, 2002 and 2001

Revenue. We recognized \$283.1 million, \$361.2 million, and \$1,603.2 million in revenue for fiscal 2003, 2002, and 2001, respectively. The decrease in revenue of \$78.1 million, or 21.6% from fiscal 2002 to 2003 was primarily a result of the continued decline in demand for our core networking products. The decrease in revenue of \$1,242.0 million, or 77.5% from fiscal 2001 to 2002 was due to the reduction in demand for core networking products. CIENA's revenue derived from products and services is as follows (in thousands):

	Fiscal Years					
	2001	%	2002	%	2003	%
Products	\$1,518,833	94.7	\$304,155	84.2	\$240,772	85.0
Services	84,396	5.3	57,000	15.8	42,364	15.0
Total	\$1,603,229	100.0	\$361,155	100.0	\$283,136	100.0

We had sales to 110 customers in fiscal 2003, as compared to 77 customers in fiscal 2002 and 53 customers in fiscal 2001. During the following fiscal years, customers who each accounted for at least 10% of our revenue during the respective periods are as follows (in thousands):

	Fiscal Years					
	2001	%*	2002	%*	2003	%*
Sprint	\$463,078	28.9	\$ 58,739	16.3	n/a	—
Qwest	347,083	21.6	n/a	—	\$31,148	11.0
AT&T	n/a	—	74,111	20.5	39,444	13.9
Total	\$810,161	50.5	\$132,850	36.8	\$70,592	24.9

*—Denotes % of total revenue.

n/a—Denotes revenue recognized less than 10% for the period.

During the following fiscal years CIENA's geographic distribution of revenue is as follows (in thousands):

	Fiscal Years					
	2001	%	2002	%	2003	%
Domestic	\$1,220,742	76.1	\$232,524	64.4	\$178,564	63.1
International	382,487	23.9	128,631	35.6	104,572	36.9
Total	\$1,603,229	100.0	\$361,155	100.0	\$283,136	100.0

Gross Profit (Loss). Cost of goods sold consists of component costs, direct compensation costs, warranty and other contractual obligations, royalties, license fees, direct technical support costs, cost of excess and obsolete inventory and overhead related to manufacturing, technical support and engineering, furnishing and installation ("EF&I") operations. Gross profit (loss) was \$73.0 million, (\$234.9) million, and \$698.7 million for fiscal 2003, 2002, and 2001, respectively. The \$307.9 million increase in fiscal 2003 compared to fiscal 2002 was primarily the result of a \$291.8 million decrease in inventory obsolescence cost. The \$933.6 million decrease in gross profit in fiscal 2002 compared to fiscal 2001 was the result of decreased revenue and an increase in excess and obsolete inventory charges. This increase in excess and obsolete inventory charges was a result of the decline in capital spending by our customers and a decline in forecasted revenue of existing products and accordingly, we recorded a provision for inventory, including purchase commitments, of approximately \$286.5 million in fiscal 2002.

Gross profit (loss), as a percentage of total revenue, was 25.8%, (65.0%) and 43.6% for fiscal 2003, 2002 and 2001, respectively. The increase from fiscal 2002 to fiscal 2003 was largely attributable to decreases in inventory obsolescence costs, increases in manufacturing efficiencies, higher margin product mix and improvements in margin from installation and technical support services. The decrease from fiscal 2001 compared to fiscal 2002 was largely attributable to increases in inventory obsolescence costs, lower manufacturing volumes resulting in reduced manufacturing efficiencies, and changes in product mix resulting in sales of higher proportion of revenue from lower margin installation and tech support services.

Gross profit on products, as a percentage of product revenue, was 34.0%, 25.0% and 52.5% for fiscal 2003, 2002 and 2001, respectively. The improvement from fiscal 2002 to fiscal 2003 was largely attributable to increases in manufacturing efficiencies and higher margin product mix. The reduction from fiscal 2001 to fiscal 2002 was primarily attributable to lower manufacturing volumes resulting in reduced manufacturing efficiencies.

Gross loss on services, as a percentage of services revenue, was 33.3%, 43.0% and 36.6% for fiscal 2003, 2002 and 2001, respectively. The improvement from fiscal 2002 to fiscal 2003 was largely attributable to reductions in services overhead costs. The reduction from fiscal 2001 to fiscal 2002 was primarily the result of increased technical support costs.

Research and Development Expenses. Research and development expenses (exclusive of stock compensation costs of \$12.8, \$15.7 and \$17.8 million) were \$199.7 million, \$239.6 million and \$235.8 million for fiscal 2003, 2002 and 2001, respectively. During fiscal 2003, 2002 and 2001, research and development expenses were 70.5%, 66.3% and 14.7% of revenue, respectively. The \$39.9 million, or 16.7% decrease, from fiscal 2002 to fiscal 2003 was the result of decreased employee related expenses, prototype costs, consulting expenses, and depreciation expense. The \$3.8 million, or 1.6% increase, from fiscal 2001 to fiscal 2002 was primarily related to increases in depreciation expense that were partially offset by reductions in prototype parts and employee related costs. CIENA has expensed research and development costs as incurred.

Selling and Marketing Expenses. Selling and marketing expenses (exclusive of stock compensation of \$2.7, \$3.6 and \$8.4 million) were \$103.2 million, \$130.3 million and \$146.9 million for fiscal 2003, 2002 and 2001, respectively. During fiscal 2003, 2002 and 2001, selling and marketing expenses were 36.5%, 36.1% and 9.2% of revenue, respectively. The \$27.1 million, or 20.8% decrease, from fiscal 2002 to fiscal 2003 was the result of reduced levels of sales staff, advertising costs, outside consultants, facility costs and depreciation expense. The \$16.6 million, or 11.3% decrease, from fiscal 2002 to 2001 was primarily the result of decreases in staffing levels, commissions earned, trade show participation and promotional costs.

General and Administrative Expenses. General and administrative expenses (exclusive of stock compensation of \$1.2, \$1.1 and \$15.2 million) were \$38.5 million, \$52.6 million and \$57.9 million for fiscal 2003, 2002 and 2001, respectively. During fiscal 2003, 2002 and 2001 general and administrative expenses were 13.6%, 14.6% and 3.6% of revenue, respectively. The \$14.1 million, or 26.8% decrease, from fiscal 2002 to fiscal 2003 was primarily the result of decreases in staffing levels, outside consultants and facility costs. Fiscal 2003 general and administrative expenses also include costs of \$2.5 million related to the settlement of litigation with Nortel. The \$5.3 million, or 9.2% decrease, from fiscal 2001 to 2002 was primarily due to decreases in employee-related costs. Fiscal 2002 general and administrative expenses also include costs of \$1.8 million related to the settlement of litigation with Pirelli.

Deferred Stock Compensation Costs. The cumulative deferred stock compensation costs related to research and development, selling and marketing and general and administrative employees assumed as part of our merger and acquisition activity were \$16.8 million, \$20.3 million and \$41.4 million during fiscal 2003, 2002 and 2001 respectively. As part of our acquisition of WaveSmith, ONI, and Cyras we recorded \$7.4 million, \$8.8 million and \$98.5 million of deferred stock compensation relating to the unvested stock options and restricted stock assumed on the acquisition, respectively. Deferred stock compensation is presented as a reduction of stockholders' equity and is amortized over the remaining vesting period of the applicable options. As of October 31, 2003, the balance of deferred stock compensation was \$9.7 million.

Amortization of Goodwill. Amortization of goodwill was \$0.0, \$0.0, and \$177.8 million for fiscal 2003, 2002 and 2001, respectively. The Company adopted SFAS 142 effective November 1, 2001 and upon adoption ceased to amortize goodwill.

Amortization of Intangible Assets. Amortization of intangible assets (exclusive of \$3.3 million, \$0.0 and \$0.0 included in costs of goods sold related to certain technology licenses) was \$17.9 million, \$9.0 million and \$4.4 million for fiscal 2003, 2002 and 2001, respectively. In purchasing companies, we have acquired intangible assets such as certain developed technology, patents and covenants not to compete. As part of our acquisition of Akara, WaveSmith, ONI, and Cyras we recorded \$14.5 million, \$59.7 million, \$15.1 million and \$47.7 million worth of intangibles, respectively. The various intangible assets will be amortized over periods ranging from 2 months to eight years.

In-Process Research and Development. In-process research and development was \$2.8 million, \$0.0 and \$45.9 million for fiscal 2003, 2002 and 2001, respectively. In connection with our fiscal 2003 acquisitions of Akara and WaveSmith, we recorded charges of \$1.3 million and \$1.5 million, respectively, related to in-process research and development. This generally represents the estimated value of purchased in-process technology that had not yet reached technological feasibility and had no alternative future use at the time of the acquisitions. In connection with our March 2001 acquisition of Cyras, we recorded a \$45.9 million charge for in-process research and development. This represents the estimated value of purchased in-process technology related to Cyras' K2 product development that had not yet reached technological feasibility and had no alternative future use at the time of the acquisition. The amount of the purchase prices for Akara, WaveSmith and Cyras allocated to in-process research and development was determined using the discounted cash flow method. This method consisted of estimating future net cash flows attributable to the in-process technology for a discrete projection period and discounting the net cash flows back to their present value.

Restructuring Costs. During fiscal 2003, we recorded a restructuring charge of \$32.0 million associated with work-force reductions and the write-down of certain property and equipment. This was offset by a credit of \$0.8 million related to the adjustment of previously estimated restructuring charges. The restructuring charge included \$12.2 million associated with work force reductions, \$2.3 million primarily related to lease terminations and non-cancelable lease costs and a \$17.5 million write-down related to property and equipment consisting primarily of leasehold improvements, production equipment and research test equipment. See Note 3.

During fiscal 2002, we incurred \$225.4 million in restructuring charges associated with our ongoing efforts to align our operations with the current telecommunications industry environment. The restructuring charges included \$32.9 million related to work force reductions of approximately 1,946 employees, \$70.3 million primarily related to lease terminations and non-cancelable lease costs and an \$122.2 million write-down related to property and equipment consisting primarily of leasehold improvements, production equipment and research test equipment.

During fiscal 2001, we recorded \$15.4 million in restructuring charges related to the consolidation of excess facilities. The consolidation included the closure of certain manufacturing warehouse facilities and the consolidation of certain operational centers related to business activities that have been restructured. The charges included \$7.0 million primarily related to lease terminations and non-cancelable lease costs and also included an \$8.4 million write-down related to property and equipment consisting primarily of leasehold improvements and production equipment.

We expect to incur additional restructuring charges over the next several quarters as a result of our ongoing program to restructure our business.

Goodwill and Other Intangible Impairment. Goodwill and other intangible impairment was \$29.6 million, \$557.3 million and \$1.7 billion for fiscal 2003, 2002 and 2001, respectively. During fiscal 2003, we recorded a charge of \$29.6 million related to the impairment of MetroDirector K2 technology acquired in the Cyras transaction. This charge was determined in accordance with SFAS 144, which requires CIENA to perform an assessment on the carrying value of its developed technology intangible assets.

In fiscal 2002 and 2001 we recorded charges of \$557.3 million and \$1.7 billion, respectively. The fiscal 2002 charge was determined in accordance with SFAS 142, which requires annual testing to determine and measure goodwill impairment on a reporting unit basis. The fiscal 2001 charge was determined in accordance with SFAS 121, which required CIENA to perform an assessment of the carrying value of its long-lived assets including significant amounts of goodwill and other intangible assets.

Provision for Doubtful Accounts. CIENA performs ongoing credit evaluations of its customers and generally does not require collateral or other forms of security from its customers. CIENA maintains an allowance for potential losses when a particular problem with the collectibility of a receivable is identified. Provision for doubtful accounts expenses were \$0.0, \$14.8 million and (\$6.6) million for fiscal 2003, 2002 and 2001, respectively. In fiscal 2001, we received payment for \$15.4 million of the gross outstanding accounts receivable balance due from iaxis Limited primarily through our sales agreement with Dynege. Accordingly, we recognized a reduction of \$6.6 million in the provision for doubtful accounts during fiscal 2001. We recorded a provision for doubtful accounts of approximately \$14.8 million during fiscal 2002. This provision related to the estimated losses of \$18.1 million from three customers, each of whom filed for bankruptcy protection during fiscal 2002, offset by \$3.3 million of the gross outstanding accounts receivable balance due from iaxis Limited through our sales agreement with Dynege. CIENA did not record any additional provision for doubtful accounts during fiscal 2003.

Interest and Other Income, Net. Interest and other income, net were \$43.0 million, \$61.1 million and \$63.6 million for fiscal 2003, 2002 and 2001, respectively. Interest and other income, net, consists of interest income earned on our cash, cash equivalents and available-for-sale short and long-term investments. The \$18.1 million decrease from fiscal 2002 to fiscal 2003 was attributable to the impact of lower average interest rates and lower average cash and invested balances. The \$2.5 million decrease from fiscal 2001 to fiscal 2002 was attributable to the impact of lower average interest rates.

Interest Expense. Interest expenses were \$36.3 million, \$45.3 million and \$30.6 million for fiscal 2003, 2002 and 2001, respectively. The \$9.0 million, or 19.9% decrease, from fiscal 2002 to fiscal 2003 was attributable to the decrease in our debt obligations. The \$14.7 million, or 48.0% increase, from fiscal 2001 to fiscal 2002 was attributable to the acquisition of debt obligations related to ONI.

Loss on Equity Investments, Net. The \$4.8 million loss on equity investments in fiscal 2003 related to the decline in value of non-public equity investments that were determined to be other than temporary. Loss on equity investments, net was \$15.7 million for fiscal 2002. We realized a loss of \$1.9 million from the sale of a public equity investment and a loss of \$16.6 million from a decline in the fair value of certain equity investments that were determined to be other than temporary. On November 16, 2001, CIENA sold 80.1% of its ownership in ATI International Investments, Inc., the parent company of ATI Telecom International Ltd. ("Alta"), which resulted in a gain of \$2.8 million. CIENA retains a 19.9% ownership in ATI International Investments, Inc.

Loss on Extinguishment of Debt. Losses on extinguishment of debt were \$20.6 million, \$2.7 million and \$0.0 for fiscal 2003, 2002 and 2001, respectively. On June 21, 2002, we assumed the outstanding ONI 5.00% convertible subordinated notes, due October 15, 2005, in an aggregate principal amount of \$300 million. The notes were initially recorded at a value of \$218.0 million based upon the present value of the outstanding notes at the time of the acquisition. We are accreting the difference between \$218.0 million and \$300.0 million over the remaining period to October 15, 2005, such that the carrying value of the outstanding notes equals the principal value at the time the notes become due. During fiscal 2003, we conducted a tender offer for the ONI notes, which resulted in our purchasing \$154.7 million in principal amount of notes for \$140.3 million. Since the notes had an accreted value of \$119.7 million, the purchase resulted in a non-cash loss of \$20.6 million. During fiscal 2002, we purchased on the open market \$97.1 million in principal amount of notes for \$75.2 million. Since the notes had an accreted value of \$72.5 million, the purchase resulted in a non-cash loss of \$2.7 million.

Provision for Income Taxes. Our income tax expenses were 0.3%, 7.4% and 5.1% of pre-tax loss for fiscal 2003, 2002 and 2001, respectively. The income tax provision for fiscal 2003 was \$1.3 million. This provision was primarily attributable to foreign taxes related to our foreign operations. We did not record a tax benefit for our domestic losses during fiscal 2003. We intend to maintain a valuation allowance against our deferred tax assets until sufficient positive evidences exists to support its reversal. The income tax provision for 2002 was \$110.7 million. Our income tax provision for 2002 differed from the expected statutory benefit of 35% primarily due to the establishment of a valuation allowance against our deferred tax assets and the non-deductibility of the goodwill impairment. The income tax provision for 2001 differed from the expected 35% benefit primarily due to the non-deductibility of the goodwill impairment, and in-process research and development.

Net Loss. Our net losses were \$386.5 million, \$1,597.5 million and \$1,794.1 million for fiscal 2003, 2002 and 2001, respectively.

Liquidity and Capital Resources

At October 31, 2003, our principal source of liquidity was cash and cash equivalents, short-term investments and long-term investments. We had \$309.7 million in cash and cash equivalents, \$796.8 million in short-term investments and \$519.7 million in long-term investments.

Our operating activities consumed net cash of \$241.2 million and \$28.0 million in fiscal 2003 and 2002, respectively and provided net cash of \$163.2 million in fiscal 2001. Cash used in operating activities during fiscal 2003 was primarily attributable to the net loss, the reduction in accrued liabilities and an increase in accounts receivable. This was offset by the non-cash charges for early extinguishment of debt, restructuring charges and related asset write-downs, depreciation, amortization and impairment of intangibles. Cash used in operating activities during fiscal 2002 was primarily attributable to the net loss, offset by non-cash charges related to goodwill impairment, amortization of other intangibles, deferred stock compensation and debt issuance costs, non-cash portion of restructuring charges, depreciation expense, provision for inventory excess and obsolescence, decrease in deferred income tax asset and decrease in accounts receivable. Cash provided by operating activities during fiscal 2001 was primarily attributable to decreases in accounts receivable and inventories offset by non-cash charges related to goodwill impairment, amortization of other intangibles, deferred stock compensation and debt issuance costs, non-cash portion of restructuring charges, depreciation expense, provision for inventory excess and obsolescence, and increases in deferred revenue and other obligations.

Our investment activities provided net cash of \$302.6 million and \$239.1 million in fiscal 2003 and 2002 respectively, and used net cash of \$1,490.6 million in fiscal 2001. Investment activities included the net redemption of \$364.8 million and \$26.0 million of short and long-term investments during fiscal 2003 and 2002, respectively and the net purchase of \$1,293.2 million of short and long-term investments during fiscal 2001. Investment activities also included approximately \$15.0 million, \$10.0 million and \$13.0 million of equity investments in private companies, accounted for under the cost method, during fiscal 2003, 2002 and 2001, respectively. Also included in investment activities were additions to capital equipment and leasehold improvements in fiscal 2003, 2002, and 2001 of \$29.5 million, \$66.3 million and \$238.5 million, respectively. The capital equipment expenditures were primarily for customer demonstration systems, test systems, manufacturing equipment, computer equipment and leasehold improvements. In fiscal 2003 we used cash of \$26.7 million, net of expenditures, in connection with our acquisition of Akara and WaveSmith. In fiscal 2002, we acquired cash of \$286.9 million, net of expenditures, in connection with our acquisition of ONI. In fiscal 2001, we acquired cash of \$54.1 million, net of expenditures, in connection with our acquisition of Cyras.

Our financing activities used net cash of \$128.9 million and \$231.8 million in fiscal 2003 and 2002, respectively and provided net cash of \$1,582.2 million in fiscal 2001. During fiscal 2003 the primary use was related to the purchase of \$154.7 million of the remaining \$202.9 million outstanding ONI convertible subordinated notes. We paid \$139.2 million for the notes and fees of \$1.1 million related to the purchase. Also, during fiscal 2003, we received \$13.8 million from the exercise of stock options and \$1.9 million from the repayment of notes receivable from stockholders. The primary use of cash during fiscal 2002 related to the redemption of all outstanding Cyras Systems LLC 4.5% convertible subordinated notes for \$178.4 million and the purchase of ONI 5.0% convertible subordinated notes with a cumulative accreted book

value of \$72.5 million. Also during fiscal 2002, we received \$15.1 million from the exercise of stock options and the sale of stock through our employee stock purchase plan and \$5.0 million from the repayment of notes receivable from stockholders. During fiscal 2001, we completed a public offering of 11,000,000 shares of common stock at a price of \$83.50 per share less underwriters' discounts and commissions. Concurrent with the offering of common stock, we completed a public offering of 3.75% convertible notes with an aggregate principal amount of \$690 million. Net proceeds from these offerings were approximately \$1,547.8 million, after deducting underwriting discounts, commissions and offering expenses. During fiscal 2001, we also received \$31.9 million from the exercise of stock options and the sale of stock through our employee stock purchase plan and \$4.6 million for the repayment of notes receivable from stockholders.

The following is a summary of our future minimum payments under contractual obligations as of October 31, 2003 (in thousands):

	Total	Less than One Year	One to Three Years	Four to Five Years	Thereafter
Convertible notes ⁽¹⁾⁽²⁾	\$ 859,542	\$28,289	\$102,441	\$728,812	\$ —
Operating leases	251,005	37,810	72,128	56,071	84,996
Purchase obligations ⁽³⁾	33,270	33,270	—	—	—
Total	\$1,143,817	\$99,369	\$174,569	\$784,883	\$84,996

(1) The terms of our convertible notes with a principal value of \$690.0 million include interest at 3.75% payable on a semi-annual basis on February 1 and August 1 of each year; the notes are due February 1, 2008. The terms of the ONI convertible subordinated notes with a principal value of \$48.3 million include interest at 5.00% payable on a semi-annual basis on April 15 and October 15 of each year; the notes are due October 15, 2005.

(2) On November 18, 2003, CIENA announced a full redemption of all of the outstanding ONI 5.00% convertible subordinated notes due October 15, 2005. The principal amount of the notes outstanding is \$48.3 million. On the redemption date of December 19, 2003, CIENA will pay holders 102% of the outstanding principal amount of the notes plus accrued interest.

(3) Purchase commitments related to amounts we are obligated to pay to our contract manufacturers and component suppliers for inventory.

Some of our commercial commitments, including some of the future minimum payments set forth above, are secured by standby letters of credit. The following is a summary of our commercial commitments secured by standby letters of credit by commitment expiration date as of October 31, 2003 (in thousands):

	Total	Less than One Year	One to Three Years	Four to Five Years	Thereafter
Standby letters of credit	\$11,351	\$10,741	\$360	\$250	\$—

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

Based on past performance and current expectations, we believe that our cash and cash equivalents, short-term investments, and cash generated from operations will satisfy our working capital needs, capital expenditures, investment requirements, full redemption of the ONI 5% convertible subordinated notes, and other liquidity requirements associated with our existing operations through at least the next 12 months.

Effects of Recent Accounting Pronouncements

In November 2002, the FASB issued FASB Interpretation No. 45 ("FIN 45"), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." FIN 45 requires that a liability be recorded in the guarantor's balance sheet upon issuance of a guarantee. In addition, FIN 45 requires disclosures about the guarantees that an entity has issued, including a reconciliation of changes in the entity's product warranty liabilities. The initial recognition and initial measurement provisions of FIN 45 are applicable on a prospective basis to guarantees issued or modified after December 31, 2002, irrespective of the guarantor's fiscal year end. The disclosure requirements of FIN 45 are effective for financial statements of interim or annual periods ending after December 15, 2002. The adoption of this standard did not have a material impact on CIENA's financial statements.

In November 2002, the Emerging Issues Task Force ("EITF") reached a consensus on Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables." EITF Issue No. 00-21 provides guidance on how to account for arrangements that involve the delivery or performance of multiple products, services and/or rights to use assets. The provisions of EITF Issue No. 00-21 applied to revenue arrangements entered into in fiscal periods beginning after June 15, 2003.

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities, an Interpretation of Accounting Research Bulletin No. 51." FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 must be applied for the first interim or annual period beginning after December 15, 2003. The Company believes that the adoption of this standard will have no material impact on its financial statements.

In April 2003, the FASB issued SFAS 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." SFAS 149 amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities under SFAS 133. The statement requires that contracts with comparable characteristics be accounted for similarly and clarifies when a derivative contains a financing component that warrants special reporting in the statement of cash flows. SFAS 149 is effective for contracts entered into or modified after June 30, 2003, except in certain circumstances, and for hedging relationships designated after June 30, 2003. The Company does not expect that the adoption of this standard will have a material effect on its financial position or results of operations.

In May 2003, the FASB issued SFAS 150, "Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity." This Statement establishes standards for how an issuer classifies and measures in its statement of financial position certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances) because that financial instrument embodies an obligation of the issuer. This Statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003, except for mandatory redeemable financial instruments of nonpublic entities. The FASB has defined implementation of SFAS 150 indefinitely for certain non-controlling interests, the provisions of which are currently not applicable to the Company. The Company does not expect that the adoption of this standard will have a material effect on its financial position or results of operations.

Quarterly Results of Operations

The tables below (in thousands, except per share data) set forth the operating results and percentage of revenue represented by certain items in CIENA's statements of operations for each of the eight quarters in the period ended October 31, 2003. This information is unaudited, but in our opinion reflects all adjustments (consisting only of normal recurring adjustments) that we consider necessary for a fair presentation 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, 2002	Apr. 30, 2002	Jul. 31, 2002	Oct. 31, 2002	Jan. 31, 2003	Apr. 30, 2003	Jul. 31, 2003	Oct. 31, 2003
Revenue:								
Products	\$ 139,935	\$ 73,465	\$ 41,029	\$ 49,726	\$ 61,221	\$ 63,399	\$ 59,294	\$ 56,858
Services	22,221	13,588	8,999	12,192	9,253	10,141	9,184	13,786
Total revenue	162,156	87,053	50,028	61,918	70,474	73,540	68,478	70,644
Costs:								
Products	90,964	63,181	37,450	36,479	42,234	41,852	39,249	35,563
Services	28,309	24,344	13,510	15,322	14,632	14,919	12,749	14,189
Excess and obsolete inventory costs	20,414	223,277	41,192	1,592	(2,657)	(1,446)	(55)	(1,138)
Total cost of goods sold	139,687	310,802	92,152	53,393	54,209	55,325	51,943	48,614
Gross profit (loss)	22,469	(223,749)	(42,124)	8,525	16,265	18,215	16,535	22,030
Operating expenses:								
Research and development	64,756	59,558	53,950	61,355	53,734	52,193	47,963	45,809
Selling and marketing	37,600	29,835	30,829	32,012	26,605	25,663	24,536	26,389
General and administrative ⁽¹⁾	13,655	13,276	10,798	14,883	14,706	8,066	7,969	7,737
Deferred stock compensation costs:								
Research and development	3,951	3,465	3,860	4,396	3,798	3,406	2,932	2,688
Selling and marketing	956	851	842	911	759	676	687	606
General and administrative	227	176	256	433	374	346	312	193
Amortization of intangible assets	1,813	1,813	2,343	3,003	3,554	3,421	4,479	6,416
In-process research and development	—	—	—	—	—	—	1,500	1,300
Restructuring costs	6,828	121,348	18,562	78,691	—	2,724	15,527	12,904
Goodwill and intangible impairment	—	—	—	557,286	—	—	—	29,596
Provision for doubtful accounts	—	16,055	(1,242)	—	—	—	—	—
Total operating expenses	129,786	246,377	120,198	752,970	103,530	96,495	105,905	133,638
Loss from operations	(107,317)	(470,126)	(162,322)	(744,445)	(87,265)	(78,280)	(89,370)	(111,608)
Interest and other income, net	16,172	15,045	13,558	16,370	13,301	11,131	8,865	9,662
Interest expense	(10,505)	(8,637)	(10,614)	(15,583)	(12,203)	(8,061)	(8,070)	(7,997)
Loss on equity investments, net	(5,306)	(434)	—	(9,937)	(10)	—	—	(4,750)
Loss on extinguishment of debt	—	—	—	(2,683)	(20,606)	—	—	—
Loss before income taxes	(106,956)	(464,152)	(159,378)	(756,278)	(106,783)	(75,210)	(88,575)	(114,693)
Provision (benefit) for income tax	(36,365)	148,001	607	(1,508)	359	251	299	347
Net loss	\$ (70,591)	\$ (612,153)	\$ (159,985)	\$ (754,770)	\$ (107,142)	\$ (75,461)	\$ (88,874)	\$ (115,040)
Basic and diluted net loss per common share and dilutive potential common share								
	\$ (0.22)	\$ (1.86)	\$ (0.42)	\$ (1.75)	\$ (0.25)	\$ (0.17)	\$ (0.20)	\$ (0.24)
Weighted average basic common and dilutive potential common share								
	327,620	328,764	376,548	431,257	432,572	433,932	451,009	470,244

(1) During the quarter ended October 31, 2002 includes \$1,792 of costs related to Pirelli litigation. During the quarter ended January 31, 2003 includes \$2,500 related to Nortel settlement costs.

Quarterly Results as a Percentage of Total Revenue

	Jan. 31, 2002	Apr. 30, 2002	Jul. 31, 2002	Oct. 31, 2002	Jan. 31, 2003	Apr. 30, 2003	Jul. 31, 2003	Oct. 31, 2003
Revenue:								
Products	86.3%	84.4%	82.0%	80.3%	86.9%	86.2%	86.6%	80.5%
Services	13.7	15.6	18.0	19.7	13.1	13.8	13.4	19.5
Total revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Costs:								
Products	56.1	72.5	74.9	58.9	59.9	56.9	57.3	50.3
Services	17.5	28.0	27.0	24.8	20.8	20.3	18.6	20.1
Excess and obsolete inventory costs	12.6	256.5	82.3	2.6	(3.8)	(2.0)	(0.1)	(1.6)
Total cost of goods sold	86.2	(357.0)	184.2	86.3	76.9	75.2	75.8	68.8
Gross profit (loss)	13.8	(257.0)	(84.2)	13.7	23.1	24.8	24.2	31.2
Operating expenses:								
Research and development	39.9	68.4	107.8	99.1	76.3	71.0	70.0	64.8
Selling and marketing	23.2	34.3	61.6	51.7	37.7	34.9	35.8	37.4
General and administrative	8.4	15.3	21.6	24.0	20.9	11.0	11.6	11.0
Deferred stock compensation costs:								
Research and development	2.4	4.0	7.7	7.1	5.4	4.6	4.3	3.8
Selling and marketing	0.6	1.0	1.7	1.5	1.1	0.9	1.0	0.9
General and administrative	0.2	0.2	0.5	0.7	0.5	0.5	0.5	0.3
Amortization of intangible assets	1.1	2.1	4.7	4.8	5.0	4.6	6.6	9.1
In-process research and development	—	—	—	—	—	—	2.2	1.8
Restructuring costs	4.2	139.4	37.1	127.1	—	3.7	22.7	18.3
Goodwill and intangible impairment	—	—	—	900.0	—	—	—	41.9
Provision for doubtful accounts	—	18.4	(2.5)	—	—	—	—	—
Total operating expenses	80.0	283.1	240.2	1,216.0	146.9	131.2	154.7	189.2
Loss from operations	(66.2)	(540.1)	(324.4)	(1,202.3)	(123.8)	(106.4)	(130.5)	(158.0)
Interest and other income, net	10.0	17.3	27.1	26.4	18.9	15.1	13.0	13.7
Interest expense	(6.5)	(9.9)	(21.2)	(25.2)	(17.3)	(11.0)	(11.9)	(11.3)
Loss on equity investment, net	(3.3)	(0.5)	—	(16.0)	—	—	—	(6.7)
Loss on extinguishment of debt	—	—	—	(4.3)	(29.3)	—	—	—
Loss before income taxes	(66.0)	(533.2)	(318.5)	(1,221.4)	(151.5)	(102.3)	(129.4)	(162.4)
Provision (benefit) for income taxes	(22.4)	170.0	1.2	(2.4)	0.5	0.3	0.4	0.5
Net loss	(43.6)%	(703.2)%	(319.7)%	(1,219.0)%	(152.0)%	(102.6)%	(129.8)%	(162.8)%

Risk Factors

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

Our business could continue to be adversely affected by unfavorable and uncertain conditions in the communications industry

The last three years have seen substantial changes in the communications industry. Most of our customers and potential customers have confronted static or declining revenue. Many have experienced significant financial distress, and some have gone out of business. This has resulted in a significant change in the structure of the equipment industry, with greater concentration of purchasing power in a small number of large services providers, combined with a substantial

reduction in overall demand. Together these factors have adversely affected our revenue and operating results. In addition, most of our customers have become more conservative and uncertain about their future purchases which has made managing our business difficult.

We expect the factors described above to continue to affect our business for an indeterminate period, in several significant ways:

- capital expenditures by many of our customers may be flat or reduced;
- we will continue to have only limited ability to forecast the volume and product mix of our sales;
- managing our expenditures will be difficult in light of the uncertainties surrounding our business;
- increased competition resulting from reduced demand will put substantial downward pressures on the pricing of our products, tending to reduce our profit margins;
- increased competition will enable customers to insist on more favorable terms and conditions for sales, including extended payment terms or other financing assistance, as a condition of procuring their business; and
- the bankruptcies or weakened financial condition of some of our customers may require us to write off amounts due to us from prior sales.

The result of any one or a combination of these factors could lead to further reduced revenue and increased operating losses.

We face intense competition that could hurt our sales and profitability

The market for networking solutions is extremely competitive. Competition in this market is based on varying combinations of price, functionality, manufacturing capability, installation, services, scalability and the ability of the system solutions to meet customers' immediate and future network requirements. A small number of very large companies, including Alcatel, Cisco, Fujitsu, Hitachi, Huawei, Lucent, Marconi, NEC, Nortel, Siemens, Ericsson, and Tellabs have historically dominated the telecommunications equipment industry. They all have greater financial, marketing, manufacturing and intellectual property resources than CIENA. They also often have existing relationships with our customers and potential customers. We also compete with a number of smaller companies that provide significant competition.

Because we sell systems that compete directly with product offerings of these companies, and in some cases displace or replace their equipment, we represent a competitive threat. The decline in the market for communications networking products has resulted in even greater competitive pressures. We expect that the aggressive tactics we have confronted on the part of many of these competitors will continue, and perhaps become more severe. These tactics include:

- intense price competition in sales of new equipment, resulting in lower profit margins;
- discounting resulting from sales of used equipment or inventory that a competitor has written down or written off;
- early announcements of competing products and other marketing efforts;
- "one-stop shopping" options;
- customer financing assistance;
- marketing and advertising assistance; and
- intellectual property disputes.

Tactics such as those described above can be particularly effective in a concentrated customer base like ours. Our customers are under increasing competitive pressure to deliver their services at the lowest possible cost. This pressure may result in the pricing of communications networking systems becoming a more important factor in customer decisions. This may favor larger competitors that can spread the effect of price discounts across a larger array of products and services and across a larger customer base than ours. If we are unable to offset any reductions in the average sales price for our products by a reduction in the cost of our products, our gross profit margins will be adversely affected. Our inability to compete successfully against our competitors and maintain our gross profit margins would harm our business, financial condition and results of operations.

New competitors continue to emerge to compete with our products. They often base their products on the latest available technology. They may achieve commercial availability of their products more quickly due to the narrower focus of their efforts. Our inability to compete successfully against these companies would harm our business, financial condition and results of operations.

The success of our strategy depends on our ability to increase our revenue substantially

We have deliberately chosen to continue to spend on research and development, sales and marketing, and other operating expenses at levels that will not permit us to return to profitability unless we can increase our revenue substantially. In order to do so, we plan both to continue to maintain and enhance our existing products and to expand and diversify our product portfolio. In addition we believe we must continue to maintain a significant sales presence in our principle markets and to spend on marketing our products and services. We are implementing this strategy through a combination of internal development, acquisitions of smaller companies, and strategic alliances with other vendors. If we fail to execute this strategy effectively, or it does not produce substantial revenue growth, we will be required to modify the strategy, which would likely have an adverse effect on our financial condition.

Our future success will depend on our ability to sell our products to our existing incumbent carrier customers and add additional incumbent carriers as new customers

Historically, a large percentage of our sales were made to emerging carriers, many of which no longer exist or have experienced severe financial difficulties and have reduced their equipment purchases. We expect that our sales to emerging carriers will continue to be at a lower level than they were at one time. Consequently, our future success will depend, to a large extent, on our ability to increase our sales to large domestic and international incumbent carriers.

We have limited experience in selling to incumbent carriers relative to many of our larger competitors. Many of them have long-standing relationships with incumbent carriers, which present additional challenges to the sales process. The sales cycles for these larger customers is often substantially longer than for sales to smaller customers; and they often require extensive testing of products before deciding to purchase them. In addition, even after a product has been selected for an incumbent carrier's network and a contract has been signed, we are typically unable to recognize revenue until final network certification tests are completed satisfactorily, a process that is often lengthy and difficult. Complying with these certification requirements may involve unanticipated delays that could adversely affect our ability to sell to larger carriers or the timing of recognition of revenue. If we do not succeed in increasing our sales to our existing incumbent carrier customers and adding additional incumbent carriers as customers, our business will suffer.

We may not be successful in selling our products through new channels or to government customers

We believe that, in order to succeed, we must enter new markets and build a larger and more diverse customer base. Therefore, we are beginning to sell some of our products to large enterprises and federal, state and local governments. To succeed in these markets, we believe we must develop and manage new sales channels through resellers, distributors and systems integrators for sales of those of our products that are suitable for those markets. Since we have only limited experience in developing and managing such channels, it is uncertain to what extent we will be successful.

Sales to federal, state and local governments often require compliance with complex procurement rules and regulations with which we have little experience. We may be unable to compete for government opportunities if we cannot comply with these rules and regulations.

Our failure either to develop and manage new sales channels or to sell to government customers would adversely affect our ability to achieve our planned levels of revenue, which would adversely affect our profitability.

Our strategy involves pursuing strategic acquisitions and investments that may not be successful

Our business strategy includes acquiring or making strategic investments in other companies to expand our portfolio of products and services and to acquire or accelerate the development of new or improved products. To do so, we may use cash, issue equity that would dilute our current shareholders' ownership, incur debt or assume indebtedness. In addition, we may incur significant amortization expenses related to intangible assets. In the fourth quarter fiscal 2001 and fourth quarter fiscal 2002, we incurred a significant write-off of goodwill associated with our previous acquisitions.

Strategic investments and acquisitions involve numerous risks, including:

- potential large cash expenditures;
- difficulties in integrating the operations, technologies and products of the acquired companies;
- diversion of management's attention;
- potential difficulties in completing projects of the acquired company;
- the potential loss of key employees of the acquired company;
- dependence on unfamiliar or relatively small supply partners; and
- exposure to unanticipated liabilities.

In addition, acquisitions and strategic investments may involve risks of entering markets in which we have little or no prior experience and competitors have stronger market positions.

Product performance problems could limit our sales prospects

The development and production of new products with high technology content often involves problems with software, components and manufacturing methods. If significant reliability, quality or network monitoring problems develop, including those due to defects in software or faulty components, a number of negative effects on our business could result, including:

- costs associated with fixing software or hardware defects;
- high service and warranty expenses;
- payment of liquidated damages for performance failures;
- high inventory obsolescence expense;
- high levels of product returns;
- delays in collecting accounts receivable;
- reduced orders from existing customers; and
- declining interest from potential customers.

Although we maintain accruals for product warranties, actual costs could exceed these amounts. From time to time, there will be interruptions or delays in the activation of our products at a customer's site. These interruptions or delays may result from product performance problems or from issues with installation and activation, some of which are outside our control. If we experience significant interruptions or delays that we cannot promptly resolve, confidence in our products could be undermined, which could cause us to lose customers or otherwise harm our business.

Economic conditions require us to reduce the size of our business further

Since November 2001, we have taken several steps, including reductions in force and dispositions of assets to reduce the size of our operations to better match the reduced sales of our products and services. Weakness in the telecommunications equipment market continues to affect our business. Accordingly, during the next twelve months we believe that we will be required to reduce our costs further. This could cause disruption in our business and require us to take accounting charges. If we fail to execute effectively on a program of cost reductions, our profitability could suffer.

Selling our products requires substantial investments of our resources that may not produce anticipated benefits

In order to sell our products to both potential and existing customers, we must invest in financial, engineering, manufacturing and logistics support resources, even though we are unsure of the volume, duration or timing of customer purchases. Our customers are generally technically sophisticated and demanding. Consequently, we may incur substantial expenses and devote resources to potential relationships that never materialize or fulfill our expectations, in which event our investment may largely be lost. For example, we often provide equipment and services to our customers, free of charge, for the purpose of performing laboratory testing. In the quarter ended October 31, 2003, inventory increased as a result of providing a large amount of test equipment to a potential customer. If we are unsuccessful in winning this contract, we may be required to take a charge for the write down or write off of this inventory.

Our results can fluctuate unpredictably

Purchases by many of our potential and existing customers can be unpredictable, sporadic and subject to unanticipated changes. Our results, in turn, can fluctuate unpredictably. A decision to purchase our products requires a significant investment and commitment of resources by our customers. As a result, the sales cycles for many of our products are long, often as much as a year or two between initial contact with a potential customer and the recognition of revenue from sales to the customer. Further, purchases by our existing customers tend to be large and sporadic, depending upon their need to build a customer base, their plans for expanding their networks, the availability of financing, and the effects of regulatory and business conditions in the countries in which they operate. Current economic and market conditions have made it even more difficult to make reliable estimates of future revenue.

Fluctuations in our revenue can lead to even greater fluctuations in our operating profits. Our budgeted expense levels depend in part on our expectations of long-term future revenue. Any substantial adjustment to expenses to account for lower levels of revenue is difficult and takes time. Consequently, if our revenue does decline, our levels of inventory, operating expenses and general overhead would be high relative to our revenue, resulting in additional operating losses.

Other factors can also contribute to fluctuations in our revenue and operating results, including:

- variations and the mix between higher and lower margin products and services;
- fluctuations in demand for our products;
- changes in our pricing policies or the pricing policies of our competitors;
- the timing and size of orders from customers;
- changes in customers' requirements, including changes or cancellations to orders from customers;
- the introduction of new products by us or our competitors;
- changes in the price or availability of components for our products;
- readiness of customer sites for installation;
- satisfaction of contractual customer acceptance criteria and related revenue recognition issues;
- manufacturing and shipment delays and deferrals;
- increased service, installation, warranty or repair costs;
- the timing and amount of employer payroll tax to be paid on employee gains on stock options exercised; and
- changes in general economic conditions as well as those specific to the telecommunications industry.

We may not be successful in enhancing and upgrading our products

The market for communications networking solutions is characterized by rapid technological change, frequent introductions of new products, and recurring changes in customer requirements. To succeed in this market, we must continue to develop new products and new features for existing products. Doing so is difficult and costly, and there is no assurance that we will continue to be successful. In addition, we must be able to identify and gain access to promising new technologies. Failure to keep pace with technological advances would impair the competitiveness of our products and sooner or later do serious harm to our business.

Our products are based on complex technology that could result in unanticipated delays in developing, improving, manufacturing or deploying them. Modifying our products to enable customers to integrate them into a new type of network architecture entails similar development risks.

Certain enhancements to our products are in the development phase and are not yet ready for commercial manufacturing or deployment. The maturing process from laboratory prototype to customer trials, and subsequently to general availability, involves a number of steps, including:

- completion of product development;
- the qualification and multiple sourcing of critical components;
- validation of manufacturing methods and processes;
- extensive quality assurance and reliability testing, and staffing of testing infrastructure;
- validation of software; and
- establishment of systems integration and systems test validation requirements.

Each of these steps, in turn, presents serious risks of failure, rework or delay, any one of which could decrease the speed and scope of product introduction and marketplace acceptance of the product. Specialized application specific integrated circuits (“ASICs”) and intensive software testing and validation are key to the timely introduction of enhancements to several of our products, and schedule delays are common in the final validation phase, as well as in the manufacture of specialized ASICs. In addition, unexpected intellectual property disputes, failure of critical design elements, and a host of other execution risks may delay or even prevent the introduction of these products. If we do not develop and successfully introduce these products in a timely manner, our business, financial condition and results of operations would be harmed.

We depend on a limited number of suppliers, and for some items we do not have a substitute supplier

We depend on a limited number of suppliers for components of our products, as well as for equipment used to manufacture and test our products. Our products include several high-performance components for which reliable, high-volume suppliers are particularly limited. Furthermore, some key optical and electronic components we use in our products are currently available only from sole or limited sources, and in some cases, that source also is a competitor. Any delay in component availability for any of our products could result in delays in deployment of these products and in our ability to recognize revenue. These delays could also harm our customer relationships and our results of operations.

Furthermore, the market for optical components has recently been consolidated resulting in reduced competition, which could lead to higher prices. In addition, the loss of a source of supply of key components could require us to re-engineer products that use those components, which would increase our costs.

On occasion, we have experienced delays in receipt of components and have received components that do not perform according to their specifications. Any future difficulty in obtaining sufficient and timely delivery of components could result in delays or reductions in product shipments, which, in turn, could harm our business.

Any delays in component availability for any of our products or test equipment could result in delays in deployment of these products and in our ability to recognize revenue from them. These delays could also harm our customer relationships and our results of operations.

We rely on contract manufacturers for our products

We rely on a small number of contract manufacturers to perform the majority of the manufacturing operations for our products. The qualification of these manufacturers is an expensive and time-consuming process, and these contract manufacturers build modules for other companies, including our competitors. In addition, we do not have contracts in place with some of these manufacturers. We may not be able to effectively manage our relationships with our manufacturers and we cannot be certain that they will be able to fill our orders in a timely manner. If we underestimate our future product requirements, the contract manufacturers may not have enough product to meet our customer requirements, and this could result in delays in the shipment of our products and our ability to recognize revenue. If we overestimate product requirements, we may have to write off excess inventory.

We rely on service delivery partners

We rely on a number of service delivery partners, both domestic and international, to complement CIENA’s global service and support resources. The certification of these partners incurs costs and is time-consuming, and these partners service products for other companies, including our competitors. We may not be able to effectively manage our relationships with our partners and we cannot be certain that they will be able to deliver our services in the manner or time required. If our service partners are unsuccessful in delivering services,

- we may compromise the relevant services revenue; and
- we may suffer delays in recognizing product revenues in cases where revenue recognition is dependent upon product installation, testing and acceptance.

Our ability to compete could be harmed if we are unable to protect and enforce our intellectual property rights or if we infringe on intellectual property rights of others

We share our proprietary information and intellectual property, including our source code, with other parties as necessary to meet the needs of our business. We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We enter into non-disclosure and proprietary rights agreements with our employees and consultants, license agreements with our corporate partners, and we control access to and distribution of our products, documentation and other proprietary information. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. This is likely to become an increasing issue as we expand our operations and sales into countries that provide a lower level of protection for intellectual property.

Monitoring unauthorized use of our products is difficult, and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology. If competitors are able to use our technology, our ability to compete effectively could be harmed. We have filed a patent infringement lawsuit to enforce our intellectual property right, and may become involved with additional disputes in the future. Such lawsuits can be costly and may significantly divert the time and attention of our personnel.

We have been subject to several claims of patent infringement, which in some cases have required us to pay the patent holders substantial sums or enter into license agreements requiring ongoing royalty payments. The frequency of assertions of patent infringement in the field of telecommunications networking solutions is increasing as patent holders seek alternative sources of revenue. There is a possibility that we may again find ourselves required to take patent licenses or to redesign or stop selling products that allegedly infringe patents belonging to others. If we are sued for infringement and are unsuccessful in defending the suit, we could be subject to significant damages, and our business and customer relationships could be adversely affected.

We face risks associated with our international operations

We market, sell and service our products globally. We have established offices around the world, including in North America, Europe, Latin America and the Asia Pacific region. We will continue to expand our international operations and enter new international markets. This expansion will require significant management attention and financial resources to develop successfully direct and indirect international sales and support channels. In some countries, our success will depend in part on our ability to form relationships with local partners. We cannot be sure that we will be able to identify appropriate partners or reach mutually satisfactory arrangements with them for sales of our products. There is a risk that we may sometimes choose the wrong partner. For these reasons, we may not be able to maintain or increase international market demand for our products.

International operations are subject to inherent risks, and our future results could be adversely affected by a variety of uncontrollable and changing factors. These include:

- greater difficulty in collecting accounts receivable and longer collection periods;
- difficulties and costs of staffing and managing foreign operations;
- the impact of recessions in economies outside the United States;
- unexpected changes in regulatory requirements;
- certification requirements;
- reduced protection for intellectual property rights in some countries;
- potentially adverse tax consequences;
- political and economic instability;
- trade protection measures and other regulatory requirements;
- service provider and government spending patterns; and
- natural disasters and epidemics.

Such factors could have a material adverse impact on our operating results and financial condition.

We face risks in reselling the products of other companies

We have recently entered into agreements that permit us to distribute the products of other companies and may enter into other agreements in the future. To the extent we succeed in reselling the products of these companies, we may be required by customers to assume warranty and service obligations. While these suppliers have agreed to support us with respect to those obligations, they are relatively small companies with limited financial resources. If they should be unable, for any reason, to provide the required support, we may have to expend our own resources on doing so. This risk is amplified by the fact that the equipment has been designed and manufactured by others, and is thus subject to warranty claims whose magnitude we are currently unable to evaluate fully.

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

If we are unable to retain and motivate our existing employees and attract qualified personnel to fill key positions, we may be unable to effectively develop our existing products, make timely product introductions and increase sales. Since we generally do not have employment contracts with our employees, we must rely upon providing competitive compensation packages and a dynamic work environment to retain and motivate employees. In response to the decline in our revenue and weakness in the telecommunications equipment market, we have not increased salaries for or paid bonuses to most of our employees since the end of fiscal 2001. Since our compensation packages include equity-based incentives, pressure on our stock price could affect our ability to continue to offer competitive compensation packages to our employees. In addition to these compensation issues, we must continue to motivate employees to execute our strategies and achieve our goals, which may be difficult due to morale challenges posed by the workforce reductions and uncertainty in our industry and the economy in general.

If we lose members of our management team or other key personnel, it may be difficult to replace them. Even in the current economic downturn, competition for highly skilled technical and other personnel can be intense. As a result, we may not be successful in identifying, recruiting and hiring qualified engineers and other key personnel.

We are exposed to the credit risk of our customers

Industry and economic conditions have weakened the financial position of some of our customers. To sell to some of these customers, we may be required to take risks of uncollectible accounts. While we monitor these situations carefully and attempt to take appropriate measures to protect ourselves, it is possible that we may have to write down or write off doubtful accounts. Such write-downs or write-offs, if large, could have a material adverse effect on our operating results and financial condition.

Our stock price is volatile

Our common stock price has experienced substantial volatility in the past, and is likely to remain volatile in the future. Volatility can arise as a result of divergence between our actual or anticipated financial results and published expectations of analysts, and announcements that we, our competitors, or our customers may make.

Divergence between our actual results and our anticipated results, analyst estimates and public announcements by us, our competitors, or by customers will occur from time to time in the future, with resulting stock price volatility, irrespective of our overall year-to-year performance or long-term prospects. As long as we continue to depend on a limited customer base, and particularly when a substantial majority of their purchases consist of newly introduced products, there is substantial chance that our quarterly results will vary widely.

Forward-looking statements

Some of the statements contained, or incorporated by reference, in this annual report discuss future expectations, contain projections of results of operations or financial condition or state other “forward-looking” information. Those statements are subject to known and unknown risks, uncertainties and other factors that could cause the actual results to differ materially from those contemplated by the statements. The “forward-looking” information is based on various factors and was derived using numerous assumptions. In some cases, you can identify these so-called “forward-looking statements” by words like “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of those words and other comparable words. You should be aware that those statements only reflect our predictions. Actual events or results may differ substantially. 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” above.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The following discussion about the Company’s market risk disclosures involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. The Company is exposed to market risk related to changes in interest rates and foreign currency exchange rates. The Company does not use derivative financial instruments for speculative or trading purposes.

Interest Rate Sensitivity. The Company maintains a short-term and long-term investment portfolio. These available-for-sale securities are subject to interest rate risk and will fall in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 10 percent from levels at October 31, 2003, the fair value of the portfolio would decline by approximately \$112.2 million.

Foreign Currency Exchange Risk. As a global concern, the Company faces exposure to adverse movements in foreign currency exchange rates. These exposures may change over time as business practices evolve and if our exposure increases, adverse movement in foreign currency exchange rates could have a material adverse impact on the Company’s financial results. The Company’s primary exposures are related to non-dollar denominated operating expenses in Canada, Latin America, Europe and Asia where the Company sells primarily in U.S. dollars. The Company is prepared to hedge against fluctuations in foreign currency if this exposure becomes material. As of October 31, 2003, the assets and liabilities of the Company related to non-dollar denominated currencies were not material. Therefore we do not expect an increase or decrease of 10% in the foreign exchange rate would have a material impact on the Company’s financial position.

Item 8. Financial Statements and Supplementary Data

The following is an index to the consolidated financial statements and supplementary data:

	Page Number
Report of Independent Auditors	35
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Consolidated Statements of Operations	37
Consolidated Statements of Changes in Stockholders’ Equity	38
Consolidated Statements of Cash Flows	39
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Report of Independent Auditors

To the Board of Directors and Shareholders of CIENA Corporation:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, shareholders' equity and cash flows present fairly, in all material respects, the financial position of CIENA Corporation and its subsidiaries at October 31, 2003 and October 31, 2002, and the results of their operations and their cash flows for each of the three years in the period ended October 31, 2003 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes 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. We believe that our audits provide a reasonable basis for our opinion.

As discussed with Note 1 to the financial statements, the Company ceased amortizing certain goodwill and intangibles as a result of the adoption of Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets," effective on first day of its 2002 fiscal year.

The image shows a handwritten signature in cursive script that reads "PricewaterhouseCoopers LLP". The signature is written in black ink and is positioned above the printed name of the firm.

PricewaterhouseCoopers LLP
McLean, VA
December 9, 2003

CIENA Corporation

Consolidated Balance Sheets

(in thousands, except share data)	October 31,	
	2002	2003
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 377,189	\$ 309,665
Short-term investments	1,130,414	796,809
Accounts receivable, net	28,680	43,600
Inventories, net	47,023	44,995
Prepaid expenses and other	54,351	34,334
Total current assets	1,637,657	1,229,403
Long-term investments	570,861	519,744
Equipment, furniture and fixtures, net	196,951	114,930
Goodwill	212,500	336,039
Other intangible assets, net	62,457	108,408
Other long-term assets	70,596	69,641
Total assets	\$ 2,751,022	\$ 2,378,165
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 39,841	\$ 44,402
Accrued liabilities	132,588	98,926
Restructuring liabilities	27,423	14,378
Unfavorable lease commitments	7,630	9,380
Income taxes payable	—	4,640
Deferred revenue	15,388	14,473
Other current obligations	948	—
Total current liabilities	223,818	186,199
Long-term deferred revenue	15,444	14,547
Long-term restructuring liabilities	65,742	52,164
Long-term unfavorable lease commitments	70,124	61,312
Other long-term obligations	5,009	2,698
Convertible notes payable	843,616	730,428
Total liabilities	1,223,753	1,047,348
Commitments and contingencies		
Stockholders' equity:		
Preferred stock—par value \$0.01; 20,000,000 shares authorized; zero shares issued and outstanding	—	—
Common stock—par value \$0.01; 980,000,000 shares authorized; 432,842,481 and 473,214,856 shares issued and outstanding	4,328	4,732
Additional paid-in capital	4,683,865	4,861,182
Deferred stock compensation	(24,983)	(9,664)
Notes receivable from stockholders	(3,866)	(448)
Accumulated other comprehensive income	8,840	2,447
Accumulated deficit	(3,140,915)	(3,527,432)
Total stockholders' equity	1,527,269	1,330,817
Total liabilities and stockholders' equity	\$ 2,751,022	\$ 2,378,165

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,		
	2001	2002	2003
Revenue:			
Products	\$ 1,518,833	\$ 304,155	\$ 240,772
Services	84,396	57,000	42,364
Total revenue	1,603,229	361,155	283,136
Costs:			
Products	720,874	228,074	158,898
Services	115,264	81,485	56,489
Excess and obsolete inventory costs (benefit)	68,411	286,475	(5,296)
Total cost of goods sold	904,549	596,034	210,091
Gross profit (loss)	698,680	(234,879)	73,045
Operating expenses:			
Research and development	235,831	239,619	199,699
Selling and marketing	146,949	130,276	103,193
General and administrative	57,865	52,612	38,478
Deferred stock compensation costs:			
Research and development	17,783	15,672	12,824
Selling and marketing	8,378	3,560	2,728
General and administrative	15,206	1,092	1,225
Amortization of goodwill	177,786	—	—
Amortization of intangible assets	4,413	8,972	17,870
In-process research and development	45,900	—	2,800
Restructuring costs	15,439	225,429	31,155
Goodwill and intangible impairment	1,719,426	557,286	29,596
Provision for doubtful accounts	(6,579)	14,813	—
Total operating expenses	2,438,397	1,249,331	439,568
Loss from operations	(1,739,717)	(1,484,210)	(366,523)
Interest and other income (expense), net	63,579	61,145	42,959
Interest expense	(30,591)	(45,339)	(36,331)
Loss on equity investments, net	—	(15,677)	(4,760)
Loss on extinguishment of debt	—	(2,683)	(20,606)
Loss before income taxes	(1,706,729)	(1,486,764)	(385,261)
Provision for income taxes	87,333	110,735	1,256
Net loss	\$(1,794,062)	\$(1,597,499)	\$(386,517)
Basic and diluted net loss per common share and dilutive potential common share			
	\$ (5.75)	\$ (4.37)	\$ (0.87)
Weighted average basic common and dilutive potential common shares outstanding			
	311,815	365,202	446,696

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

CIENA Corporation

Consolidated Statements of Changes in Stockholders' Equity

(dollars in thousands)	Common Shares	Stock Amount	Additional Paid-in- Capital	Deferred Stock Compen- sation	Notes Receivable from Stock- holders	Accum- lated Other Compre- hensive Income	Retained Earnings (Deficit)	Total Stockholders' Equity (Deficit)
Balance at October 31, 2000	286,530,631	\$2,865	\$ 541,030	\$ 16,227	\$ (30)	\$ (903)	\$ 250,646	\$ 809,835
Net loss	—	—	—	—	—	—	(1,794,062)	(1,794,062)
Changes in unrealized gains on investments, net	—	—	—	—	—	5,804	—	5,804
Translation adjustment	—	—	—	—	—	(59)	—	(59)
Comprehensive loss								\$(1,788,317)
Exercise of stock options	4,373,093	44	35,343	—	—	—	—	35,387
Unearned stock compensation	—	—	—	(98,456)	—	—	—	(98,456)
Deferred stock compensation costs	—	—	—	41,367	—	—	—	41,367
Forfeiture of unearned stock compensation	—	—	(3,489)	3,489	—	—	—	—
Issuance of common stock, net of issuance costs	37,118,540	371	3,060,396	—	(7,785)	—	—	3,052,982
Tax benefit from the exercise of stock options	—	—	71,605	—	—	—	—	71,605
Repayment of receivables from stockholders	—	—	—	—	4,579	—	—	4,579
Balance at October 31, 2001	328,022,264	\$3,280	\$3,704,885	\$(37,373)	\$(3,236)	\$ 4,842	\$(1,543,416)	\$ 2,128,982
Net loss	—	—	—	—	—	—	(1,597,499)	\$(1,597,499)
Changes in unrealized gains on investments, net	—	—	—	—	—	3,731	—	3,731
Translation adjustment	—	—	—	—	—	267	—	267
Comprehensive loss								\$(1,593,501)
Exercise of stock options	3,699,493	37	15,103	—	—	—	—	15,140
Unearned stock compensation	—	—	—	(8,826)	—	—	—	(8,826)
Deferred stock compensation costs	—	—	—	21,216	—	—	—	21,216
Issuance of common stock, net of issuance costs	101,120,724	1,011	963,877	—	(5,673)	—	—	959,215
Repayment of receivables from stockholders	—	—	—	—	5,043	—	—	5,043
Balance at October 31, 2002	432,842,481	\$4,328	\$4,683,865	\$(24,983)	\$(3,866)	\$ 8,840	\$(3,140,915)	\$ 1,527,269
Net loss	—	—	—	—	—	—	(386,517)	(386,517)
Changes in unrealized gains on investments, net	—	—	—	—	—	(6,743)	—	(6,743)
Translation adjustment	—	—	—	—	—	350	—	350
Comprehensive loss								\$ (392,910)
Exercise of stock options	4,608,143	46	13,752	—	—	—	—	13,798
Unearned stock compensation	—	—	—	(7,385)	—	—	—	(7,385)
Deferred stock compensation costs	—	—	—	17,093	—	—	—	17,093
Forfeiture of unearned stock compensation	—	—	(5,611)	5,611	—	—	—	—
Issuance of common stock, net of issuance costs	35,764,232	358	169,176	—	—	—	—	169,534
Repayment of receivables from stockholders	—	—	—	—	3,418	—	—	3,418
Balance at October 31, 2003	473,214,856	\$4,732	\$4,861,182	\$ (9,664)	\$ (448)	\$ 2,447	\$(3,527,432)	\$ 1,330,817

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,		
	2001	2002	2003
Cash flows from operating activities:			
Net loss	\$(1,794,062)	\$(1,597,499)	\$ (386,517)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Early extinguishment of debt	—	—	20,606
Tax benefit related to exercise of stock options and warrants	71,605	—	—
Non-cash impairment from equity transactions	—	13,823	4,760
Non-cash portion of restructuring charges and related asset write-downs	—	113,596	37,828
Effect of accumulated translation adjustment	(59)	267	350
Accretion of convertible notes payable	6,183	12,693	6,432
In-process research and development	45,900	—	2,800
Depreciation	100,882	122,048	75,834
Amortization of goodwill, goodwill impairment, other intangibles, deferred stock compensation and debt issuance costs	1,948,740	589,610	70,554
Provision for doubtful accounts	(6,579)	14,813	—
Provision for inventory excess and obsolescence	68,411	250,457	(5,296)
Provision for warranty and other contractual obligations	33,073	13,271	9,301
Changes in assets and liabilities:			
Accounts receivable	(139,534)	358,493	(14,187)
Inventories	(177,482)	(27,807)	9,216
Deferred income tax asset	(6,631)	186,861	—
Prepaid expenses and other	(35,640)	(12,625)	3,977
Accounts payable and accruals	8,648	6,275	(78,753)
Income taxes payable	(834)	(7,170)	4,626
Deferred revenue and other obligations	40,522	(65,079)	(2,689)
Net cash provided by (used in) operating activities	163,173	(27,973)	(241,158)
Cash flows from investing activities:			
Additions to equipment, furniture and fixtures	(238,544)	(66,330)	(29,544)
Purchase of available for sale securities	(1,714,077)	(1,521,479)	(1,049,993)
Maturities of available for sale securities	420,885	1,547,516	1,414,808
Marketable securities (discount) premium amortization	—	2,469	11,948
Acquisition of business, inclusive of intellectual property and other intangibles, net of cash acquired	54,101	286,899	(29,668)
Minority equity investments	(13,005)	(10,000)	(15,000)
Net cash (used in) provided by investing activities	(1,490,640)	239,075	302,551
Cash flows from financing activities:			
Net proceeds from (repayment of) other obligations	1,265	(1,015)	(4,370)
Proceeds from (repayment of) convertible notes payable	669,300	(250,971)	(140,261)
Proceeds from issuance of common stock and warrants	907,026	15,140	13,798
Repayment of notes receivable from stockholders	4,579	5,043	1,916
Net cash provided by (used in) financing activities	1,582,170	(231,803)	(128,917)
Net increase (decrease) in cash and cash equivalents	254,703	(20,701)	(67,524)
Cash and cash equivalents at beginning of period	143,187	397,890	377,189
Cash and cash equivalents at end of period	\$ 397,890	\$ 377,189	\$ 309,665
Supplemental disclosure of cash flow information:			
Cash paid during the period for:			
Interest	\$ 16,051	\$ 36,776	\$ 30,287
Income taxes	\$ 1,007	\$ 485	\$ 1,780
Issuance of common stock for notes receivable from stockholders	\$ —	\$ —	\$ —

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

CIENA Corporation

Notes to Consolidated Financial Statements

(1) The Company and Significant Accounting Policies and Estimates

Description of Business

CIENA is a leading global provider of innovative network solutions to service providers and enterprises worldwide. Our customers include long distance carriers, local exchange carriers, cable operators, Internet service providers, wireless and wholesale carriers, resellers, governments, large businesses and non-profit institutions.

CIENA was incorporated in Delaware in November 1992, and completed its initial public offering on February 7, 1997. CIENA's principal executive offices are located at 1201 Winterson Road, Linthicum, Maryland 21090.

Principles of Consolidation

CIENA has 25 wholly owned U.S. and international subsidiaries, which have been consolidated in the accompanying financial statements. On August 29, 2003, CIENA acquired all of the outstanding capital stock of Akara Corporation ("Akara"), a Delaware company based in Ottawa, Ontario. On June 16, 2003, CIENA acquired by merger WaveSmith Networks, Inc. ("WaveSmith"), a Delaware company based in Acton, Massachusetts. On June 21, 2002, CIENA acquired by merger ONI Systems Corp. ("ONI"), a Delaware Company, listed on NASDAQ, which was headquartered in San Jose, California. On March 29, 2001, CIENA acquired all of the outstanding capital stock of Cyras Systems, Inc. ("Cyras"), a Delaware company based in Fremont, California. The Akara, WaveSmith, ONI and Cyras transactions were all accomplished as tax-free reorganizations, all of which were recorded using the purchase accounting method.

The accompanying consolidated financial statements include the accounts of CIENA and its wholly owned subsidiaries. All material intercompany accounts and transactions have been eliminated in consolidation.

Fiscal Year

The Company has a 52 or 53 week fiscal year, which ends on the Saturday nearest to the last day of October in each year (November 1, 2003, November 2, 2002, and November 3, 2001). For purposes of financial statement presentation, each fiscal year is described as having ended on October 31. Fiscal 2001 was comprised of 53 weeks. Fiscal 2002 and 2003 were comprised of 52 weeks.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires the Company to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, together with amounts disclosed in the related notes to the financial statements. Actual results could differ from the recorded estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with expected original maturities of three months or less to be cash equivalents.

Investments

CIENA's short-term and long-term investments are classified as available-for-sale and are reported at fair value, with unrealized gains and losses, net of tax, recorded in accumulated other comprehensive income. Realized gains or losses and declines in value determined to be other than temporary, if any, on available-for-sale securities will be reported in other income or expense as incurred.

CIENA also has certain other minority equity investments in non-publicly traded companies. These investments are generally carried at cost as CIENA owns less than 20% of the voting equity and does not have the ability to exercise significant influence over these companies. As of October 31, 2002 and October 31, 2003, \$16.1 million and \$21.3 million of these investments are included in other long-term assets, respectively. These investments are inherently high risk as the market for technologies or product manufactured by these companies are usually early stage at the time of the investment by CIENA and such markets may never be significant. CIENA could lose its entire investment in some or all of these companies. CIENA monitors these investments for impairment and makes appropriate reductions in carrying values when necessary. During fiscal 2003 and 2002, CIENA recorded a charge of \$4.8 million and \$16.6 million, respectively, from a decline in the fair values of certain equity investments that were determined to be other than temporary. No write-downs were recorded during fiscal 2001.

Inventories

Inventories are stated at the lower of cost or market, with cost determined on the first-in, first-out basis. The Company records a provision for excess and obsolete inventory whenever such an impairment has been 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 2–5 years for equipment, furniture and fixtures and 2–10 years for leasehold improvements.

Internal use software and web site development costs are capitalized in accordance with Statement of Position (SOP) No. 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use," and Emerging Issues Task Force ("EITF") Issue No. 00-02, "Accounting for Web Site Development Costs." Qualifying costs incurred during the application development stage, which consist primarily of outside services and purchased software license costs, are capitalized and amortized over the estimated useful life of the asset.

Goodwill and Purchased Intangible Assets

The Company has recorded goodwill and purchased intangible assets as a result of several acquisitions. See Note 2. Purchased intangible assets are carried at cost less accumulated amortization. Amortization is computed using the straight-line method over the economic lives of the respective assets, generally three to seven years. It is the Company's policy to assess periodically the carrying amount of its purchased intangible assets to determine if there has been an impairment to their carrying value. Impairments of other intangibles assets are determined in accordance with Statement Financial Accounting Standards No. 144 "Accounting for the Impairment or disposal of Long-Lived Assets" ("SFAS 144"). This statement is effective for fiscal 2003 and supersedes Statement of Financial Accounting Standard No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" ("SFAS 121").

In July 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 141 "Business Combinations" ("SFAS 141") and Statement of Financial Accounting Standards No. 142 "Goodwill and Other Intangible Assets" ("SFAS 142"). SFAS 141 addresses financial accounting and reporting for business combinations. This statement requires the purchase method of accounting to be used for all business combinations, and prohibits the pooling-of-interests method of accounting. It is effective for all business combinations initiated after June 30, 2001 and supersedes APB Opinion No. 16, "Business Combinations" as well as Financial Accounting Standards Board Statement of Financial Accounting Standards No. 38, "Accounting for Preacquisition Contingencies of Purchased Enterprises."

SFAS 142 addresses how intangible assets acquired individually or with a group of other assets should be accounted for in financial statements upon their acquisition. This statement requires goodwill amortization to cease and for goodwill to be periodically reviewed for impairment for fiscal years beginning after October 31, 2001. SFAS 142 supersedes APB Opinion No. 17, "Intangible Assets." The Company adopted the provisions of this standard for its first quarter of fiscal 2002.

The following table presents the impact of SFAS 142 on net loss and net loss per share had SFAS 142 been in effect for fiscal 2001, 2002 and 2003 (in thousands except per share data):

	Fiscal Year Ended October 31,		
	2001	2002	2003
Net loss	\$(1,794,062)	\$(1,597,499)	\$(386,517)
Adjustments:			
Amortization of goodwill	177,786	—	—
Adjusted net loss	\$(1,616,276)	\$(1,597,499)	\$(386,517)
Weighted average shares—basic and diluted	311,815	365,202	446,696
Adjusted basic and diluted EPS	\$ (5.18)	\$ (4.37)	\$ (0.87)
Reported basic and diluted EPS	\$ (5.75)	\$ (4.37)	\$ (0.87)

Concentrations

Substantially all of CIENA's cash and cash equivalents, short-term and long-term investments, are custodied at three major U.S. financial institutions. The majority of CIENA's cash equivalents consist of money market funds and overnight repurchase agreements. Deposits held with banks may exceed the amount of insurance provided on such deposits. Generally these deposits may be redeemed upon demand and, therefore, bear minimal risk.

Historically, CIENA has relied on a limited number of customers for a substantial portion of the Company's revenue. During fiscal 2003 Qwest and AT&T each accounted for at least 10% of CIENA's revenue and combined accounted for 24.9%. During fiscal 2002, Sprint and AT&T each accounted for at least 10% of CIENA's revenue and combined accounted for 36.8%. During fiscal 2001, Sprint and Qwest Communications each accounted for at least 10% of CIENA's revenue and, combined, accounted for 50.5%. CIENA expects that a significant portion of the Company's future revenue will continue to be generated by a limited number of customers. The loss of any one of these customers or any substantial reduction in orders by any one of these customers could materially adversely affect CIENA's financial condition or operating results.

Additionally, CIENA's access to certain raw materials is dependent upon single and sole source suppliers. The inability of any supplier to fulfill supply requirements of CIENA could affect future results. CIENA relies on a small number of contract manufacturers to perform the majority of the manufacturing operations 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 may suffer.

Revenue Recognition

CIENA recognizes product revenue in accordance with the terms of the sales contract and where collection is reasonably assured. For transactions where CIENA has yet to obtain customer acceptance, revenue is not recognized until the terms of acceptance are satisfied. Revenue for installation services is recognized as the services are performed unless the terms of the supply contract combine product acceptance with installation, in which case, revenue from installation services are recognized when the terms of acceptance are satisfied and installation is completed. Amounts received in excess of revenue recognized are included as deferred revenue in the accompanying balance sheet. For transactions involving the sale of software, revenue is recognized in accordance with Statement of Position No. 97-2 ("SOP 97-2"), "Software Revenue Recognition," including deferral of revenue recognition in instances where vendor specific objective evidence for undelivered elements is not determinable. For distributor sales where risks of ownership have not transferred, CIENA recognizes revenue when the product is shipped through to the end user.

Revenue-Related Accruals

The Company provides for the estimated costs to fulfill customer warranty and other contractual obligations upon the recognition of the related revenue. Such reserves are determined based upon actual warranty cost experience, estimates of component failure rates, and management's industry experience. The Company's sales contracts generally do not permit the right of return of product by the customer after the product has been accepted.

Research and Development

The Company charges all research and development costs to expense as incurred.

Advertising Costs

The Company expenses all advertising costs as incurred.

Income Taxes

The Company accounts for income taxes in accordance with Statement of Financial Accounting Standards No. 109 ("SFAS 109"), "Accounting for Income Taxes." SFAS 109 is an asset and liability approach that requires the recognition of 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 carry forwards. In estimating future tax consequences, SFAS 109 generally 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. Tax savings resulting from deductions associated with stock options and certain stock warrants are credited directly to additional paid in capital when realization of such benefit is fully assured. See Note 13.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, which include short-term and long-term investments, accounts receivable, accounts payable, and other accrued expenses, approximate their fair values due to their short maturities.

Foreign Currency Translation

The majority of the Company's foreign branches and subsidiaries use the U.S. dollar as their functional currency, as the U.S. parent exclusively funds the branches and subsidiaries' operations with U.S. dollars. 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. Resulting translation adjustments are recorded directly to a separate component of stockholders' equity. Where the U.S. dollar is the functional currency, translation adjustments are recorded in other income. The net gain (loss) on foreign currency re-measurement and exchange rate changes for fiscal 2001, 2002 and 2003 was immaterial for separate financial statement presentation.

Computation of Basic Net Income (Loss) per Common Share and Diluted Net Income (Loss) per Common and Dilutive Potential Common Share

The Company calculates earnings per share in accordance with the Statement of Financial Accounting Standards No. 128, "Earnings per Share" ("SFAS 128"). SFAS 128 simplifies the earnings per share ("EPS") computation and replaces the presentation of primary EPS with a presentation of basic EPS. This statement also requires dual presentation of basic and diluted EPS on the face of the income statement for entities with a complex capital structure and requires a reconciliation of the numerator and denominator used for the basic and diluted EPS computations. See Note 11.

Software Development Costs

Statement of Financial Accounting Standards No. 86, "Accounting for the Costs of Computer Software to be Sold, Leased or Otherwise Marketed" ("SFAS 86"), requires the capitalization of certain software development costs 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 over the estimated product life. The Company defines technological feasibility as being attained at the time a working model is completed. To date, the period between achieving technological feasibility and the general availability of such software has been short, and software development costs qualifying for capitalization have been insignificant. Accordingly, the Company has not capitalized any software development costs.

Accounting for Stock Options

In October 1995, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 123 ("SFAS 123"), "Accounting for Stock-Based Compensation." SFAS 123 allows companies to account for stock-based compensation either under the new provisions of SFAS 123 or using the intrinsic value method provided by Accounting Principles Board Opinion No. 25 ("APB 25"), "Accounting for Stock Issued to Employees," but requires pro forma disclosure in the footnotes to the financial statements as if the measurement provisions of SFAS 123 had been adopted.

In December 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure" ("SFAS 148"). SFAS 148 amends SFAS 123, to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS 148 amends the disclosure requirements of SFAS 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. SFAS 148 is effective for financial statements for fiscal years ending after December 15, 2002.

The Company has elected to continue to account for its stock-based compensation in accordance with the provisions of APB 25 as interpreted by FASB Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation, an Interpretation of APB Opinion No. 25," ("FIN 44") and present the pro forma disclosures required by SFAS 123 as amended by SFAS 148. See Note 14.

Segment Reporting

In June 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 131 ("SFAS 131"), "Disclosures about Segments of an Enterprise and Related Information." SFAS 131 establishes annual and interim reporting standards for operating segments of a company. It also requires entity-wide disclosures about the products and services an entity provides, the material countries in which it holds assets and reports revenue, and its major customers. The Company is not organized by multiple operating segments for the purpose of making operating decisions or assessing performance. Accordingly, the Company operates in one operating segment and reports only certain enterprise-wide disclosures. See Note 16.

Newly Issued Accounting Standards

In November 2002, the FASB issued FASB Interpretation No. 45 ("FIN 45"), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." FIN 45 requires that a liability be recorded in the guarantor's balance sheet upon issuance of a guarantee. In addition, FIN 45 requires disclosures about the guarantees that an entity has issued, including a reconciliation of changes in the entity's product warranty liabilities. The initial recognition and initial measurement provisions of FIN 45 are applicable on a prospective basis to guarantees issued or modified after December 31, 2002, irrespective of the guarantor's fiscal year end. The disclosure requirements of FIN 45 are effective for financial statements of interim or annual periods ending after December 15, 2002. The adoption of this standard did not have a material impact on CIENA's financial statements.

In November 2002, the Emerging Issues Task Force ("EITF") reached a consensus on Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables." EITF Issue No. 00-21 provides guidance on how to account for arrangements that involve the delivery or performance of multiple products, services and/or rights to use assets. The provisions of EITF Issue No. 00-21 will apply to revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The Company does not expect that the adoption of this standard will have a material effect on its financial position or results of operations.

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities, an Interpretation of Accounting Research Bulletin No. 51." FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics

of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 must be applied for the first interim or annual period beginning after December 15, 2003. The Company does not expect that the adoption of this standard will have a material effect on its financial position or results of operations.

In April 2003, the FASB issued Statement of Financial Accounting Standard No. 149 ("SFAS 149"), "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." SFAS 149 amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities under SFAS 133. The statement requires that contracts with comparable characteristics be accounted for similarly and clarifies when a derivative contains a financing component that warrants special reporting in the statement of cash flows. SFAS 149 is effective for contracts entered into or modified after June 30, 2003, except in certain circumstances, and for hedging relationships designated after June 30, 2003. The Company does not expect that the adoption of this standard will have a material effect on its financial position or results of operations.

In May 2003, the FASB issued Statement of Financial Accounting Standard No. 150 ("SFAS 150"), "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." This Statement establishes standards for how an issuer classifies and measures in its statement of financial position certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances) because that financial instrument embodies an obligation of the issuer. This Statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003, except for mandatory redeemable financial instruments of nonpublic entities. The FASB has defined implementation of SFAS 150 indefinitely for certain non-controlling interests, the provisions of which are currently not applicable to the Company. The Company does not expect that the adoption of this standard will have a material effect on its financial position or results of operations.

Reclassification

Certain prior year amounts have been reclassified to conform to current year consolidated financial statement presentation.

(2) Business Combinations

In fiscal 2003, the Company acquired Akara and WaveSmith. In fiscal 2002, and 2001, the Company acquired ONI and Cyras, respectively. As a result of these acquisitions, the Company, has recorded charges for in-process research and development and recorded intangible assets related to existing technology.

In-process research and development represents in-process technology that, as of the date of the acquisition, has not reached technological feasibility and has no alternative future use. Based on valuation assessments, the value of these projects is determined by estimating the resulting net cash flows from the sale of the products resulting from the completion of the projects, reduced by the portion of the revenue attributable to developed technology and the percentage of completion of the project. The resulting cash flows are then discounted back to their present values at appropriate discount rates.

Existing technology represents purchased technology for which development had been completed as of the date of acquisition. This amount is determined using the income approach. This method consisted of estimating future net cash flows attributable to existing technology for a discrete projection period and discounting the net cash flows to their present value. The existing technology will be amortized its useful life.

The purchase price for the Company's acquisitions have been based on the average closing price of CIENA's common stock for two trading days prior to, the date of, and the two trading days after the announcement of the acquisition.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of the acquisitions (in thousands):

	Akara at August 29, 2003	WaveSmith at June 16, 2003	ONI at June 21, 2002	Cyras at March 29, 2001
Cash, cash equivalents, long and short-term investments	\$ 1,232	\$ 4,159	\$ 623,559	\$ 68,891
Inventory	909	983	14,705	4,618
Equipment, furniture and fixtures	282	793	40,759	4,597
Other tangible assets	1,542	472	25,847	47,591
Existing technology	9,300	54,300	13,000	47,700
Non-compete agreements	3,100	—	1,000	11,600
Contracts and purchase orders	2,100	5,400	1,100	—
Goodwill	34,275	89,264	590,895	2,059,899
Deferred stock compensation	—	7,385	8,826	98,456
Other assumed liabilities	(2,658)	(2,405)	(43,336)	(35,914)
CIENA initial investment	—	(5,000)	—	—
Unfavorable lease commitments	(541)	—	(80,183)	—
Promissory notes and loans	(6,099)	—	—	—
Convertible subordinated notes payable	—	—	(218,013)	(167,700)
In-process research and development	1,300	1,500	—	45,900
Total purchase price	\$44,742	\$156,851	\$ 978,159	\$2,185,638

Akara Corporation

On August 29, 2003, CIENA completed the acquisition by merger of Akara Corporation, a privately held corporation headquartered in Ottawa, Ontario that provides SONET/SDH based storage extension devices for storage area networks. Pursuant to the terms of the acquisition agreement, Akara became a wholly owned subsidiary of CIENA, and the outstanding shares of Akara common and preferred stock were exchanged for \$30.6 million in cash and approximately 2,343,015 shares of CIENA common stock. The aggregate purchase price was \$44.7 million, which included CIENA common stock valued at \$13.8 million, and transaction costs of \$0.3 million.

The \$2.1 million assigned to the contracts and purchase orders will be amortized over five years. The \$6.1 million assigned to the value of the promissory notes and loans was based upon the present value of the notes at the time of the acquisition. CIENA paid \$3.1 million of these obligations in full during the fourth quarter of fiscal 2003, and the remaining \$3.0 million payable to CIENA was eliminated during the consolidation.

The amount of goodwill allocated to the purchase price was \$34.3 million and is not deductible for tax purposes. The Company operates in one operating segment and reports only certain enterprise-wide disclosures. Accordingly, the goodwill from this transaction is not part of a reportable segment. The operations of Akara are not material to the consolidated financial statements of the Company and, accordingly, separate pro forma financial information has not been presented.

WaveSmith Networks

On June 16, 2003, CIENA completed the acquisition by merger of WaveSmith, a privately held corporation headquartered in Acton, Massachusetts that is a leading innovator of multiservice switching equipment. Pursuant to the terms of the acquisition agreement, WaveSmith merged into CIENA, and the outstanding shares of WaveSmith common and preferred stock were exchanged for approximately 33,421,217 shares of CIENA common stock. The aggregate purchase price was \$156.8 million, which included CIENA common stock valued at \$142.7 million, CIENA options, warrants and restricted stock valued at \$7.9 million, transaction costs of \$1.2 million and an initial CIENA investment of \$5.0 million.

The \$5.4 million assigned to the contracts and purchase orders will be amortized over a range of two months to five years.

The amount of goodwill allocated to the purchase price was \$89.3 million and is not deductible for tax purposes. The Company operates in one operating segment and reports only certain enterprise-wide disclosures. Accordingly, the goodwill from this transaction is not part of a reportable segment. The operations of WaveSmith are not material to the consolidated financial statements of the Company and, accordingly, separate pro forma financial information has not been presented.

ONI Systems

On June 21, 2002, CIENA completed the acquisition by merger of ONI Systems Corp. ("ONI"), a NASDAQ-listed corporation headquartered in San Jose, California. ONI is a provider of optical networking equipment specifically designed to address bandwidth and service limitations of regional and metropolitan networks. Under the terms of the agreement, each outstanding share of capital stock of ONI was exchanged for 0.7104 shares of CIENA common stock, and CIENA assumed all ONI outstanding options and warrants as well as the ONI outstanding convertible debt. The stockholders of ONI received 101,120,724 shares of CIENA common stock of which 1,039,429 shares are restricted and subject to repurchase.

Additionally, CIENA converted options and warrants to purchase approximately 18,193,345 ONI shares into options and warrants to purchase 12,924,552 shares of CIENA common stock. The aggregate purchase price was \$978.2 million, including CIENA common stock valued at \$875.7 million, CIENA options, warrants and restricted stock valued at \$89.2 million and transaction costs of \$13.3 million.

The \$2.1 million assigned to the other intangible assets, non-compete agreements and contracts, will be amortized over a range of two months to one year.

During the quarter ended July 31, 2002, CIENA and ONI reduced their combined workforce by approximately 283 employees. Approximately \$3.8 million of costs associated with the ONI workforce reduction qualify for treatment under EITF 95-3 "Recognition of Liabilities in Connection with a Purchase Combination" and were recorded as an element of the acquisition.

The \$80.2 million assigned to the value of the unfavorable lease commitments was based upon the present value of the assumed lease obligations based upon current rental rates at the time of the acquisition. These unfavorable lease commitments will be paid over the respective lease terms through fiscal 2011. The \$218.0 million assigned to the value of the ONI \$300.0 million principal amount of 5.0% convertible subordinated notes due October 15, 2005 was based upon the present value of the notes at the time of the acquisition. CIENA is accreting the difference between the present value of the notes and the outstanding principal value over the remaining period to October 15, 2005, such that the carrying value of the notes equals the principal value at the time the notes become due.

The amount of goodwill allocated to the purchase price was \$590.9 million and is not deductible for tax purposes. The Company operates in one operating segment and reports only certain enterprise-wide disclosures. Accordingly, the goodwill from this transaction is not part of a reportable segment.

The following unaudited pro forma data summarizes the results of operations for the period indicated as if the ONI acquisition had been completed as of the beginning of the periods presented. The unaudited pro forma data gives effect to actual operating results prior to the June 21, 2002 acquisition, adjusted to include the pro forma effect of amortization of intangibles, deferred stock compensation costs, and the tax effects to the pro forma adjustments. These pro forma amounts 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 periods presented or that may be obtained in the future (in thousands, except per share data).

	Year Ended October 31,	
	2001	2002
Revenue	\$ 1,798,909	\$ 431,495
Net loss	\$(2,157,621)	\$(1,702,866)
Diluted net loss per common share and dilutive potential common share	\$ (5.14)	\$ (3.93)

Cyras

On March 29, 2001, CIENA acquired all of the outstanding capital stock, and assumed the options of Cyras Systems, Inc. ("Cyras"), a privately held provider of next-generation optical networking systems based in Fremont, California. The purchase price was approximately \$2.2 billion and consisted of the issuance of approximately 26.1 million shares of CIENA common stock, the assumption of stock options of approximately 1.9 million shares and the indirect assumption of \$150 million principal amount of Cyras' convertible subordinated indebtedness.

The amortization period for the goodwill and intangibles, based on management's estimate of the useful life of the acquired technology, was three to seven years. As a result of the issuance of SFAS 142, amortization related to goodwill will no longer be recorded in subsequent fiscal years.

The following unaudited pro forma data summarizes the results of operations for the period indicated as if the Cyras acquisition had been completed as of the beginning of the periods presented. The unaudited pro forma data gives effect to actual operating results prior to the acquisition, adjusted to include the pro forma effect of amortization of intangibles, deferred stock compensation costs, the elimination of the charge for acquired in-process research and development, the tax effects to the pro forma adjustments and the recognition of the tax benefits arising from Cyras' net operating loss carry forwards. These pro forma amounts 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 periods presented or that may be obtained in the future (in thousands, except per share data).

	Year Ended October 31,	
	2000	2001
Revenue	\$ 858,750	\$ 1,603,229
Net loss	\$(274,330)	\$(1,890,627)
Diluted net loss per common share and dilutive potential common share	\$ (0.90)	\$ (6.06)

(3) Restructuring Costs and Impairment Charges**Restructuring**

The following table displays the activity and balances of the restructuring reserve account for the year ended October 31, 2003 (in thousands):

	Workforce Reduction	Consolidation of Excess Facilities	Liabilities Recorded in Connection with Purchase Combination	Total
Balance at October 31, 2001	\$ —	\$ 15,439 ^(a)	\$ —	\$ 15,439
Additional reserve recorded	32,929 ^(b)	192,500 ^(b)	3,792 ^(c)	229,221
Non-cash charges	(893)	(113,596)	—	(114,489)
Cash payments	(26,837)	(6,498)	(3,671)	(37,006)
Balance at October 31, 2002	5,199	87,845	121	93,165
Additional reserve recorded	12,240 ^(d)	19,748 ^(d)	430 ^(e)	32,418
Adjustment to previous estimates	(523) ^(d)	(310) ^(d)	—	(833)
Non-cash charges	(1,913)	(28,485)	—	(30,398)
Cash payments	(12,154)	(15,105)	(551)	(27,810)
Balance at October 31, 2003	\$ 2,849	\$ 63,693	\$ —	\$ 66,542
Current restructuring liabilities	\$ 2,849	\$ 11,529	\$ —	\$ 14,378
Non-current restructuring liabilities	\$ —	\$ 52,164	\$ —	\$ 52,164

(a) During the fourth quarter of fiscal year 2001, CIENA recorded a restructuring charge of \$15.4 million relating to consolidation of excess facilities. The consolidation of excess facilities included the closure of certain manufacturing warehouse facilities and the consolidation of certain operational centers related to business activities that were restructured. The charge included \$7.0 million primarily related to lease terminations and non-cancelable lease costs and also included an \$8.4 million write-down related to property and equipment consisting primarily of leasehold improvements and production equipment.

(b) During the first quarter of fiscal 2002, CIENA had a workforce reduction of approximately 380 employees concentrated in manufacturing operations staff. CIENA recorded a restructuring charge of \$6.8 million associated with this action.

During the second quarter of fiscal 2002, CIENA had a workforce reduction of approximately 400 employees largely concentrated in manufacturing operations and research and development activities associated with the closure of CIENA's Marlborough, Massachusetts research and development facility. On March 26, 2002, CIENA had a company-wide workforce reduction of approximately 650 employees. CIENA recorded a restructuring charge of \$121.4 million associated with the workforce reductions, lease terminations, non-cancelable lease costs and the write-down of certain property, equipment and leasehold improvements associated with this action.

As a result of the CIENA and ONI Systems Corp. integration and restructuring activities, CIENA recorded a charge of \$11.0 million during the third quarter of fiscal 2002 associated with workforce reductions of approximately 66 employees, lease terminations, non-cancelable lease costs and the write-down of certain property, equipment and leasehold improvements. Also during the third quarter of fiscal 2002, CIENA recorded an additional restructuring charge of approximately \$7.6 million to increase the estimated cost of the net lease expense for previously restructured facilities.

During the fourth quarter of fiscal 2002, CIENA had a company-wide workforce reduction of approximately 450 employees. CIENA recorded a restructuring charge of \$78.7 million associated with the workforce reductions, lease terminations, non-cancelable lease costs and the write-down of certain property, equipment and leasehold improvements associated with this action.

(c) During the third quarter of fiscal 2002, CIENA and ONI Systems Corp. reduced their combined workforce by approximately 283 employees. Approximately \$3.8 million of costs associated with the ONI workforce reduction qualify for treatment under EITF 95-3 "Recognition of Liabilities in Connection with a Purchase Combination" and were recorded as an element of the acquisition.

(d) During the second quarter of fiscal 2003, CIENA reduced its workforce by approximately 75 employees. CIENA recorded a restructuring charge of \$2.7 million associated with the workforce reduction.

During the third quarter of fiscal 2003, CIENA recorded a restructuring charge of \$15.5 million associated with a workforce reduction of approximately 84 employees, lease terminations, non-cancelable lease costs and the write-down of certain property, equipment and leasehold improvements.

During the fourth quarter of fiscal 2003, CIENA recorded a restructuring charge of \$12.9 million associated with a workforce reduction of approximately 231 employees, lease termination, non-cancelable lease costs and the write-down of certain property, equipment and leasehold improvements.

(e) During the third quarter of fiscal 2003, CIENA and WaveSmith reduced their combined workforce by 8 employees. Approximately \$0.4 million of cost associated with the WaveSmith workforce reduction qualify for treatment under EITF 95-3 "Recognition of Liabilities in Connection with a Purchase Combination" and were recorded as an element of the acquisition.

Goodwill Impairment Charges

The Company adopted SFAS 142 effective November 1, 2001 and upon adoption ceased to amortize goodwill. On adoption of SFAS 142, the Company determined that its operations represent a single reporting unit. The Company completed an impairment review of the goodwill associated with its reporting unit during the three months ended January 31, 2002. The Company compared the fair value of its reporting unit at November 1, 2001 to the carrying value including goodwill for the unit at November 1, 2001, and determined that the carrying value, including goodwill, did not exceed the unit's fair value. As a result, no impairment charge was required on adoption.

In accordance with SFAS 142, which requires annual testing to determine and measure goodwill impairment on a reporting unit basis, and with the assistance from independent valuation experts management performed an assessment of the fair value of the Company's single reporting unit and its intangible assets as of September 30, 2003 and 2002, respectively. The Company compared its fair value to its carrying value including goodwill and determined that its carrying value, including goodwill, did not exceed fair value as of September 30, 2003 but did exceed fair value as of September 30, 2002. As a result, during fiscal 2002 the Company assessed the fair value of its assets, including identified intangible assets, and liabilities and derived an implied fair value for its goodwill. Since the carrying amount of goodwill was greater than its implied fair value, an impairment loss of \$557.3 million was recognized in fiscal 2002.

During fiscal 2003 the fair value of the Company was determined using the average market price of the Company's common stock over a 10-day period before and after September 27, 2003 and a control premium of 25%. During fiscal 2002 fair value of the Company was determined using the average market price of the Company's common stock over a 10-day period before and after September 27, 2002 and a control premium of 25%. The Company determined the estimated fair value of identified intangible assets and non-goodwill intangible assets and liabilities using discounted cash flows. The cash flow periods used were eight years, applying annual growth rates of 10% to 86%. The Company used discount rates of 10% to 32% based on the specific risks and circumstances associated with the identified intangible asset or other non-goodwill assets or liability being evaluated. The assumptions supporting the estimated cash flows for identified intangible assets and other non-goodwill assets and liabilities, including the discount rate, reflects management's estimates. The discount rate was based on the Company's weighted average cost of capital as adjusted for the risks associated with its operations.

The changes in the carrying amount of goodwill for fiscal 2002 and 2003 are as follows (in thousands):

Balance as of November 1, 2002	\$ 178,891
Goodwill acquired during fiscal 2002	590,895
Impairment losses	(557,286)
Balance as of October 31, 2002	212,500
Goodwill acquired during fiscal 2003	123,539
Balance as of October 31, 2003	\$ 336,039

As part of CIENA's review of financial results for fiscal 2001, CIENA performed an assessment of the carrying value of the Company's long-lived assets including significant amounts of goodwill and other intangible assets recorded in connection with the acquisition of Cyras. The assessment was performed pursuant to SFAS 121 because of the significant negative industry and economic trends affecting both the Company's current operations and expected future sales of MetroDirector K2 as well as the general decline of technology valuations. The conclusion of that assessment was that the decline in market conditions within the Company's industry was significant and other than temporary. As a result, the Company recorded a charge of \$1.7 billion to reduce goodwill during the fourth quarter of 2001 based on the amount by which the carrying amount of these assets exceeded their fair value. The write down is related to the goodwill associated with the Cyras transaction. Fair value was determined based on discounted future cash flows for the operating entity, which had separately identifiable cash flows. The cash flow periods used were six years, applying annual growth rates of 25% to 100%. The discount rate used was 11.3%, and the terminal value was estimated based upon terminal growth rates of 4%. The assumptions supporting the estimated future cash flows, including the discount rate and estimated terminal values reflect management's best estimates. The discount rate was based upon the Company's weighted average cost of capital as adjusted for the risks associated with its operations.

Other Intangible Impairment Charges

As part of CIENA's review of financial results for fiscal 2003, CIENA performed an assessment of the carrying value of the Company's long-lived assets, including other intangible assets. The assessment was performed pursuant to SFAS 144. As a result, the Company recorded a charge of \$29.6 million during fiscal 2003, related to the impairment of MetroDirector K2 technology acquired in the Cyras transaction. This charge was based on the amount by which the carrying amount of the developed technology exceeded its fair value. Fair value was determined based on discounted future cash flows derived from the developed technology, which had separately identifiable cash flows. The cash flow periods used were five years, applying a first year growth rate of 5% with subsequent declines of between 10% and 20% in the following years. The discount rate used was 21.0%. The assumptions supporting the estimated future cash flows, including the discount rate reflect management's best estimates. The discount rate was based upon the Company's weighted average cost of capital as adjusted for the risks associated with its operations.

(4) Marketable Debt and Equity Securities

Cash, short-term and long-term investments are comprised of the following (in thousands):

	October 31, 2003			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Corporate bonds	\$ 617,837	\$ 787	\$163	\$ 618,461
Asset backed obligations	161,474	322	—	161,796
Municipal bonds	5,024	7	—	5,031
Commercial paper	10,487	2	28	10,461
US government obligations	518,609	2,095	229	520,475
Money market funds	309,994	—	—	309,994
	<u>\$1,623,423</u>	<u>\$3,213</u>	<u>\$420</u>	<u>\$1,626,218</u>
Included in cash and cash equivalents	309,665	—	—	309,665
Included in short-term investments	793,807	3,012	10	796,809
Included in long-term investments	519,953	201	410	519,744
	<u>\$1,623,423</u>	<u>\$3,213</u>	<u>\$420</u>	<u>\$1,626,218</u>

	October 31, 2002			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Corporate bonds	\$ 669,699	\$ 2,639	\$521	\$ 671,817
Asset-backed obligations	109,755	625	—	110,380
Municipal bonds	20,745	92	—	20,837
Commercial paper	98,215	119	—	98,334
US obligations	793,327	6,580	—	799,907
Money market funds	377,189	—	—	377,189
	<u>\$2,068,930</u>	<u>\$10,055</u>	<u>\$521</u>	<u>\$2,078,464</u>
Included in cash and cash equivalents	\$ 377,189	\$ —	\$ —	\$ 377,189
Included in short-term investments	1,126,733	4,202	521	1,130,414
Included in long-term investments	565,008	5,853	—	570,861
	<u>\$2,068,930</u>	<u>\$10,055</u>	<u>\$521</u>	<u>\$2,078,464</u>

The following table summarizes maturities of debt investments (including restricted investments) at October 31, 2003 (in thousands):

	Amortized Cost	Estimated Fair Value
Less than one year	\$ 793,807	\$ 796,809
Due in 1–2 years	467,262	466,962
Due in 2–5 years	52,691	52,782
	<u>\$1,313,760</u>	<u>\$1,316,553</u>

(5) Accounts Receivable

As of October 31, 2003, the trade accounts receivable, net of allowance for doubtful accounts, included three customers who each accounted for 23.6%, 12.5%, and 10.1% of the net trade accounts receivable, respectively. As of October 31, 2002, the trade accounts receivable, net of allowance for doubtful accounts, included three customers who each accounted for 19.3%, 15.0%, and 12.8% of the net trade accounts receivable, respectively.

CIENA performs ongoing credit evaluations of its customers and generally has not required collateral or other forms of security from its customers. CIENA maintains an allowance for potential losses on a specific identification basis. CIENA's allowance for doubtful accounts as of October 31, 2003 and October 31, 2002 was \$1.5 million and \$9.5 million, respectively. In fiscal 2001, CIENA received payment for approximately \$15.4 million of the gross outstanding accounts receivable balance due from iaxis Limited primarily through the Company's sales agreement with Dynegy. Accordingly, CIENA recognized a reduction in the provision for doubtful accounts of \$6.6 million during fiscal year 2001. CIENA recorded a provision for doubtful accounts of approximately \$14.8 million during fiscal 2002. This provision relates to the estimated losses of \$18.1 million from three customers, each of whom filed for bankruptcy protection during fiscal 2002, offset by a payment of \$3.3 million of the gross outstanding accounts receivable balance due from iaxis Limited through the Company's sales agreement with Dynegy. CIENA did not record any additional provision for doubtful accounts during fiscal 2003.

The following table summarizes the activity in the Company's allowance for doubtful accounts (in thousands):

Year Ended October 31	Balance at Beginning of Period	Provisions	Deductions	Balance at End of Period
2001	\$29,581	\$ (6,579)	\$21,511	\$1,491
2002	\$ 1,491	\$14,813	\$ 6,831	\$9,473
2003	\$ 9,473	\$ —	\$ 7,975	\$1,498

(6) Inventories

Inventories are comprised of the following (in thousands):

	October 31,	
	2002	2003
Raw materials	\$ 34,025	\$ 16,121
Work-in-process	12,658	5,904
Finished goods	48,485	46,063
	95,168	68,088
Reserve for excess and obsolescence	(48,145)	(23,093)
	<u>\$ 47,023</u>	<u>\$ 44,995</u>

The Company writes down its inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based on assumptions about future demand and market conditions. As a result of the decline in capital spending by the Company's customers and a further decline

in forecasted revenue of existing products in fiscal 2002, the Company recorded a provision for excess inventory and purchase commitments of \$286.5 million, which included charges of \$250.5 million for excess inventory and obsolescence and \$36.0 million for excess inventory purchase commitments. During fiscal 2003, the Company recorded a benefit for excess inventory of \$5.3 million, primarily related to the realization of sales from previously reserved excess inventory.

The following table summarizes the activity in the Company's reserve for excess and obsolete inventory (in thousands):

Year Ended October 31	Balance at Beginning of Period	Provisions (Benefits)	Deductions	Balance at End of Period
2001	\$18,238	\$ 68,411	\$ 32,845	\$53,804
2002	\$53,804	\$250,457	\$256,116	\$48,145
2003	\$48,145	\$ (5,296)	\$ 19,756	\$23,093

(7) Equipment, Furniture and Fixtures

Equipment, furniture and fixtures are comprised of the following (in thousands):

	October 31,	
	2002	2003
Equipment, furniture and fixtures	\$ 380,316	\$ 332,843
Leasehold improvements	78,761	70,145
	459,077	402,988
Accumulated depreciation and amortization	(266,501)	(288,170)
Construction-in-progress	4,375	112
	<u>\$ 196,951</u>	<u>\$ 114,930</u>

(8) Other Intangible Assets

Other intangible assets are comprised of the following (in thousands):

	2002 Gross Intangible	Accumulated Amortization	Net Intangible	2003 Gross Intangible	Accumulated Amortization	Net Intangible
Developed technology	\$60,700	\$(11,409)	\$49,291	\$ 94,704	\$(22,975)	\$ 71,729
Patents and licenses	14,155	(1,989)	12,166	36,655	(8,984)	27,671
Covenants not to compete, outstanding purchase orders and contracts	2,100	(1,100)	1,000	12,700	(3,692)	9,008
	<u>\$76,955</u>		<u>\$62,457</u>	<u>\$144,059</u>		<u>\$108,408</u>

In January 2003, CIENA reached a settlement agreement with Nortel. Under the agreement, CIENA made a one-time payment of \$25 million to Nortel, and Nortel granted CIENA a license under the patents in suit and certain related patents. CIENA accounted for the \$25.0 million liability by recording an expense of \$2.5 million in first quarter 2003 related to the settlement of the litigation, and recording the remaining \$22.5 million as an intangible asset that will be amortized over eight years based upon the expected life of the patent rights acquired in the settlement.

As a result of the WaveSmith acquisition, we recorded \$54.3 million in developed technology and \$5.4 million in other intangibles related to contracts and outstanding purchase orders. As a result of the Akara acquisition, we recorded \$9.3 million in developed technology and \$5.2 million in other intangibles related to noncompete agreements and customer relationships.

As a result of the impairment of intangible assets, we recorded a charge against gross developed technology of \$29.6 million.

The aggregate amortization expense of other intangible assets was \$21.2 million, \$9.0 million and \$4.4 million for fiscal 2003, 2002 and 2001, respectively. Expected future amortization of other intangible assets is as follows (in thousands):

Year Ended October 31,

2004	\$ 17,452
2005	17,453
2006	17,452
2007	17,453
2008	16,107
Thereafter	22,491
	<u>\$108,408</u>

(9) Other Balance Sheet Details

Other long-term assets (in thousands):

	October 31,	
	2002	2003
Maintenance spares inventory, net	\$27,170	\$26,206
Deferred debt issuance costs	15,897	12,869
Investments in privately held companies	16,052	21,292
Other	11,477	9,274
	<u>\$70,596</u>	<u>\$69,641</u>

Accrued liabilities (in thousands):

	October 31,	
	2002	2003
Warranty and other contractual obligations	\$ 45,498	\$37,380
Accrued compensation, payroll related tax and benefits	37,466	33,206
Accrued excess inventory purchase commitments	1,892	1,405
Accrued interest payable	6,981	6,583
Accrued Pirelli settlement	11,000	—
Other	29,751	20,352
	<u>\$132,588</u>	<u>\$98,926</u>

The following table summarizes the activity in the Company's accrued warranty and other contractual obligations (in thousands):

Year Ended October 31	Balance at Beginning of Period	Provisions	Settlements	Balance at End of Period
2001	\$27,605	\$33,073	\$(20,832)	\$39,846
2002	\$39,846	\$13,271	\$ (7,619)	\$45,498
2003	\$45,498	\$ 9,301	\$(17,419)	\$37,380

Deferred revenue (in thousands):

	October 31,	
	2002	2003
Products	\$ 8,175	\$ 4,772
Services	22,657	24,248
	30,832	29,020
Less current portion	(15,388)	(14,473)
Long-term deferred revenue	<u>\$ 15,444</u>	<u>\$ 14,547</u>

(10) Convertible Notes Payable

On February 9, 2001, CIENA completed a public offering of 3.75% convertible notes, in an aggregate principal amount of \$690 million, due February 1, 2008. Interest is payable on February 1 and August 1 of each year beginning August 1, 2001. The notes may be converted into shares of CIENA's common stock at any time before their maturity or their prior redemption or repurchase by CIENA. The conversion rate is 9.5808 shares per each \$1,000 principal amount of notes, subject to adjustment in certain circumstances. On or after the third business day after February 1, 2004, CIENA has the option to redeem all or a portion of the notes that have not been previously converted at the following redemption prices (expressed as percentage of principle amount):

Period	Redemption Price
Beginning on the third business day after	
February 1, 2004 and ending on January 31, 2005	102.143%
Beginning on February 1, 2005 and ending on January 31, 2006	101.607%
Beginning on February 1, 2006 and ending on January 31, 2007	101.071%
Beginning on February 1, 2007 and ending on January 31, 2008	100.536%

On June 21, 2002, CIENA assumed the outstanding ONI 5.00% convertible subordinated notes, in an aggregate principal amount of \$300 million, due October 15, 2005. Interest is payable on April 15 and October 15 of each year. The ONI convertible subordinated notes were initially recorded at a value of \$218.0 million based upon the fair value of the outstanding notes at the time of the acquisition.

During the fourth quarter fiscal 2002, CIENA purchased on the open market \$97.1 million of the \$300 million outstanding ONI convertible subordinated notes. The Company paid \$75.2 million for notes with a cumulative accreted book value of \$72.5 million, which resulted in a loss on early extinguishment of debt of \$2.7 million.

During the first quarter fiscal 2003, CIENA purchased \$154.7 million of the remaining \$202.9 million outstanding ONI convertible subordinated notes pursuant to a tender offer. The Company paid \$140.3 million related to the tender offer for notes with a cumulative accreted book value of \$119.7 million, which resulted in a loss on early extinguishment of debt of \$20.6 million.

The remaining outstanding ONI convertible subordinated notes have a carrying value of \$40.4 million and a face value of \$48.3 million. CIENA is accreting the difference between the values over the remaining period to October 15, 2005, such that the carrying value of the outstanding notes equals the principal value at the time the notes become due. Accretion of the principal was \$8.2 million for the period of June 21, 2002 to October 31, 2002. Accretion of the principal was \$6.4 million for fiscal 2003.

The remaining ONI convertible subordinated notes may be converted into shares of CIENA's common stock at any time before their maturity. The conversion rate is 7.7525 shares per each \$1,000 principal amount of notes, subject to adjustment in certain circumstances. On or after October 16, 2003, CIENA has the option to redeem all or a portion of the notes that have not been previously converted at the following redemption prices (expressed as percentage of principal amount):

Period	Redemption Price
October 16, 2003	102%
October 15, 2004	101%

On November 18, 2003, CIENA announced a full redemption of all of the outstanding ONI 5.00% convertible subordinated notes due October 15, 2005. See note 17.

(11) Earnings (Loss) Per Share Calculation

Basic EPS is computed using the weighted average number of common shares outstanding. Diluted EPS is computed using the weighted average number of common shares outstanding, stock options and warrants using the treasury stock method. Approximately 34.6 million, 41.5 million and 16.4 million options and restricted stock were outstanding during fiscal 2003, 2002, and 2001 respectively, but were not included in the computation of diluted EPS as the effect would be anti-dilutive.

(12) Stockholders' Equity***Authorized Shares***

On March 12, 2001, the shareholders of the Company approved an increase to the number of authorized shares of common stock from 460 million to 980 million shares.

Stockholder Rights Plan

In December 1997, the Company's Board of Directors adopted a Stockholder Rights Plan. This plan is designed to deter any potential coercive or unfair takeover tactics in the event of an unsolicited takeover attempt. It is not intended to prevent a takeover of the Company on terms that are favorable and fair to all shareholders and will not interfere with a merger approved by the Board of Directors. Each right entitles shareholders to buy a "unit" equal to one one-thousandth of a share of Preferred Stock of the Company. The rights will be exercisable only if a person or a group acquires or announces a tender or exchange offer to acquire 15% or more of the Company's common stock or if the Company enters into certain other business combination transactions not approved by the Board of Directors.

In the event the rights become exercisable, the rights plan allows for CIENA shareholders to acquire stock of the surviving corporation, whether or not CIENA is the surviving corporation, having a value twice that of the exercise price of the rights. The rights were distributed to shareholders of record in January 1998. The rights will expire in December 2007 and are redeemable for \$0.001 per right at the approval of the Company's Board of Directors.

Public Offerings

On February 9, 2001, CIENA completed a public offering of 11,000,000 shares of common stock at a price of \$83.50 per share less underwriters' discounts and commissions. Net proceeds from the public offering were approximately \$878.5 million, after deducting underwriting discounts, commissions and offering expenses. Pending use of the net proceeds, the Company has invested them in interest bearing, investment grade securities.

Accumulated Comprehensive Income

The components of accumulated comprehensive income (loss) are as follows (in thousands):

	October 31,		
	2001	2002	2003
Net loss	\$(1,794,062)	\$(1,597,499)	\$(386,517)
Changes in net unrealized gains on investments	5,804	3,731	(6,743)
Change in accumulated translation adjustments	(59)	267	350
Total comprehensive loss	\$(1,788,317)	\$(1,593,501)	\$(392,910)

(13) Income Taxes

Loss before income taxes and the provision for income taxes consists of the following (in thousands):

	October 31,		
	2001	2002	2003
Loss before income taxes	\$(1,706,729)	\$(1,486,764)	\$(385,261)
Provision (benefit) for income taxes:			
Current:			
Federal	77,705	(16,168)	—
State	(500)	—	—
Foreign	133	989	1,256
Total current	77,338	(15,179)	1,256
Deferred:			
Federal	9,595	116,802	—
State	400	9,112	—
Foreign	—	—	—
Total deferred	9,995	125,914	1,256
Provision for income taxes	\$ 87,333	\$ 110,735	\$ 1,256

The tax provision reconciles to the amount computed by multiplying income before income taxes by the U.S. federal statutory rate of 35% as follows:

	October 31,		
	2001	2002	2003
Provision at statutory rate	35.0%	35.0%	35.0%
Non-deductible purchased research and development	(0.9)	—	(0.3)
Research and development credit	0.3	0.4	1.3
Foreign sales corporation benefit	0.2	—	—
Non-deductible goodwill and other	(39.7)	(13.6)	(1.6)
Valuation allowance	—	(29.2)	(34.7)
	(5.1)%	(7.4)%	(0.3)%

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

	October 31,	
	2002	2003
Deferred tax assets:		
Reserves and accrued liabilities	\$ 118,817	\$ 84,530
Depreciation and amortization	15,715	1,371
NOL and credit carryforward	616,178	803,407
Convertible notes	(18,068)	(2,875)
Other	6,976	7,765
Gross deferred tax assets	739,618	894,198
Valuation allowance	(739,618)	(894,198)
Net deferred tax asset	\$ —	\$ —
Deferred tax liabilities:	\$ —	\$ —
Depreciation and other	—	—
Deferred long-term tax liabilities	\$ —	\$ —

During fiscal 2002, the Company established a valuation allowance against its deferred tax assets. The Company intends to maintain a valuation allowance until sufficient positive evidence exists to support its reversal.

As of October 31, 2003, the Company had a \$2.0 billion net operating loss carry forward and a \$68.4 million income tax credit carry forward which begin to expire in fiscal year 2020 and 2012 respectively. The Company's ability to use net operating losses and credit carry forwards may be 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 the Company's stock. The tax benefit on deductions of approximately \$92.6 million associated with the Company's stock will be credited to additional paid-in capital when realized.

Approximately \$184.1 million of the valuation allowance as of October 31, 2003 was attributable to deferred tax assets associated with the acquisitions of ONI, WaveSmith and Akara, that when realized, will first reduce goodwill, then other non-current intangibles of the acquired companies, and then income tax expense.

The IRS is currently examining the Company's federal income tax returns for fiscal 1999 through fiscal 2002. Management does not expect the outcome of these examinations to have a material effect on the Company's consolidated financial position, results of operations or cash flow.

(14) Employee Benefit Plans

Active Equity Incentive Plans

The Company maintains four active equity incentive plans under which it grants stock options, restricted stock, or other forms of equity-based compensation: the 1999 Non-Officer Incentive Stock Plan (the "1999 Plan"); the Third Amended and Restated 1994 Stock Option Plan (the "1994 Plan"); the 1996 Outside Directors Stock Option Plan (the "1996 Plan"); and the CIENA Corporation 2000 Equity Incentive Plan (the "2000 Plan").

The 1999 Plan authorizes the issuance of non-qualified options to employees of the Company who are not executive officers or directors. The exercise price for each option is established by the Board of Directors at not less than 85% of fair market value of the Common Stock at the time of grant. Options issued under the plan vest over four years. As of October 31, 2003, there were 57,175,278 shares in the plan.

The 1994 Plan authorizes the issuance of either qualified or non-qualified options to directors, employees or consultants. In general, the Company uses the 1994 Plan to grant options to executive officers. The exercise price for options under the plan is established by the Board of Directors at not less than the fair market value of the Common Stock at the time of grant. The Board determines the terms of vesting of options issued under the plan. The Company's current practice is for options to vest over a four-year period. As of October 31, 2003, there were 55,354,872 shares in the plan. Under the terms of the plan, this number will increase by 0.75% of the number of issued and outstanding shares of the common stock on the last day of fiscal 2004.

The 1996 Plan provides for the issuance of non-qualified options to non-employee directors of the Company. The plan provides automatic grants of (i) an initial option at the time of a director's election to the Board and (ii) annual options on the day following the Company's annual meeting of shareholders. The exercise price is equal to the fair market value of the stock at the time of grant. Initial options vest over three years, and annual options vest after one year. As of October 31, 2003, there were 1,500,000 shares in the plan.

The 2000 Plan was assumed by the Company as a result of its merger with ONI. It authorizes the issuance of stock options, restricted stock, and stock bonuses to employees, officers, directors, consultants, independent contractors and advisors. The terms of awards under the plan are established by the Board of Directors or its Compensation Committee. The exercise price of options may not be less than 85% of the fair market value of the stock at the date of grant (100% of the fair market value for qualified options). The Board of Directors (or the Compensation Committee) has broad discretion to establish the terms and conditions for grants of restricted stock and stock bonuses. As of October 31, 2003, there were 45,211,839 shares in the plan. Under the terms of the plan, this number will increase by 5.0% of the number of issued and outstanding shares of the company each January 1st, unless the Compensation Committee reduces the amount of the increase in any year. By action of the Compensation Committee, the amount of the increase on

January 1, 2004 will be only 2.0% of the issued and outstanding shares of the Company. In addition, any shares subject to options or other awards under the ONI 1997 Stock Plan, ONI 1998 Equity Incentive Plan, or ONI 1999 Equity Incentive Plan that are forfeited upon cancellation of the option or award are available for grant and issuance under the 2000 Plan.

Other Equity Incentive Plans

As a result of its acquisitions of Lightera, Omnia, Cyras, ONI, WaveSmith and Akara, the Company has assumed obligations under various equity incentive plans previously maintained by those companies, including the obligation to honor grants made under these plans prior to the acquisitions. The Company will issue CIENA Common Stock upon the exercise of options outstanding under these plans, and restricted stock issued under these plans has been converted into restricted shares of CIENA Common Stock. The Company does not intend to issue any further grants under these plans.

These inactive plans include:

- The WaveSmith 2000 Stock Option and Incentive Plan
- The ONI 1997 Stock Option Plan
- The ONI 1998 Equity Incentive Plan
- The ONI 1999 Equity Incentive Plan
- The Cyras 1998 Stock Plan
- The Omnia 1997 Stock Plan
- The Lightera 1998 Stock Plan

Stock Option Activity

The following table is a summary of the Company's stock option activity (shares in thousands):

	Shares	Weighted Average Exercise Price
Balance at October 31, 2000	30,721	\$44.72
Granted and assumed	23,715	41.35
Exercised	(3,987)	6.07
Canceled	(3,517)	54.62
Balance at October 31, 2001	46,932	45.56
Granted and assumed	26,620	12.07
Exercised	(2,118)	2.30
Canceled	(28,959)	56.63
Balance as of October 31, 2002	42,475	19.20
Granted and assumed	22,382	4.83
Exercised	(2,004)	1.75
Canceled	(13,995)	30.17
Balance as of October 31, 2003	48,858	\$10.10

At October 31, 2003, approximately 1.3 million shares of Common Stock subject to repurchase by the Company had been issued upon the exercise of options and restricted stock purchase agreements, and 22.6 million of the total outstanding options were vested and not subject to repurchase by the Company upon exercise. As of October 31, 2003, approximately 83.3 million shares are available for issuance under these plans.

In May 2002, CIENA commenced a registered exchange offer pursuant to which it offered eligible employees the opportunity to exchange outstanding certain stock options for new options with an exercise price to be established in November 2002. The stock options included in the offer had an exercise price greater than \$12.00 per share and were outstanding under the 1994 Plan, the 1999 Plan or the Cyras Systems, Inc. 1998 Plan ("the Cyras Plan"). New options exchanged for options issued under the 1994 Plan and the 1999 Plan were to be issued under the 1999 Plan, and the new options exchanged for options tendered under the Cyras Plan were to be issued under the Cyras Plan. Except for options

issued after October 16, 2001, the new options were to be exercisable for one half the number of shares covered by the old options tendered for exchange. With respect to options issued after October 16, 2001, the new options were to be exercised for the same number of shares as the old options tendered for exchange. Eligible employees tendered for exchange in the offer options to purchase a total of 15.1 million shares. On November 19, 2002, CIENA completed the exchange offer and issued new options for approximately 6.4 million shares at an exercise price of \$4.53 per share.

The following table summarizes information with respect to stock options outstanding at October 31, 2003 (shares in thousands):

Range of Exercise Price	Options Outstanding			Vested Options Not Subject to Repurchase upon Exercise	
	Number Outstanding at Oct. 31, 2003	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number at Oct. 31, 2003	Weighted Average Exercise Price
\$ 0.01-\$ 3.92	5,101	4.30	\$ 1.01	4,817	\$ 0.97
\$ 3.93-\$ 4.50	3,924	8.75	4.30	1,173	4.30
\$ 4.51-\$ 4.53	12,754	9.05	4.53	1,734	4.53
\$ 4.54-\$ 6.97	9,038	8.89	6.08	2,573	6.65
\$ 6.98-\$ 11.88	5,065	7.41	9.58	3,164	9.38
\$11.89-\$ 16.13	3,469	6.04	14.94	3,372	14.97
\$16.14-\$ 19.88	7,267	7.86	16.55	3,970	16.59
\$19.88-\$149.50	2,240	6.88	61.54	1,782	60.09
\$ 0.01-\$149.50	<u>48,858</u>	7.84	\$10.10	<u>22,585</u>	\$12.74

Employee Stock Purchase Plan

In March 1998, the shareholders approved the Corporation's 1998 Employee Stock Purchase Plan ("1998 ESPP") under which 5.0 million shares of common stock had been reserved for issuance. Eligible employees may purchase a limited number of shares of the Company's stock at 85% of the market value at certain plan-defined dates. Approximately 1,339,000, 1,927,000 and 424,000 shares of common stock have been issued for \$4.7 million, \$10.0 million, and \$7.8 million during fiscal 2003, 2002 and 2001, respectively. In March 2003 the 1998 ESPP terminated by its own terms due to the issuance all remaining shares of the Company's common stock available for issuance under this plan.

In March 2003, the shareholders approved the Corporation's 2003 Employee Stock Purchase plan ("2003 ESPP") under which 20.0 million shares of common stock had been reserved for issuance. Eligible employees may purchase a limited number of shares of the Company's stock at 85% of the market value at certain plan-defined dates. Approximately 1,487,000 shares of common stock have been issued for \$6.2 million during fiscal 2003. As of October 31, 2003 approximately 18.5 million shares are available for issuance under this plan.

Pro Forma Stock-Based Compensation

Had compensation cost for the Company's stock option plans and employee stock purchase plan been determined based on the fair value at the grant date for awards in fiscal years 2003, 2002 and 2001 consistent with the provisions of SFAS 123 as amended by SFAS 148, the Company's net loss and net loss per share for fiscal 2003 and 2001 would have increased and the Company's net loss and net loss per share for fiscal 2002 would have decreased to the pro forma amounts indicated below (in thousands, except per share):

The below pro forma disclosures are not necessarily representative of the effects on reported net income or loss for future years.

The weighted average fair value of each option granted under the various stock option plans for 2001, 2002 and 2003 is \$27.92, \$4.88 and \$3.32 respectively. The fair value of each option grant is estimated on the date of grant using the Black-Scholes Option Pricing Model with the following weighted average assumptions for fiscal years 2001, 2002 and 2003:

	Employee Stock Option Plans			Employee Stock Purchase Plan		
	October 31,			October 31,		
	2001	2002	2003	2001	2002	2003
Expected volatility	131%	92%	71%	131%	92%	71%
Risk-free interest rate	3.6%	2.6%	3.2%	3.6%	1.3%	1.3%
Expected life (years)	2.6	4.5	4.5	0.5	0.5	0.5
Expected dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	October 31,		
	2001	2002	2003
Net loss applicable to common stockholders as reported	\$(1,794,062)	\$(1,597,499)	\$(386,517)
Compensation (expense) benefit, net of tax	(324,660)	40,068	(22,776)
Net loss applicable to common stockholders pro forma	\$(2,118,722)	\$(1,557,431)	\$(409,293)
Basic and diluted net loss per share—as reported	\$ (5.75)	\$ (4.37)	\$ (0.87)
Basic and diluted net loss per share—pro forma	\$ (6.79)	\$ (4.26)	\$ (0.92)

The Black-Scholes option-pricing model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option-pricing models require the input of highly subjective assumptions including the expected stock price volatility. The Company uses projected volatility rates, which are based upon historical volatility rates, trended into future years. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, existing models, including the Black-Scholes option-pricing model, do not necessarily provide a reliable single measure of the fair value of the Company's options.

Employee 401(k) Plan

The Company has a 401(k) defined contribution profit sharing plan. The plan covers all full-time employees who are not covered by a collective bargaining agreement where retirement benefits are subject to good faith bargaining. Participants may contribute up to 60% of pre-tax compensation, subject to certain limitations. The Company may make discretionary annual profit sharing contributions of up to the lesser of \$30,000 or 25% of each participant's compensation. The Company has made no profit sharing contributions to date. The plan also includes an employer matching contribution equal to 50% of the first 3% of participating employee contributions each pay period. During fiscal 2003, 2002, and 2001 the Company made matching contributions of approximately \$2.0 million, \$4.1 million and \$3.7 million respectively.

(15) Commitments and Contingencies***Operating Lease Commitments***

The Company has certain minimum obligations under non-cancelable operating leases expiring on various dates through 2019 for equipment and facilities. Future annual minimum rental commitments under non-cancelable operating leases at October 31, 2003 are as follows (in thousands):

Year Ended October 31,	
2004	\$ 37,810
2005	36,902
2006	35,226
2007	28,982
2008	27,089
Thereafter	84,996
	<u>\$251,005</u>

Rental expense for fiscal 2003, 2002, and 2001 was approximately \$16.6 million, \$24.7 million and \$19.5 million, respectively. In addition the Company paid approximately \$22.7, \$7.2 and \$0.0 million during fiscal 2003, 2002 and 2001, respectively, related to rent costs for restructured facilities and unfavorable lease commitments, which was offset against the Company's restructuring liabilities and unfavorable lease obligations, respectively.

Purchase Commitments with Contract Manufacturers and Suppliers

The Company relies on a small number of contract manufacturers to perform the majority of the manufacturing operations for its products. In order to reduce lead times and ensure adequate component supply, the Company enters into agreements with these suppliers that allow them to procure inventory for the Company's forecasted future demands. As of October 31, 2003, the Company has purchase commitments of \$33.3 million.

Litigation

On October 3, 2000, Stanford University and Litton Systems filed a complaint in the United States District Court for the Central District of California alleging that optical fiber amplifiers incorporated into CIENA's products infringe U.S. Patent No. 4,859,016 (the "016 Patent"). The complaint seeks injunctive relief, royalties and damages. We believe that we have valid defenses to the lawsuit and intend to defend it vigorously. On October 10, 2003, the court stayed the case pending final resolution of matters before the U.S. Patent and Trademark Office (the "PTO"), including a request for and disposition of a reexamination of the 016 Patent. On October 16, 2003, the PTO granted reexamination of the 016 Patent, thus resulting in a continuation of the stay of the case.

On July 19, 2000, CIENA and CIENA Properties, Inc., a wholly owned subsidiary of CIENA, filed a complaint in the United States District Court for the District of Delaware requesting damages and injunctive relief against Corvis Corporation ("Corvis"). The suit charged Corvis with infringing four patents relating to CIENA's optical networking communication systems and technology. A jury trial to determine whether Corvis is infringing these patents commenced on February 10, 2003. On February 24, 2003, the jury decided that Corvis was infringing one of the patents and not infringing two others. The jury was deadlocked with respect to infringement on the fourth patent. This trial was immediately followed by a trial on Corvis' affirmative defenses based on the validity of two of the patents. On February 28, 2003, the jury in this trial determined that the patents were valid. In April 2003, following a third trial, another jury decided that Corvis had infringed the fourth patent on which the previous jury had deadlocked. Based on these favorable verdicts collectively holding that Corvis is infringing two valid CIENA patents, CIENA has moved for an injunction to prohibit the sale by Corvis of the infringing products. The court has not yet ruled on this motion.

As a result of the merger with ONI, we became a defendant in a securities class action lawsuit. Beginning in August 2001, a number of substantially identical class action complaints alleging violations of the federal securities laws were filed in the United States District Court for the Southern District of New York. These complaints name ONI, Hugh C. Martin, ONI's former chairman, president and chief executive officer; Chris A. Davis, ONI's former executive vice president, chief financial officer and administrative officer; and certain underwriters of ONI's initial public offering as defendants. The complaints were consolidated into a single action, and a consolidated amended complaint was filed on April 24, 2002. The amended complaint alleges, among other things, that the underwriter defendants violated the securities laws by failing to disclose alleged compensation arrangements (such as undisclosed commissions or stock stabilization practices) in the initial public offering's registration statement and by engaging in manipulative practices to artificially inflate the price of our common stock after the initial public offering. The amended complaint also alleges that ONI and the named former officers violated the securities laws on the basis of an alleged failure to disclose the underwriters' alleged compensation arrangements and manipulative practices. No specific amount of damages has been claimed. Similar complaints have been filed against more than 300 other issuers that have had initial public offerings since 1998, and all of these actions have been included in a single coordinated proceeding. Mr. Martin and Ms. Davis have been dismissed from the action without prejudice pursuant to a tolling agreement. In July 2002, ONI and other issuers in the consolidated cases filed motions to dismiss the amended complaint for failure to state a claim, which was denied as to ONI on February 19, 2003. CIENA has participated, together with the other issuer defendants in these cases, in mediated settlement negotiations that have led to a preliminary agreement among the plaintiffs, the issuer defendants and their insurers. The settlement, which is subject to court approval, would result in the dismissal of the plaintiffs' cases against the issuers. CIENA has agreed in principle to the terms of this settlement. Draft settlement documents were circulated for preliminary review in October 2003.

As a result of the merger with ONI, we also became a defendant in two substantially identical purported class actions on behalf of ONI security holders originally brought against ONI and members of its board of directors. The complaints allege that the director defendants breached their fiduciary duties to ONI in approving the merger with CIENA and seek declaratory, injunctive and other relief permitted by equity. The plaintiffs failed to obtain an injunction against completion of the merger. The first of these cases was filed on February 20, 2002, in the Superior Court of the State of California, County of San Mateo, and is captioned *K.W. Sams, On Behalf of Himself and All Others Similarly Situated v. ONI Systems Corporation, et al.* The second case was brought on March 19, 2002, in the Superior Court of the State of California, County of Santa Clara, and is captioned *Steven Myeary, On Behalf of Himself and All Others Similarly Situated v. ONI Systems Corporation.* On April 14, 2003, the plaintiffs in these cases filed a consolidated amended complaint and named four additional defendants: CIENA Corporation, James F. Jordan, Kleiner Perkins Caufield & Byers and Mohr Davidow Ventures. CIENA and the other defendants subsequently filed a demurrer and served a motion for sanctions on plaintiffs based on factual inaccuracies in the consolidated amended complaint. In response, the plaintiffs filed a corrected consolidated amended complaint, the demurrer to which is scheduled to be heard by the court in December 2003. We believe that these lawsuits are without merit and will continue to defend them vigorously.

(16) Segment Reporting

In June 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 131 (SFAS 131), "Disclosures about Segments of an Enterprise and Related Information." SFAS 131 establishes annual and interim reporting standards for operating segments of a company. It also requires entity-wide disclosures about the products and services an entity provides, the material countries in which it holds assets and reports revenue, and its major customers. The Company is not organized by multiple operating segments for the purpose of making operating decisions or assessing performance. Accordingly, the Company operates in one operating segment and reports only certain enterprise-wide disclosures.

CIENA's geographic distributions of revenue are the following (in thousands):

	Fiscal Years					
	2001	%	2002	%	2003	%
Domestic	\$1,220,742	76.1	\$232,524	64.4	\$178,564	63.1
International	382,487	23.9	128,631	35.6	104,572	36.9
Total	\$1,603,229	100.0	\$361,155	100.0	\$283,136	100.0

CIENA's revenue derived from products and services are the following (in thousands):

	Fiscal Years					
	2001	%	2002	%	2003	%
Products	\$1,518,833	94.7	\$304,155	84.2	\$240,772	85.0
Services	84,396	5.3	57,000	15.8	42,364	15.0
Total	\$1,603,229	100.0	\$361,155	100.0	\$283,136	100.0

Historically, CIENA has relied upon on a limited number of customers for a majority of the Company's revenue. During the following fiscal years customers who each accounted for at least 10% of CIENA's revenue during the respective periods are as follows (in thousands):

	Fiscal Years					
	2001	%*	2002	%*	2003	%*
Sprint	\$463,078	28.9	\$ 58,739	16.3	\$ n/a	—
Qwest	347,083	21.6	n/a	—	31,148	11.0
AT&T	n/a	—	74,111	20.5	39,444	13.9
Total	\$810,161	50.5	\$132,850	36.8	\$70,592	24.9

*—Denotes % of total revenue.

n/a —Denotes revenue recognized less than 10% for the period.

(17) Subsequent Events

On November 18, 2003, CIENA announced a full redemption of all of the outstanding ONI 5.00% convertible subordinated notes due October 15, 2005. The principal amount of the notes outstanding is \$48.3 million. On the redemption date of December 19, 2003, CIENA will pay holders 102% of the outstanding principal amount of the notes plus accrued interest.

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

None.

Item 9A. Controls and Procedures

The Chief Executive Officer and Chief Financial Officer of CIENA have evaluated the effectiveness of the disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as required by paragraph (b) of Rules 13a-15 and 15d-15 under the Exchange Act, and have concluded that as of the end of the period covered by this report the disclosure controls and procedures were effective.

There was no change in CIENA's internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Rules 13a-15 and 15d-15 under the Exchange Act during CIENA's last fiscal quarter that materially affected, or is reasonably likely to materially affect, CIENA's internal control over financial reporting.

PART III**Item 10. Directors and Executive Officers of the Registrant**

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

Additional information on compliance with Section 16(a) of the Exchange Act is incorporated herein by reference to the Company's definitive 2004 Proxy Statement.

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 is available on our web site at <http://www.ciena.com/investors/corpgovernance.htm>.

Item 11. Executive Compensation

The information is incorporated herein by reference to the Company's definitive 2004 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information is incorporated herein by reference to the Company's definitive 2004 Proxy Statement.

Item 13. Certain Relationships and Related Transactions

The information is incorporated herein by reference to the Company's definitive 2004 Proxy Statement.

Item 14. Principal Accounting Fees and Services

The information is incorporated herein by reference to the Company's definitive 2004 Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K

- (a) 1. The information required by this item is included in Item 8 of Part II of this Form 10-K.
 - 2. The information required by this item is included in Item 8 of Part II of this Form 10-K.
 - 3. Exhibits: See Index to Exhibits on page 68. The Exhibits listed in the accompanying Index to Exhibits are filed or incorporated by reference as part of this report.
- (b) Reports on Form 8-K:
- Form 8-K (Item 5 and Item 7 reported) filed on August 21, 2003.
 - Form 8-K (Item 5 and Item 7 reported) filed on September 3, 2003.
 - Form 8-K (Item 5 and Item 7 reported) filed on November 18, 2003.
 - Form 8-K (Item 12 reported) filed on December 11, 2003.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Linthicum, County of Anne Arundel, State of Maryland, on the 11th day of December 2003.

CIENA CORPORATION
 By: /s/ Gary B. Smith
 Gary B. Smith
 President, Chief Executive Officer
 and Director

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated.

Signatures	Title	Date
<u>/s/ Patrick H. Nettles, Ph.D.</u> Patrick H. Nettles, Ph.D.	Executive Chairman of the Board of Directors	December 11, 2003
<u>/s/ Gary B. Smith</u> Gary B. Smith (Principal Executive Officer)	President, Chief Executive Officer and Director	December 11, 2003
<u>/s/ Joseph R. Chinnici</u> Joseph R. Chinnici (Principal Financial Officer)	Sr. Vice President, Finance and Chief Financial Officer	December 11, 2003
<u>/s/ Andrew C. Petrik</u> Andrew C. Petrik (Principal Accounting Officer)	Vice President, Controller and Treasurer	December 11, 2003
<u>/s/ Stephen P. Bradley, Ph.D.</u> Stephen P. Bradley, Ph.D.	Director	December 11, 2003
<u>/s/ Harvey B. Cash</u> Harvey B. Cash	Director	December 11, 2003
<u>/s/ Don H. Davis, Jr.</u> Don H. Davis, Jr.	Director	December 11, 2003
<u>/s/ John R. Dillon</u> John R. Dillon	Director	December 11, 2003
<u>/s/ Lawton W. Fitt</u> Lawton W. Fitt	Director	December 11, 2003
<u>/s/ Judith M. O'Brien</u> Judith M. O'Brien	Director	December 11, 2003
<u>/s/ Gerald H. Taylor</u> Gerald H. Taylor	Director	December 11, 2003

INDEX TO EXHIBITS

Exhibit Number	Description
3.1 ⁽¹⁾	Certificate of Amendment to Third Restated Certificate of Incorporation
3.2 ⁽¹⁾	Third Restated Certificate of Incorporation
3.3 ⁽¹⁾	Amended and Restated Bylaws
3.5 ⁽¹⁰⁾	Certificate of Amendment to Third Restated Certificate of Incorporation dated March 23, 1998
3.6 ⁽¹⁰⁾	Certificate of Amendment to Third Restated Certificate of Incorporation dated March 16, 2000
3.7 ⁽¹³⁾	Certificate of Amendment to Third Restated Certificate of Incorporation dated March 13, 2001
4.1 ⁽¹⁾	Specimen Stock Certificate
4.2 ⁽³⁾	Rights Agreement dated December 29, 1997
4.3 ⁽¹⁷⁾	Amendment to Rights Agreement dated June 2, 1998
4.4 ⁽¹¹⁾	Amendment No. 2 to Rights Agreement dated September 13, 1998
4.5 ⁽⁴⁾	Amendment No. 3 to Rights Agreement dated October 19, 1998
4.6 ⁽¹²⁾	Indenture dated February 9, 2001 between CIENA Corporation and First Union National Bank for 3.75% convertible subordinated notes due February 1, 2008
4.11 ⁽¹⁸⁾	Indenture dated October 27, 2000 between ONI Systems Corp. and State Street Bank and Trust Company for 5% convertible notes due October 15, 2005
4.12 ⁽²¹⁾	First Supplemental Indenture dated June 21, 2002 to the Indenture dated October 27, 2000 between ONI Systems Corp. and State Street Bank and Trust Company for 5% convertible subordinated notes due October 15, 2005
10.1 ⁽¹⁾	Form of Indemnification Agreement for Directors and Officers
10.2 ⁽¹⁴⁾	Third Amended and Restated 1994 Stock Option Plan
10.3 ⁽¹⁾	Form of Employee Stock Option Agreements
10.4 ⁽¹⁾	1996 Outside Directors Stock Option Plan
10.5 ⁽¹⁾	Forms of 1996 Outside Directors Stock Option Agreement
10.13 ⁽¹⁾	Employment Agreement dated April 9, 1994 between the Company and Patrick Nettles
10.18 ⁽⁵⁾	Form of Transfer of Control/Severance Agreement
10.19 ⁽⁶⁾	Lightera 1998 Stock Option Plan and Form of Stock Option Agreement
10.20 ⁽⁷⁾	Omnia Communications, Inc. 1997 Stock Plan and Form of Agreements
10.21 ⁽⁹⁾	Employment Agreement dated August 18, 1999 between the Company and Gary B. Smith
10.22 ⁽⁹⁾	1999 Non-Officer Stock Option Plan and Form of Stock Option Agreement
10.24 ⁽¹³⁾	Cyras Systems, Inc. 1998 Stock Plan as amended and Form of Stock Option Agreement
10.25 ⁽¹⁵⁾	Amendment No. 1 to 1999 Non-Officer Stock Option Plan
10.26 ⁽¹⁶⁾	Form of Amendment 1 to Transfer of Control/Severance Agreement for named executive officers (other than Gary B. Smith)
10.27 ⁽¹⁶⁾	Transfer of Control/Severance Agreement between CIENA Corporation and Gary B. Smith
10.28 ⁽¹⁹⁾	ONI 1997 Stock Plan
10.29 ⁽¹⁹⁾	ONI 1998 Equity Incentive Plan
10.30 ⁽¹⁹⁾	ONI 1999 Equity Incentive Plan
10.34 ⁽²²⁾	CIENA Corporation 2003 Employee Stock Purchase Plan

Exhibit Number	Description
10.35 ⁽²³⁾	CIENA Corporation Nonqualified Management Deferred Compensation Plan
10.36 ⁽²⁴⁾	WaveSmith Networks, Inc. 2000 Stock Option and Incentive Plan
10.37 ⁽²⁵⁾	CIENA Corporation 2000 Equity Incentive Plan (Amended and Restated ONI Systems Corp. 2000 Equity Incentive Plan) (Filed herewith)
21	Subsidiaries of registrant (filed herewith)
23.1	Consent of Independent Accountants (filed herewith)
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 (filed herewith)
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 (filed herewith)
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 (filed herewith)
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 (filed herewith)

(1) Incorporated by reference from the Company's Registration Statement on Form S-1 (333-17729).

(3) Incorporated by reference from the Company's Form 8-K filed December 29, 1997.

(4) Incorporated by reference from the Company's Form 8-K filed October 19, 1998.

(5) Incorporated by reference from the Company's Form 10-K filed December 10, 1998.

(6) Incorporated by reference from the Company's Form 10-Q filed May 21, 1999.

(7) Incorporated by reference from the Company's Form 10-Q filed August 19, 1999.

(9) Incorporated by reference from the Company's Form 10-K filed December 10, 1999.

(10) Incorporated by reference from the Company's Form 10-Q filed May 18, 2000.

(11) Incorporated by reference from the Company's Form 8-K filed September 14, 1998.

(12) Incorporated by reference from the Company's Form 10-Q filed February 15, 2001.

(13) Incorporated by reference from the Company's Form 10-Q filed May 17, 2001.

(14) Incorporated by reference from the Company's Form S-8 filed October 30, 2001.

(15) Incorporated by reference from the Company's Form 10-K filed December 13, 2001.

(16) Incorporated by reference from the Company's Form 10-Q filed February 21, 2002.

(17) Incorporated by reference from the Company's Form 8-K filed June 3, 1998.

(18) Incorporated by reference from ONI Systems Corp.'s Form 10-Q filed November 14, 2000.

(19) Incorporated by reference from ONI Systems Corp.'s Form S-1 filed March 10, 2000 (333-32104).

(21) Incorporated by reference from the Company's Form 10-K filed December 12, 2002.

(22) Incorporated by reference from the Company's Form S-8 filed February 19, 2003.

(23) Incorporated by reference from the Company's Form 10-Q filed February 20, 2003.

(24) Incorporated by reference from the Company's Form 10-Q filed August 21, 2003.

(25) Effective August 19, 2003, the Company's compensation committee of the board of directors amended the ONI 2000 Equity Incentive Plan to change the name of this plan to the CIENA Corporation 2000 Equity Incentive Plan.

CORPORATE INFORMATION

Corporate Headquarters

CIENA Corporation
1201 Winterson Road
Linthicum, MD 21090-2205
Telephone: (800) 921-1144 or
(410) 865-8500
www.CIENA.com

Annual Meeting

CIENA's annual shareholder meeting will be held at 3:00 p.m. on Wednesday, March 10, 2004, at the BWI Airport Sheraton Hotel, Baltimore, MD.

Independent Certified Public Accountants

PricewaterhouseCoopers LLP
McLean, VA

General Counsel

Hogan & Hartson
Baltimore, MD

Transfer Agent

EquiServe Trust Company, NA
P.O. Box 43023
Providence, RI 02940-3023
Shareholder Inquiries: (781) 575-4593
www.EquiServe.com

Common Stock Market Data

Since its initial public offering on February 7, 1997, the Company's Common Stock has traded on the Nasdaq Stock Market under the symbol CIEN and appears in most daily newspaper stock tables as CIEN. As of January 20, 2004, there were approximately 2,422 shareholders of record and 476,185,987 shares of Common Stock Outstanding.

Investor Relations

For additional copies of this report or other financial information, contact:

Investor Relations
CIENA Corporation
1201 Winterson Road
Linthicum, MD 21090-2205
IR Hotline: (888) 243-6223 or
(410) 865-8500

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

Executive Officers

PATRICK H. NETTLES, PH.D.
Executive Chairman of the Board of Directors

GARY B. SMITH
President, Chief Executive Officer and Director

STEPHEN B. ALEXANDER
Senior Vice President, Chief Technology Officer

STEVE W. CHADDICK
Senior Vice President, Corporate Strategy and Marketing

JOSEPH R. CHINNICI
Senior Vice President, Finance and Chief Financial Officer

JAMES F. COLLIER III
Senior Vice President, Corporate Development

NICHOLAS S. JEFFERY
Senior Vice President, World Wide Sales

JESÚS LEÓN
Senior Vice President, Chief Development Officer

EDWARD A. OGONEK
Senior Vice President, General Manager of Metro and Enterprise Solutions

ROBERT A. O'NEIL
Senior Vice President, General Manager of Data Networking

ARTHUR SMITH, PH.D.
Senior Vice President, Global Operations

RUSSELL B. STEVENSON, JR.
Senior Vice President, General Counsel and Secretary

ANDREW C. PETRIK
Vice President, Controller and Treasurer

Outside Board Members

PROFESSOR STEPHEN P. BRADLEY
William Ziegler Professor of Business Administration
Harvard Business School

HARVEY B. CASH
General Partner
InterWest Partners

DON H. DAVIS, JR.
Chairman of the Board
Rockwell Automation

JOHN R. DILLON
Retired CFO
Cox Enterprises

LAWTON W. FITT
Secretary (Chief Executive)
Royal Academy of Arts

JUDITH M. O'BRIEN
Managing Director
INCUBIC L.L.C.

GERALD H. TAYLOR
Independent Communications Consultant



www.CIENA.com

CIENA's portfolio of networking systems and software is the basis of LightWorks™ architecture, an intelligent, flexible solution for all-service networking. LightWorks is a blueprint that can help service providers create a unified, automated, edge-to-core network with operational efficiency and service flexibility. CIENA helps service providers deliver and manage advanced and traditional data services. LightWorks evolves the current network model by: Sharing software intelligence across network elements to automate network operations. Consolidating network elements into multi-function systems to collapse network layers. Integrating data networking capabilities into the existing transport layer to avoid building separate data networks. Leveraging the reliability of the SONET/SDH transport network to enable a new breed of carrier-class data services. The result is a streamlined, automated network that maximizes the existing infrastructure, capitalizes on new markets, and drives down the costs of building and operating the network. LightWorks' sophisticated network intelligence, integrated data functionality, and inherent transport reliability allow service providers to manage many services on one fluid and dynamic network. With LightWorks, service providers can transform the challenges of explosive growth and increasing traffic volatility into real market opportunities.

Core Networking CIENA's suite of core networking systems helps service providers extract maximum value from their current SONET/SDH network architectures, while minimizing the risk and cost of integrating new services. Our solutions offer the superior switching functionality and long-haul transport capabilities service providers need to power the creation of a new set of carrier-class data services. CIENA's Intelligent, Flexible

Multi-service Network Management CIENA delivers market-leading platforms for core and metropolitan network multi-service aggregation. Together, these multi-service switches create an end-to-end solution for enhanced bandwidth efficiency, provisioning, and scalability converging traditional and emerging data services such as ATM, DSL, Frame Relay, TDM/CEES, and IP/MPLS in the network core and at the edge. By integrating these multi-service switches into the existing ATM infrastructure, CIENA offers a safe migration path to IP/MPLS, while simultaneously supporting existing legacy services.

Multi-service Edge Switching CIENA delivers increased optical bandwidth to the network edge. Because of its small footprint and enhanced scalability, CIENA's multi-service edge switching platform helps service providers deliver a wide variety of new data services at significantly reduced costs. The multi-service edge switching family features the following products:

DN Product Family Multi-service Platform The DN Product Family offers switching capabilities across the entire network span, from the network edge to the core. Service providers can now deliver customized services based on customer demand and service area density, all at lower price points than any product on the market today.

ON-Center™ DN 7000 Manager™ Software for LightWorks ON-Center® Management Suite ON-Center DN 7000 Manager Software enables the rapid commissioning and configuration of CIENA's DN Multi-service Switching Product Family and facilitates provisioning, monitoring, and troubleshooting of network services.

and responsive. They can be easily implemented within an existing SONET/SDH network to help service providers to quickly provision the data services their customers demand.

Metropolitan Transport CIENA's metropolitan transport solutions successfully meet both service provider and enterprise requirements.

OLINE Metro™ Multi-service DWDM Transport Platform Designed for enterprises and service providers who want to provide their customers a variety of managed services over a single optical infrastructure.

OLINE Edge™ Multi-service CWDM Transport Platform Designed for enterprises and service providers who want to offer high-bandwidth services over a single optical infrastructure.

DN 2000™ Storage Extension Platform Customer premise device for extending data and storage applications over distance to meet business continuity/disaster recovery goals.

MultiWave Metro® Dense Wavelength Division Multiplexing System DWDM optical transport system designed for use in metropolitan ring applications.

MultiWave Metro One™ Dense Wavelength Division Multiplexing System Part of the MultiWave Metro™ family of DWDM optical networking systems designed for customer premise applications.

Metropolitan Switching CIENA's metropolitan switching solutions provide a platform to aggregate, groom and add/drop services to maximize bandwidth efficiency throughout a carrier's metro network – from access to core. The metropolitan switching product line offers a comprehensive package of options to support TDM, ATM, and Ethernet switching capabilities, which help enterprise and service providers generate revenue from traditional private line services. They also enable new revenue streams from emerging switched data services. The metropolitan switching family features the following product:

SDH, DWDM, CWDM, or dark fiber.

Network Management CIENA's network management system offers an integrated suite of solutions to simplify and streamline how service providers manage and operate their equipment within their network. The modular offering covers the entire CIENA portfolio from edge to core, including all transport and switching products. Carrier-class fault, configuration, accounting, performance, and security management functionalities seamlessly interoperate to help service providers optimize their network operations.

LightWorks ON-Center® Management Suite CIENA's next-generation intelligent optical network management system creates a powerful opportunity for service providers to distinguish themselves from the competition, based on its ability to rapidly provision and continuously monitor new revenue generating optical services, while increasing the efficiency of existing or new networks.

CIENA Support Services The BEST Service & Support. CIENA offers the best support and client service in the industry. Our award-winning programs ensure reliable and timely implementation of end-to-end network solutions that help bridge the gap between the capabilities of carrier networks and the evolving communications needs of enterprises. Our experienced, degreed engineers and network designers are familiar with the deployment, operation, analysis, and optimization of advanced high-speed networks. They deliver expert consultations in DWDM, optical switching, SONET, ATM, packet-based switching, routing, and digital loop carrier systems.

CIENA's automated, data-efficient networks and talented support team continually deliver excellence 24 hours a day every day of the year. Our clients expect the best, and CIENA we deliver it.

