

[CIENA LOGO]

Filed pursuant to Rule 424(b)(4)
Registration No. 333-53922

11,000,000 Shares

CIENA CORPORATION
Common Stock

The common stock is quoted on the Nasdaq National Market under the symbol "CIEN". The last reported sale price for the common stock on February 5, 2001 was \$84.50 per share.

Concurrently with this offering, CIENA is also conducting a separate offering of \$600 million in 3.75% convertible notes due February 1, 2008 by a separate prospectus. Neither the completion of the convertible debt offering nor the completion of this common stock offering is contingent upon the other.

See "Risk Factors" beginning on page 6 in this prospectus to read about certain factors you should consider before buying shares of the common stock.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY OTHER REGULATORY BODY HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THE PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	Per Share -----	Total -----
Initial price to public.....	\$83.50	\$918,500,000
Underwriting discount.....	\$ 3.55	\$ 39,050,000
Proceeds, before expenses, to CIENA.....	\$79.95	\$879,450,000

To the extent the underwriters sell more than 11,000,000 shares of common stock, the underwriters have the option to purchase up to an additional 1,650,000 shares from CIENA at the initial price to public, less the underwriting discount.

The underwriters expect to deliver the shares in New York, New York on February 9, 2001.

GOLDMAN, SACHS & CO.
MORGAN STANLEY DEAN WITTER
BANC OF AMERICA SECURITIES LLC
ROBERTSON STEPHENS

Prospectus dated February 5, 2001.

PROSPECTUS SUMMARY

You should read this summary together with the entire prospectus, including the more detailed information in our financial statements and accompanying notes incorporated by reference in this prospectus.

CIENA CORPORATION

We are an established leader in the rapidly growing intelligent optical networking equipment market. We offer a comprehensive portfolio of products for communications service providers worldwide, including long-distance and metropolitan optical transport, intelligent optical core switching and network management solutions. Our customers include long-distance carriers, competitive and incumbent local exchange carriers, Internet service providers and wholesale carriers. We have pursued a strategy to develop and leverage the power of our technologies to change the fundamental economics of building carrier-class tele- and data-communications networks, thereby providing our customers with a competitive advantage. Our intelligent optical networking products are designed to enable carriers to deliver any time, any size, any priority bandwidth to their customers. Our optical networking products add intelligence to the network, enabling communications service providers to optimize network capacity and to offer a new range of services on demand at a substantially lower cost than traditional products. Furthermore, our products allow service providers to optimize their investments in fiber-optic infrastructure while positioning them to easily transition to next-generation optical network architectures.

Rapidly increasing use of the Internet and Internet-based applications and services has fueled dramatic growth in the volume of data traffic in the public communications network. In response, communications service providers are making significant investments to upgrade their network infrastructure by laying fiber-optic cable and installing transmission equipment based on optical technology. While advances in optical technology have enabled carriers to expand network capacity, they continue to face critical challenges including network scalability, escalating capital and operational costs and network management difficulties.

We provide a comprehensive portfolio of optical networking solutions that address these challenges by optimizing bandwidth in critical areas of service provider networks: long-distance and metropolitan optical transport, intelligent optical core switching and network management. Our solutions provide our customers with the following benefits:

- greater bandwidth capacity;
- simplified and more scalable networks;
- enhanced network manageability;
- lower capital and operational costs;
- ability to provision high-bandwidth services rapidly and flexibly; and
- ability to offer new revenue-generating services.

We have shipped products to over 35 customers, including 27 new customers since the end of fiscal 1998. Our customers include:

- Bell South;
- Broadwing;
- Cable & Wireless (U.S. & U.K.);
- CrossWave Communications;
- Enron;
- GTS (now known as eBone);
- MobilCom AG;
- PSINet;
- Qwest;
- Sprint;
- Telecom Developpement;
- Telia AB;
- Verizon;
- WorldCom (U.S. & Europe); and
- XO Communications.

Our strategy is to maintain and build upon our market leadership in the development and deployment of intelligent optical networking systems and to leverage our bandwidth-optimizing technologies to provide solutions for both voice and data communications-based networks. Important elements of our strategy are to:

- expand our base of customers using our intelligent optical networking solutions;
- increase sales and marketing efforts;
- continue to emphasize technical support and customer service;
- maintain world class manufacturing capability; and
- leverage bandwidth-optimizing technology and know-how.

Our revenue and net income for the fiscal year ended October 31, 2000 were \$858.8 million and \$81.4 million, respectively. Of our revenue for this period, 33.0% was derived from international sales. We recorded revenue for the fiscal year ended October 31, 2000 from sales to 32 customers, including 12 new customers.

We were incorporated in Delaware in 1992. Our principal executive offices are located at 1201 Winterson Road, Linthicum, Maryland 21090. Our telephone number is (410) 865-8500.

THE OFFERING

Common Stock offered by CIENA.....	11,000,000 shares
Common Stock to be outstanding after this offering.....	299,060,207 shares
Use of Proceeds.....	For general corporate purposes, which may include working capital, capital expenditures and acquisitions
Nasdaq National Market Symbol.....	CIEN

The number of shares of our common stock to be outstanding immediately after this offering is based on the number of shares outstanding as of January 31, 2001. It excludes, as of January 31, 2001, 30,294,778 shares of common stock subject to options outstanding under our stock incentive plans with a weighted average exercise price of \$49.81 per share, 13,262,264 shares of common stock available for future grant under these plans, and approximately 27 million shares issuable in our pending acquisition of Cyras Systems, Inc.

Unless otherwise indicated, all information contained in this prospectus assumes no exercise of the underwriters' option to purchase additional shares in this offering. The share and per share numbers presented in this prospectus have been retroactively restated to give effect to all stock splits.

CONCURRENT NOTES OFFERING

Concurrent with this offering of common stock, CIENA is conducting a separate public offering of convertible notes with an aggregate principal amount of \$600 million. The common stock to be outstanding after this offering in the table above excludes the shares of common stock issuable upon the conversion or redemption of these notes. This offering of common stock is not conditioned on the completion of the offering of our notes.

RECENT DEVELOPMENTS

PROPOSED ACQUISITION OF CYRAS SYSTEMS, INC.

On December 19, 2000, we announced an agreement to acquire all of the outstanding capital stock, options and warrants of Cyras Systems, Inc., a privately held provider of next-generation optical networking systems based in Fremont, California. As consideration in the acquisition, we agreed to issue a total of approximately 27 million shares of our common stock and indirectly assume \$150 million principal amount of Cyras's convertible subordinated indebtedness.

Cyras is designing and developing next-generation optical networking solutions for telecommunications carriers. The Cyras K2 product, which is in the development phase and is not yet ready for commercial manufacturing or deployment, will enable carriers of metropolitan area networks to consolidate multiple legacy network elements into a single transport and switching platform. This consolidation results in the increased cost effectiveness, network optimization and scalability that are demanded in today's increasingly data-oriented carrier environment. We believe that the addition of the K2 product to our portfolio will increase our market opportunity by leveraging this leading-edge product for the metropolitan network with our CoreDirector(TM) and long-haul optical transport presence, extensive sales force and global services and support infrastructure. These capabilities will enable us to offer carriers seamless end-to-end service creation and management with unmatched scalability, agility and efficiency using our LightWorks architecture for smart bandwidth provisioning and network-wide service management.

We will account for the Cyras acquisition as a purchase. We expect to complete the acquisition in the first calendar quarter of 2001. If and when we complete the acquisition of Cyras, we will record a charge for acquired in-process research and development, which we currently estimate will be approximately \$16.4 million, and will amortize goodwill and other intangibles of approximately \$1.6 billion over a three- to seven-year period and deferred stock compensation of approximately \$255 million over the relevant vesting periods. We expect the Cyras acquisition to be dilutive to our fiscal 2001 earnings by \$0.19 to \$0.22 per share and, excluding one-time charges associated with the acquisition and amortization of intangibles and deferred stock compensation, accretive during the latter half of our fiscal 2002, assuming expected revenue and cost synergies as well as anticipated product cost and pricing.

For the nine months ended September 30, 2000, Cyras recorded no revenues, incurred operating expenses of \$53.8 million and had a net loss of \$54.4 million. Additional audited and unaudited financial information of Cyras, and unaudited pro forma combined financial statements showing the pro forma effect of the acquisition on our historical financial statements, are incorporated in this prospectus by reference to our Form 8-K report filed on January 18, 2001.

The Cyras acquisition is subject to customary closing conditions, including regulatory approvals. See "Risk Factors -- Risks Related to the Cyras Acquisition".

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision, you should carefully consider the risk factors set forth below as well as other information we include or incorporate by reference in this prospectus and the additional information in the other reports we file with the SEC. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect us.

OUR RESULTS CAN BE UNPREDICTABLE

Our ability to recognize revenue during a quarter from a customer depends upon our ability to ship product and satisfy other contractual obligations of a customer sale in that quarter. In general, revenue and operating results in any reporting period may fluctuate due to factors including:

- loss of a customer;
- the timing and size of orders from customers;
- changes in customers' requirements, including changes 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, 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 and intelligent optical networking industries.

Our intelligent optical networking products require a relatively large investment, and our target customers are highly demanding and technically sophisticated. There are only a limited number of potential customers in each geographic market, and each customer has unique needs. As a result, the sales cycles for our products are long, often more than a year between our initial contact with the customer and its commitment to purchase.

We budget expense levels on our expectations of long-term future revenue. These budgets reflect our substantial investment in the financial, engineering, manufacturing and logistics support resources we think we may need for large potential customers, even though we do not know the volume, duration or timing of any purchases from them. In addition, we make a substantial investment in financial, manufacturing and engineering resources for the development of new and enhanced products. As a result, we may continue to experience high inventory levels, operating expenses and general overhead.

We have experienced rapid expansion in all areas of our operations, particularly in the manufacturing of our products. Our future operating results will depend on our ability to continue to expand our manufacturing facilities in a timely manner so that we can satisfy our delivery commitments to our customers. Our failure to expand these facilities in a timely manner and meet our customer delivery commitments would harm our business, financial condition and results of operations.

Our product development efforts will require us to incur ongoing development and operating expenses, and any delay in the contributions from new products, such as the MultiWave CoreDirector product line, and enhancements to our existing optical transport products could harm our business.

CHANGES IN TECHNOLOGY OR THE DELAYS IN THE DEPLOYMENT OF NEW PRODUCTS COULD HURT OUR NEAR-TERM PROSPECTS

The market for optical networking equipment is changing at a rapid pace. The accelerated pace of deregulation and the adoption of new technology in the telecommunications industry likely will intensify the competition for improved optical networking products. Our ability to develop, introduce and manufacture new and enhanced products will depend upon our ability to anticipate changes in technology, industry standards and customer requirements. Our failure to introduce new and enhanced products in a timely manner could harm our competitive position and financial condition. Several of our new products, including the MultiWave CoreDirector and the enhancements to the MultiWave CoreStream products, are based on complex technology which could result in unanticipated delays in the development, manufacture or deployment of these products. In addition, our ability to recognize revenue from these products could be adversely affected by the extensive testing required for these products by our customers. The complexity of technology associated with support equipment for these products could also result in unanticipated delays in their deployment. These delays could harm our competitive and financial condition.

Competition from competitive products, the introduction of new products embodying new technologies, a change in the requirements of our customers, or the emergence of new industry standards could delay or hinder the purchase and deployment of our products and could render our existing products obsolete, unmarketable or uncompetitive from a pricing standpoint. The long certification process for new telecommunications equipment used in the networks of the regional Bell operating companies, referred to as RBOCs, has in the past resulted in and may continue to result in unanticipated delays which may affect the deployment of our products for the RBOC market.

WE FACE INTENSE COMPETITION WHICH COULD HURT OUR SALES AND PROFITABILITY

The market for optical networking equipment is extremely competitive. Competition in the optical networking installation and test services market is based on varying combinations of price, functionality, software functionality, manufacturing capability, installation, services, scalability and the ability of the system solution to meet customers' immediate and future network requirements. A small number of very large companies, including Alcatel, Cisco Systems, Fujitsu Group, Hitachi, Lucent Technologies, NEC Corporation, Nortel Networks, Siemens AG and Telefon AB LM Ericsson, have historically dominated the telecommunications equipment industry. These companies have substantial financial, marketing, manufacturing and intellectual property resources. In addition, these companies have substantially greater resources to develop or acquire new technologies than we do and often have existing relationships with our potential customers. We sell systems that compete directly with product offerings of these companies and in some cases displace or replace equipment they have traditionally supplied for telecommunications networks. As such, we represent a specific threat to these companies. The continued expansion of our product offerings with the MultiWave CoreDirector product line and enhancements to our MultiWave CoreStream product line likely will increase this perceived threat. We expect continued aggressive tactics from many of these competitors, including:

- price discounting;
- early announcements of competing products and other marketing efforts;
- "one-stop shopping" options;

- customer financing assistance;
- marketing and advertising assistance; and
- intellectual property disputes.

These tactics can be particularly effective in a highly concentrated customer base such as ours. Our customers are under increasing competitive pressure to deliver their services at the lowest possible cost. This pressure may result in pricing for optical networking systems becoming a more important factor in customer decisions, which may favor larger competitors that can spread the effect of price discounts in their optical networking products 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.

Many of our customers have indicated that they intend to establish a relationship with at least two vendors for optical networking products. With respect to customers for whom we are the only supplier, we do not know when or if these customers will select a second vendor or what impact the selection might have on purchases from us. If a second optical networking supplier is chosen, these customers could reduce their purchases from us, which could in turn have a material adverse effect on us.

New competitors are emerging to compete with our existing products as well as our future products. We expect new competitors to continue to emerge as the optical networking market continues to expand. These companies may achieve commercial availability of their products more quickly due to the narrow and exclusive focus of their efforts. Several of these competitors have raised significantly more cash and they have in some cases offered stock in their companies, positions on technical advisory boards, or have provided significant vendor financing to attract new customers. In particular, a number of companies, including several start-up companies and recently public companies that have raised substantial equity capital, have announced products that compete with our products. Our inability to compete successfully against these companies would harm our business, financial condition and results of operations.

WE MAY NOT BE ABLE TO SUCCESSFULLY COMPLETE DEVELOPMENT AND ACHIEVE COMMERCIAL ACCEPTANCE OF NEW PRODUCTS

Our MultiWave CoreDirector CI product and some enhancements to the MultiWave CoreDirector and MultiWave CoreStream product lines and LightWorks Toolkit are in the development phase and are not yet ready for commercial manufacturing or deployment. We expect to offer additional releases of the MultiWave CoreDirector product over the life of the product and continue to enhance features of our MultiWave CoreStream product, including the longer reach and higher channel count functionality of our product line. The initial release of MultiWave CoreDirector CI is expected in limited availability for customer trials during the first calendar quarter of 2001. 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, including application-specific integrated circuits, referred to as ASICs;
- validation of manufacturing methods and processes;
- extensive quality assurance and reliability testing, and staffing of testing infrastructure;
- validation of embedded software;

- establishment of systems integration and systems test validation requirements; and
- identification and qualification of component suppliers.

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 ASICs and intensive software testing and validation, in particular, are key to the timely introduction of enhancements to the MultiWave CoreDirector product line, 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.

The markets for our MultiWave CoreDirector product line are relatively new. We have not established commercial acceptance of these products, and we cannot assure you that the substantial sales and marketing efforts necessary to achieve commercial acceptance in traditionally long sales cycles will be successful. If the markets for these products do not develop or the products are not accepted by the market, our business, financial condition and results of operations would suffer.

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 optical transport systems are currently available only from sole sources, and in some cases, that sole source is also a competitor. A worldwide shortage of some electrical components has caused an increase in the price of components. 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 revenues. These delays could also harm our customer relationships.

Failures of components can affect customer confidence in our products and could adversely affect our financial performance and the reliability and performance of our products. 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. A recent wave of consolidation among suppliers of these components, such as the recent and pending purchases of E-TEK and SDL, respectively, by JDS Uniphase, could adversely impact the availability of components on which we depend. Delayed deliveries of key components from these sources could adversely affect 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 manufacture our CoreDirector product line and some of the components for our other products. The qualification of these manufacturers is an expensive and time-consuming process, and these contract manufacturers build modules for other companies, including for our competitors. In addition, we do not have contracts in place with many 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 cannot effectively manage these manufacturers or they fail to deliver components in a timely manner, it may have an adverse effect on our business and results of operations.

SOME OF OUR SUPPLIERS ARE ALSO OUR COMPETITORS

Some of our component suppliers are both primary sources for components and major competitors in the market for system equipment. For example, we buy components from:

- Alcatel;
- Lucent Technologies;
- NEC Corporation;
- Nortel Networks; and
- Siemens AG.

Each of these companies offers optical communications systems and equipment that are competitive with our products. Also, Lucent is the sole source of two components and is one of two suppliers of two others. Recently, Lucent has announced that it intends to spin off a portion of its components business. Our supply of components from Lucent may be adversely affected by this restructuring. Alcatel and Nortel are suppliers of lasers used in our products, and NEC is a supplier of an important piece of testing equipment. A decline in reliability or other adverse change in these supply relationships could harm our business.

SALES TO EMERGING CARRIERS MAY INCREASE THE UNPREDICTABILITY OF OUR RESULTS

As we continue to address emerging carriers, timing and volume of purchasing from these carriers can also be more unpredictable due to factors such as their need to build a customer base, acquire rights of way and interconnections necessary to sell network service, and build out new capacity, all while working within their capital budget constraints. Sales to these carriers may increase the unpredictability of our financial results because even these emerging carriers purchase our products in multi-million dollar increments.

Unanticipated changes in customer purchasing plans also create unpredictability in our results. A portion of our anticipated revenue over the next several quarters is comprised of orders of less than \$25 million each from several customers, some of which may involve extended payment terms or other financing assistance. Our ability to recognize revenue from financed sales to emerging carriers will depend on the relative financial condition of the specific customer, among other factors. Further, we will need to evaluate the collectibility of receivables from these customers if their financial conditions deteriorate in the future. Purchasing delays and changes in the financial condition or the amount of purchases by any of these customers could have a material adverse effect on us. In the past we have had to make provisions for the accounts receivables from customers that experienced financial difficulty. If additional customers face similar financial difficulties, our receivables from these customers may become uncollectible, and we would have to write off the asset or decrease the value of the asset to the extent the receivable could not be collected. These write-downs or write-offs would adversely affect our financial performance.

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 rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We also enter into non-disclosure and proprietary rights agreements with our employees and consultants, and license agreements with our corporate partners, and 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. 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, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. If competitors are able to use our technology, our ability to compete effectively could be harmed. We are involved in an intellectual property dispute regarding the use of our technology and may become involved with additional disputes in the future. Such lawsuits can be costly and may significantly divert time and attention from some members of our personnel.

We have received, and may receive in the future, notices from holders of patents in the optical technology field that raise issues of possible infringement by our products. Questions of infringement in the optical networking equipment market often involve highly technical and subjective analysis. We cannot assure you that any of these patent holders or others will not in the future initiate legal proceedings against us, or that we will be successful in defending against these actions. We are involved in an intellectual property dispute regarding the possible infringement of our products. In the past, we have been forced to take a license from the owner of the infringed intellectual property, or to redesign or stop selling the product that includes the challenged intellectual property. 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.

PRODUCT PERFORMANCE PROBLEMS COULD LIMIT OUR SALES PROSPECTS

The production of new optical networking products and systems with high technology content involves occasional problems as the technology and manufacturing methods mature. If significant reliability, quality or network monitoring problems develop, including those due to faulty components, a number of negative effects on our business could result, including:

- costs associated with reworking our manufacturing processes;
- high service and warranty expenses;
- 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 aspects of the installation and activation activities, some of which are outside our control. If we experience significant interruptions or delays that we can not promptly resolve, confidence in our products could be undermined, which could harm our business.

OUR PROSPECTS DEPEND ON DEMAND WHICH WE CANNOT RELIABLY PREDICT OR CONTROL

We may not anticipate changes in direction or magnitude of demand for our products. The product offerings of our competitors could adversely affect the demand for our products. In addition, unanticipated reductions in demand for our products could adversely affect us.

Demand for our products depends on our customers' requirements. These requirements may vary significantly from quarter to quarter due to factors such as:

- the type and quantity of optical equipment needed by our customers;
- the timing of the deployment of optical equipment by our customers;
- the rate at which our current customers fund their network build-outs;
and
- the equipment configurations and network architectures our customers want.

Customer determinations are subject to abrupt changes in response to their own competitive pressures, capital requirements and financial performance expectations. These changes could harm our business.

Recently we have experienced an increased level of sales activity that could lead to an upsurge in demand that is reflected in the overall increase in demand for optical networking and similar products in the telecommunications industry. Our results may suffer if we are unable to address this demand adequately by successfully scaling up our manufacturing capacity and hiring additional qualified personnel. To date we have largely depended on our own manufacturing and assembly facilities to meet customer expectations, but we cannot be sure that we can satisfy our customers' expectations in all cases by internal capabilities. In that case, we face the challenge of adequately managing customer expectations and finding alternative means of meeting them. If we fail to manage these expectations we could lose customers or receive smaller orders from customers.

OUR SUCCESS LARGELY DEPENDS ON OUR ABILITY TO RETAIN KEY PERSONNEL

Our success has always depended in large part on our ability to attract and retain highly-skilled technical, managerial, sales and marketing personnel, particularly those skilled and experienced with optical communications equipment. Our key founders and employees, together with the key founders and employees of our acquired companies, have received a substantial number of our shares and vested options that can be sold at substantial gains. In many cases, these individuals could become financially independent through these sales before our future products have matured into commercially deliverable products. These circumstances may make it difficult to retain and motivate these key personnel.

As we have grown and matured, competitors' efforts to hire our employees have intensified, particularly among competitive start-up companies and other early stage companies. We have agreements in place with most of our employees that limit their ability to work for a competitor and prohibit them from soliciting our other employees and our customers following termination of their employment. Our employees and our competitors may not respect these agreements. We have in the past been required to enforce, and are currently in the process of enforcing, some of these agreements. We expect in the future to continue to be required to resort to legal actions to enforce these agreements and could incur substantial costs in doing so. We may not be successful in these legal actions, and we may not be able to retain all of our key employees or attract new personnel to add to or replace them. The loss of key personnel would likely harm our business.

PART OF OUR STRATEGY INVOLVES PURSUING STRATEGIC ACQUISITIONS THAT MAY NOT BE SUCCESSFUL

As part of our strategy for growth, we will consider acquiring businesses that are intended to accelerate our product and service development processes and add complementary products and services. We may issue equity or incur debt to finance these acquisitions and may incur significant amortization expenses related to goodwill and other intangible assets. Acquisitions involve a number of operational risks, including risks that the acquired business will not be

successfully integrated, may distract management attention and may involve unforeseen costs and liabilities.

OUR STOCK PRICE MAY EXHIBIT VOLATILITY

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 the activities of short sellers and risk arbitrageurs, and may have little relationship to our financial results or prospects. Volatility can also result from any 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 likely 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 like the MultiWave CoreStream, MultiWave CoreDirector and MultiWave Metro, there is substantial risk that our quarterly results will vary widely.

FUTURE SALES OF OUR COMMON STOCK COULD DEPRESS ITS MARKET PRICE

Sales of substantial amounts of common stock by our officers, directors and other stockholders in the public market after this offering, or the awareness that a large number of shares is available for sale, could adversely affect the market price of our common stock. In addition to the adverse effect a price decline would have on holders of our common stock, that decline would impede our ability to raise capital through the issuance of additional shares of common stock or other equity or convertible debt securities. Substantially all of the shares of our common stock currently outstanding are eligible for resale in the public market. Furthermore, we will issue approximately 27 million additional shares of common stock if our acquisition of Cyras is consummated, almost all of which will be freely tradeable.

Although some of our officers and directors have agreed that for 90 days after the date of this prospectus they will not offer, sell, contract to sell or otherwise dispose of any shares of our common stock, Goldman, Sachs & Co. may, in its discretion, waive this lock-up at any time for any holder.

RISKS RELATED TO THE CYRAS ACQUISITION

THE ACQUISITION MAY NOT BE COMPLETED

We currently expect to complete the acquisition of Cyras Systems, Inc. in the first calendar quarter of 2001, but because completion is subject to regulatory approvals and a shareholder vote of Cyras, the acquisition may be delayed or not completed at all.

WE MAY NOT BE ABLE TO ACHIEVE THE BENEFITS WE SEEK FROM THE ACQUISITION OR TO INTEGRATE CYRAS SUCCESSFULLY INTO OUR OPERATIONS

Even if the acquisition of Cyras is completed, we cannot be certain that we will achieve the benefits we envision from the acquisition. These benefits, including the accretion to our earnings we expect to achieve in the second half of fiscal 2002, depend on our ability to successfully complete the development of the Cyras K2 product and integrate it into our product portfolio, achieve market acceptance for the Cyras product, achieve our revenue expectations for the Cyras product and the expected synergies, and successfully integrate and retain Cyras personnel. Cyras's product is in the development phase and is not yet ready for commercial

manufacturing or deployment, and we cannot assure you that the substantial efforts necessary to complete development of the product and achieve commercial acceptance will be successful. We have only limited experience in significant acquisitions and cannot assure you that this acquisition will be successful.

The integration of Cyras into our operations following our merger with Cyras involves a number of risks, including:

- difficulty assimilating Cyras's operations and personnel;
- diversion of management attention;
- potential disruption of ongoing business;
- inability to retain key personnel;
- inability to maintain uniform standards, controls, procedures and policies; and
- impairment of relationships with employees, customers or vendors.

Failure to overcome these risks or any other problems encountered in connection with the merger could have a material adverse effect on our business, results of operations and financial condition.

SIGNIFICANT MERGER-RELATED CHARGES AGAINST EARNINGS WILL REDUCE OUR EARNINGS IN THE QUARTER IN WHICH WE CONSUMMATE THE MERGER AND DURING THE POST-MERGER INTEGRATION PERIOD

If and when we complete the acquisition of Cyras, we will incur a charge for in-process research and development, which we currently estimate will be approximately \$16.4 million. The actual charge we incur could be greater than this estimate, which could have a material adverse effect on our results of operations and financial condition. Also, in the future we will incur non-cash charges in connection with the merger related to goodwill and other intangible amortization and amortization of deferred stock compensation. Other merger-related costs will be capitalized as part of the acquisition's purchase price and amortized in future periods. We could also incur other additional unanticipated merger costs relating to our acquisition of Cyras.

WE WILL INCUR SIGNIFICANT ADDITIONAL DEBT IN CONNECTION WITH THE MERGER

Cyras has \$150 million of 4 1/2% convertible subordinated notes outstanding. We will indirectly assume these notes at the effective date of the merger. This additional indebtedness could adversely affect CIENA in a number of ways, including:

- limiting our ability to obtain necessary financing in the future;
- limiting our flexibility to plan for, or react to, changes in our business;
- requiring us to use a substantial portion of our cash flow from operations or utilize a significant portion of cash on hand to repay the debt when due in August 2005, or earlier if we are required to offer to repurchase the notes, as described below, rather than for other purposes, such as working capital or capital expenditures;
- making us more highly leveraged than some of our competitors, which may place us at a competitive disadvantage; and
- making us more vulnerable to a downturn in our business.

Additionally, in the event that the holders of the notes convert their notes into our common stock, we would have to issue a significant number of shares of additional common stock. For example, if our merger with Cyras had closed on December 28, 2000, when the estimated exchange ratio would have been approximately 0.13, we would have had to issue approximately

1,000,000 shares of our common stock if holders of the entire \$150 million of convertible notes decided to convert their notes.

In the event that the holders of the notes do not elect to convert them into our common stock before March 31, 2002, and if a "complying public equity offering" has not occurred on or before that date, we will have to make an offer to repurchase the notes at 118.942% of the principal balance of the notes on April 30, 2002. A "complying public equity offering" is defined as a firm commitment underwritten public offering of the common stock of Cyras, in which Cyras raises at least \$50 million in gross proceeds.

FOLLOWING THE COMPLETION OF OUR ACQUISITION OF CYRAS, A SIGNIFICANT NUMBER OF ADDITIONAL SHARES WILL BE ADDED TO OUR PUBLIC FLOAT

We will issue approximately 27 million shares of our common stock as consideration in the Cyras acquisition. These shares represent 9.4% of our outstanding common stock as of January 31, 2001. Almost all of these shares will be freely tradable immediately following the closing of the acquisition which is currently expected to be in the first calendar quarter of 2001. Any sales of substantial numbers of shares of our common stock in the public market following the completion of the Cyras acquisition could adversely affect the market price of our common stock.

FORWARD LOOKING STATEMENTS

Some of the statements contained, or incorporated by reference, in this prospectus 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 prospectus.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of the 11,000,000 shares of common stock that we are offering will be approximately \$879.1 million, after deducting the underwriting discount and estimated offering expenses. If the underwriters' option to purchase additional shares in this offering is exercised in full, we estimate that our net proceeds will be approximately \$1,011.1 million.

Concurrent with this offering of common stock, CIENA is conducting a separate offering of convertible notes with an aggregate principal amount of \$600 million. This offering of common stock is not conditioned on the completion of the offering of our notes.

The principal purpose of this offering is to obtain additional capital. We may use the net proceeds for working capital, capital expenditures, acquisitions and other general corporate purposes.

We have not determined the amounts we plan to spend on any of the uses described above or the timing of these expenditures. Pending our use of the net proceeds, we intend to invest them in short-term, interest-bearing, investment grade securities.

PRICE RANGE OF COMMON STOCK

CIENA common stock is, and the shares of CIENA common stock offered hereby are expected to be, quoted on the Nasdaq National Market and traded under the symbol "CIEN." The following table sets forth the high and low sales price per share of CIENA common stock as reported by the Nasdaq National Market for the periods indicated, adjusted to reflect the two-for-one stock split of the common stock of CIENA, which became effective on September 18, 2000.

	PRICE RANGE OF COMMON STOCK	
	HIGH	LOW
Fiscal Year ending October 31, 1998		
First Quarter.....	\$ 31.78	\$23.72
Second Quarter.....	\$ 29.13	\$18.63
Third Quarter.....	\$ 46.19	\$23.44
Fourth Quarter.....	\$ 37.94	\$ 4.06
Fiscal Year ending October 31, 1999		
First Quarter.....	\$ 11.50	\$ 6.22
Second Quarter.....	\$ 14.63	\$ 8.31
Third Quarter.....	\$ 18.88	\$11.35
Fourth Quarter.....	\$ 21.41	\$14.53
Fiscal Year ending October 31, 2000		
First Quarter.....	\$ 39.69	\$16.75
Second Quarter.....	\$ 94.50	\$30.03
Third Quarter.....	\$ 90.13	\$44.94
Fourth Quarter.....	\$151.00	\$64.19
Fiscal Year ending October 31, 2001		
First Quarter.....	\$121.38	\$59.56
Second Quarter (through February 5, 2001).....	\$ 92.63	\$80.25

On February 5, 2001, the last reported sale price of our common stock on the Nasdaq National Market was \$84.50 per share. As of January 31, 2001, there were approximately 1,479 holders of record of our common stock.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock and do not anticipate paying any cash dividends in the foreseeable future.

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations." 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 1997, 1998, 1999 and 2000 comprised 52 weeks and fiscal 1996 comprised 53 weeks.

	YEAR ENDED OCTOBER 31,				
	1996	1997	1998	1999	2000
	(IN THOUSANDS, EXCEPT PER SHARE DATA)				
STATEMENT OF OPERATIONS DATA:					
Revenue.....	\$88,463	\$413,215	\$508,087	\$482,085	\$858,750
Cost of goods sold.....	47,315	166,472	256,014	299,769	477,393
Gross profit.....	41,148	246,743	252,073	182,316	381,357
Operating expenses:					
Research and development.....	8,922	23,773	73,756	104,641	129,069
Selling and marketing.....	5,641	22,627	47,343	61,603	90,922
General and administrative.....	6,346	11,476	18,468	22,736	34,000
Settlement of accrued contract obligation.....	--	--	--	--	(8,538)
Purchased research and development...	--	--	9,503	--	--
Pirelli litigation.....	--	7,500	30,579	--	--
Merger-related costs.....	--	--	2,548	13,021	--
Provision for doubtful accounts.....	76	489	806	250	28,010
Total operating expenses.....	20,985	65,865	183,003	202,251	273,463
Income (loss) from operations.....	20,163	180,878	69,070	(19,935)	107,894
Other income (expense), net.....	653	7,178	12,830	13,944	12,680
Income (loss) before income taxes.....	20,816	188,056	81,900	(5,991)	120,574
Provision (benefit) for income taxes...	3,553	72,488	36,200	(2,067)	39,187
Net income (loss).....	\$17,263	\$115,568	\$ 45,700	\$ (3,924)	\$ 81,387
Basic net income (loss) per common share.....	\$ 0.62	\$ 0.76	\$ 0.19	\$ (0.01)	\$ 0.29
Diluted net income (loss) per common and dilutive potential common share.....	\$ 0.09	\$ 0.55	\$ 0.18	\$ (0.01)	\$ 0.27
Weighted average basic common shares outstanding.....	27,634	151,928	235,980	267,042	281,621
Weighted average basic common and dilutive potential common shares outstanding.....	184,814	209,686	255,788	267,042	299,662

	OCTOBER 31,				
	1996	1997	1998	1999	2000
	(IN THOUSANDS)				
BALANCE SHEET DATA:					
Cash and cash equivalents.....	\$24,040	\$273,286	\$250,714	\$143,440	\$ 143,187
Working capital.....	42,240	338,078	391,305	427,471	639,675
Total assets.....	79,676	468,247	602,809	677,835	1,027,201
Long-term obligations, excluding current portion.....	3,465	1,900	3,029	4,881	4,882
Mandatorily redeemable preferred stock.....	40,404	--	--	--	--
Stockholders' equity.....	10,783	377,278	501,036	530,473	809,835

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."

OVERVIEW

CIENA is a leader in the rapidly growing intelligent optical networking equipment market. We offer a comprehensive portfolio of products for communications service providers worldwide. Our customers include long-distance carriers, competitive and incumbent local exchange carriers, Internet service providers, wireless and wholesale carriers. CIENA offers optical transport and intelligent optical switching systems that enable service providers to provision, manage and deliver high-bandwidth services to their customers. CIENA's intelligent optical networking products are designed to enable carriers to deliver any time, any size, any priority bandwidth to their customers.

CIENA has increased the number of revenue-generating optical networking equipment customers from a total of 27 customers during fiscal 1999 to 32 customers for fiscal 2000. During fiscal 2000, three customers each represented more than 10% of CIENA's total revenues. We intend to preserve and enhance our market leadership and eventually build on our installed base with new and additional products. CIENA believes that its product and service quality, manufacturing experience, and proven track record of delivery will enable it to endure competitive pricing pressure while concentrating on efforts to reduce product costs and maximize production efficiencies. See "Risk Factors" in the prospectus.

As of October 31, 2000, CIENA and its subsidiaries employed approximately 2,775 persons, which was an increase of 847 persons over the approximate 1,928 employed on October 31, 1999.

RESULTS OF OPERATIONS

FISCAL YEARS ENDED 2000, 1999 AND 1998

REVENUE. CIENA recognized \$858.8 million, \$482.1 million and \$508.1 million in revenue for the fiscal years ended October 31, 2000, 1999 and 1998, respectively. The approximate \$376.7 million or 78.1% increase in revenue from fiscal 1999 to fiscal 2000 was due primarily to an increase in product shipments across all product lines. The approximate \$26.0 million or 5.1% decrease in revenue from fiscal 1998 to fiscal 1999 was largely the result of reduced selling prices.

CIENA recognized revenues from a total of 32, 27, and 14 optical equipment customers during fiscal 2000, 1999, and 1998, respectively. During fiscal year 2000, Sprint, Qwest Communications and GTS Network Ltd. each accounted for at least 10% or more of CIENA's revenue and all three combined accounted for 60.9% of CIENA's fiscal 2000 revenue. During fiscal year 1999 Sprint, WorldCom and GTS Network Ltd. each accounted for at least 10% or more of CIENA's revenue and all three combined accounted for 46.2% of CIENA's fiscal 1999 revenue. This compares to fiscal 1998 in which Sprint was the only 10% customer and in total accounted for 52.5% of CIENA's fiscal 1998 revenue. Revenue derived from foreign sales accounted for approximately 33.0%, 44.3%, and 23.0% of CIENA's total revenues during fiscal 2000, 1999, and 1998, respectively.

For fiscal 2000, CIENA's optical network equipment revenues were derived from sales of the MultiWave Sentry 4000, MultiWave CoreStream configured for both 2.5 gigabits per second ("Gbps") and 10.0 Gbps transmission rates, MultiWave Sentry 1600, MultiWave Metro, MultiWave 1600, MultiWave CoreDirector, MultiWave Firefly systems and MultiWave MetroOne. During fiscal 1999, CIENA recognized revenues from sales of MultiWave Sentry 4000, MultiWave

Sentry 1600, MultiWave 1600, MultiWave Metro, MultiWave Firefly, and MultiWave CoreStream systems. During fiscal 1998, CIENA recognized revenues from sales of MultiWave Sentry 1600, MultiWave 1600, MultiWave Firefly and MultiWave Sentry 4000 systems. The revenues for fiscal 2000 improved as compared to fiscal 1999 due to increased sales of MultiWave Sentry 4000, MultiWave CoreStream, MultiWave Sentry 1600, MultiWave Metro, and MultiWave Firefly systems, and also from the introduction of revenues from MultiWave CoreDirector and MultiWave MetroOne systems. The amount of revenue recognized from MultiWave Sentry 1600 and MultiWave 1600 declined in fiscal 1999 as compared to fiscal 1998. This decline in MultiWave Sentry 1600 sales in fiscal 1999 was offset by the introduction of new revenues from the MultiWave CoreStream and MultiWave Metro products in fiscal 1999. Fiscal 1999 revenues from MultiWave Sentry 4000 and MultiWave Firefly were comparable to the revenues recognized for these products in fiscal 1998. Revenues derived from engineering, furnishing and installation services as a percentage of total revenue were 8.4%, 12.1%, and 9.2% for the fiscal years 2000, 1999, and 1998, respectively.

GROSS PROFIT. Cost of goods sold consists of component costs, direct compensation costs, warranty and other contractual obligations, royalties, license fees, inventory obsolescence costs and overhead related to CIENA's manufacturing and engineering, furnishing and installation operations. Gross profit was \$381.4 million, \$182.3 million, and \$252.1 million for fiscal years 2000, 1999, and 1998, respectively. Gross margin was 44.4%, 37.8%, and 49.6% for fiscal 2000, 1999, and 1998, respectively. The increase in gross profit from fiscal 1999 to fiscal 2000 was due primarily to lower component costs and improved production efficiencies. The decrease in gross profit from fiscal 1998 to fiscal 1999 was largely attributable to lower selling prices.

CIENA's gross margins may be affected by a number of factors, including product mix, continued competitive market pricing, outsourcing of manufacturing, manufacturing volumes and efficiencies, competition for skilled labor, and fluctuations in component costs. Downward pressures on our gross margins may be further impacted by an increased percentage of engineering, furnishing and installation revenues from services or additional service requirements. CIENA will continue to concentrate on efforts to reduce product costs and maximize production efficiencies and, if successful in these efforts, may be able to improve gross margins in the future. See "Risk Factors".

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses were \$129.1 million, \$104.6 million, and \$73.8 million for fiscal 2000, 1999, and 1998, respectively. The approximate \$24.4 million or 23.3% increase from fiscal 1999 to 2000 and the approximate \$30.9 million or 41.9% increase from fiscal 1998 to 1999 in research and development expenses related to increased staffing levels, purchases of materials used in development of new or enhanced product prototypes, and outside consulting services in support of certain developments and design efforts. During fiscal 2000, 1999, and 1998 research and development expenses were 15.0%, 21.7%, and 14.5% of revenue, respectively. CIENA expects that its research and development expenditures will continue to increase in absolute dollars and perhaps as a percentage of revenue during fiscal 2001 to support the continued development of CIENA's intelligent optical networking products, the exploration of new or complementary technologies, and the pursuit of various cost reduction strategies. CIENA has expensed research and development costs as incurred.

SELLING AND MARKETING EXPENSES. Selling and marketing expenses were \$90.9 million, \$61.6 million, and \$47.3 million for fiscal 2000, 1999, and 1998, respectively. The approximate \$29.3 million or 47.6% increase from fiscal 1999 to 2000 and the approximate \$14.3 million or 30.1% increase from fiscal 1998 to 1999 in selling and marketing expenses was primarily the result of increased staffing levels in the areas of sales, technical assistance and field support, and increases in commissions earned, trade show participation and promotional costs. During fiscal 2000, 1999, and 1998 selling and marketing expenses were 10.6%, 12.8%, and 9.3% of revenue, respectively. CIENA anticipates that its selling and marketing expenses may increase in

absolute dollars and perhaps as a percentage of revenue during fiscal 2001 as additional personnel are hired and additional offices are opened to allow CIENA to pursue new customers and market opportunities. CIENA also expects the portion of selling and marketing expenses attributable to technical assistance and field support, specifically in Europe, Latin America, and Asia, will increase as CIENA's installed base of operational MultiWave systems increases.

GENERAL AND ADMINISTRATIVE EXPENSES. General and administrative expenses were \$34.0 million, \$22.7 million and \$18.5 million for fiscal 2000, 1999, and 1998, respectively. The approximate \$11.2 million or 49.5% increase from fiscal year 1999 to 2000 and the approximate \$4.3 million or 23.1% increase from fiscal year 1998 to 1999 in general and administrative expenses was primarily the result of increased staffing levels and outside consulting services. During fiscal 2000, 1999, and 1998 general and administrative expenses were 4.0%, 4.7%, and 3.6% of revenue, respectively. CIENA believes that its general and administrative expenses will increase in absolute dollars and perhaps as a percentage of revenue during fiscal 2001 as a result of the expansion of CIENA's administrative staff required to support its expanding operations.

SETTLEMENT OF ACCRUED CONTRACT OBLIGATION. The \$8.5 million gain from settlement of accrued contract obligation relates to the July 2000 termination of certain accrued contract obligations that CIENA received from iaxis Limited, one of CIENA's European customers. In September 2000, CIENA was informed that an administrative order had been issued by a London court against iaxis Limited. As a result of this order, joint administrators were appointed to manage the business of iaxis Limited while they marketed the business for sale and formulated a reorganization. See "Provision for Doubtful Accounts" below.

PURCHASED RESEARCH AND DEVELOPMENT. Purchased research and development costs were \$9.5 million for the fiscal year 1998. These costs were for the purchase of technology and related assets associated with the acquisition of Terabit during the second quarter of fiscal 1998.

PIRELLI LITIGATION. The Pirelli litigation costs of \$30.6 million in fiscal 1998 were attributable to a \$30.0 million payment made to Pirelli during the third quarter of 1998 and to additional other legal and related costs incurred in connection with the settlement of this litigation.

MERGER-RELATED COSTS. The merger costs for fiscal 1999 of approximately \$13.0 million were costs related to CIENA's acquisition of Omnia and Lightera. These costs include an \$8.1 million non-cash charge for the acceleration of warrants based upon CIENA's common stock price on June 30, 1999 and \$4.9 million for fees, legal and accounting services and other costs. The warrants were issued to one of Omnia's potential customers and became exercisable upon the consummation of the merger between CIENA and Omnia. The merger-related costs for fiscal 1998 were costs related to the contemplated merger between CIENA and Tellabs. These costs include approximately \$1.2 million in Securities and Exchange Commission filing fees and approximately \$1.3 million in legal, accounting, and other related expenses.

PROVISION FOR DOUBTFUL ACCOUNTS. CIENA performs ongoing credit evaluations of its customers and generally does not require collateral from its customers. CIENA maintains an allowance for potential losses when identified. CIENA's allowance for doubtful accounts as of October 31, 2000 was \$29.6 million. Approximately \$27.8 million relates to provisions made for doubtful accounts associated with iaxis Limited, one of CIENA's European customers. In September 2000, CIENA was informed that an administrative order had been issued by a London court against iaxis Limited. As a result of this order, joint administrators were appointed to manage the business of iaxis Limited while they marketed the business for sale and formulated a reorganization. In November 2000, CIENA was notified that Dynegy Inc. and its subsidiaries had entered into a proposed agreement to acquire the assets and stock of iaxis Limited from the administrators. As a consequence of the terms of (a) the proposed agreement between the administrators of iaxis Limited, Dynegy and its subsidiaries, and of (b) a related sales agreement between CIENA and Dynegy, CIENA expects to realize approximately \$8.9 million of the gross

outstanding accounts receivable balance due from iaxis Limited as of October 31, 2000. While the proposed purchase agreement between the administrators of iaxis Limited and Dynegy is subject to certain administrative and judicial approvals, CIENA believes that such approvals will be ultimately obtained and that CIENA will be successful in collecting the net \$8.9 million outstanding accounts receivable balance from the customer. However, should such approvals not occur, additional write-offs might be required.

OTHER INCOME (EXPENSE), NET. Other income (expense), net, consists of interest income earned on CIENA's cash, cash equivalents and marketable debt securities, net of interest expense associated with CIENA's debt obligations. Other income (expense), net, was \$12.7 million, \$13.9 million, and \$12.8 million for fiscal 2000, 1999, and 1998, respectively. The decrease in other income (expense) from fiscal 1999 to fiscal 2000 was due to lower balances of cash, cash equivalents and marketable debt securities in fiscal 2000 as compared to fiscal 1999. The increase in companies other income (expense) from fiscal 1998 to fiscal 1999 was primarily the result of the investment of the net proceeds of CIENA's stock offerings and net earnings.

PROVISION (BENEFIT) FOR INCOME TAXES. CIENA's provision (benefit) for income taxes was 32.5%, (34.5%), and 44.2% of pre-tax earnings (loss) for fiscal 2000, 1999 and 1998, respectively. The income tax provision for 2000 was lower than the expected 35% primarily due to benefits from research and development tax credits. The benefit for fiscal 1999 was less than the expected statutory benefit of 35% due to non-deductible merger costs. The income tax provision for 1998 was higher than the expected statutory rate of 35%, due primarily to charges for purchased research and development and state tax charges related to the Alta acquisition. Purchased research and development charges are not deductible for tax purposes. Exclusive of the effect of these charges, CIENA's provision for income taxes was 38.6% of income before income taxes in fiscal 1998. As of October 31, 2000, CIENA's deferred tax asset was \$143.0 million. The realization of this asset could be adversely affected if future earnings are lower than anticipated.

QUARTERLY RESULTS OF OPERATIONS

The tables below 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, 2000. This information is unaudited, but in the opinion of CIENA reflects all adjustments (consisting only of normal recurring adjustments) that CIENA considers 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.

	QUARTER ENDED							
	JAN. 31, 1999	APR. 30, 1999	JUL. 31, 1999	OCT. 31, 1999	JAN. 31, 2000	APR. 30, 2000	JUL. 31, 2000	OCT. 31, 2000
	(IN THOUSANDS, EXCEPT PER SHARE DATA)							
Revenue.....	\$100,417	\$111,490	\$128,826	\$141,352	\$152,213	\$185,679	\$233,268	\$287,590
Cost of goods sold.....	65,778	71,238	79,361	83,392	87,003	104,205	128,172	158,013
Gross profit.....	34,639	40,252	49,465	57,960	65,210	81,474	105,096	129,577
Operating expenses:								
Research and development.....	22,218	24,094	28,402	29,927	29,742	29,965	32,697	36,665
Selling and marketing.....	13,608	13,092	16,839	18,064	18,122	20,331	24,375	28,094
General and administrative.....	5,036	5,849	5,433	6,418	6,621	7,176	9,339	10,864
Settlement of accrued contract obligation.....	--	--	--	--	--	--	(8,538)	--
Merger-related costs.....	--	2,253	10,768	--	--	--	--	--
Provision for doubtful accounts.....	--	--	--	250	250	--	8,538	19,222
Total operating expenses.....	40,862	45,288	61,442	54,659	54,735	57,472	66,411	94,845
Income (loss) from operations.....	(6,223)	(5,036)	(11,977)	3,301	10,475	24,002	38,685	34,732
Other income (expense), net.....	3,301	3,583	3,492	3,568	2,950	3,268	3,026	3,436
Income (loss) before income taxes.....	(2,922)	(1,453)	(8,485)	6,869	13,425	27,270	41,711	38,168
Provision (benefit) for income taxes.....	(1,041)	(468)	(2,928)	2,370	4,363	8,863	13,556	12,405
Net income (loss).....	\$ (1,881)	\$ (985)	\$ (5,557)	\$ 4,499	\$ 9,062	\$ 18,407	\$ 28,155	\$ 25,763
Basic net income (loss) per common share (1).....	\$ (0.01)	\$ 0.00	\$ (0.02)	\$ 0.02	\$ 0.03	\$ 0.07	\$ 0.10	\$ 0.09
Diluted net income (loss) per common share and dilutive potential common share (1).....	\$ (0.01)	\$ 0.00	\$ (0.02)	\$ 0.02	\$ 0.03	\$ 0.06	\$ 0.09	\$ 0.09
Weighted average basic common share (1).....	262,404	265,060	266,032	267,616	276,182	280,162	282,258	285,177
Weighted average basic common and dilutive potential common share (1).....	262,404	265,060	266,032	290,604	295,806	299,126	299,790	301,582

(1) All share and per share information has been retroactively restated to reflect the two-for-one stock split effective September 18, 2000.

	QUARTER ENDED							
	JAN. 31, 1999	APR. 30, 1999	JUL. 31, 1999	OCT. 31, 1999	JAN. 31, 2000	APR. 30, 2000	JUL. 31, 2000	OCT. 31, 2000
	(AS A PERCENTAGE OF REVENUE)							
Revenue.....	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of goods sold.....	65.5	63.9	61.6	59.0	57.2	56.1	54.9	54.9
Gross profit.....	34.5	36.1	38.4	41.0	42.8	43.9	45.1	45.1
Operating expenses:								
Research and development.....	22.1	21.6	22.0	21.2	19.5	16.1	14.0	12.7
Selling and marketing.....	13.6	11.7	13.1	12.8	11.9	10.9	10.4	9.8
General and administrative.....	5.0	5.2	4.2	4.5	4.3	3.9	4.0	3.8
Settlement of accrued contract obligation.....	--	--	--	--	--	--	(3.7)	--
Merger-related costs.....	--	2.0	8.4	--	--	--	--	--
Provision for doubtful accounts.....	--	--	--	0.2	0.2	--	3.7	6.7
Total operating expenses.....	40.7	40.5	47.7	38.7	35.9	30.9	28.4	33.0
Income (loss) from operations.....	(6.2)	(4.4)	(9.3)	2.3	6.9	13.0	16.7	12.1
Other income (expense), net.....	3.3	3.2	2.7	2.5	1.9	1.8	1.3	1.2
Income (loss) before income taxes.....	(2.9)	(1.2)	(6.6)	4.8	8.8	14.8	18.0	13.3
Provision (benefit) for income taxes....	(1.0)	(0.4)	(2.3)	1.7	2.9	4.8	5.8	4.3
Net income(loss).....	(1.9)%	(0.8)%	(4.3)%	3.1%	5.9%	10.0%	12.2%	9.0%

CIENA's quarterly operating results have varied and are expected to vary in the future. CIENA's detailed discussion of risk factors addresses the many factors that have caused such variation in the past, and may cause similar variations in the future. See "Risk Factors". CIENA's revenues have increased in each of the last eight quarters due to strong demand across existing products and introduction of new products such as MultiWave CoreStream configured for both 2.5 Gbps and 10.0 Gbps transmission rates. CIENA's gross margin percentage has improved from the first quarter fiscal 1999 to the fourth quarter fiscal 2000 as a result of component cost reductions, production efficiencies, and relative stable sales pricing. CIENA's operating expenses have increased in each of the last eight quarters due to continued investments in research and development, selling and marketing, and infrastructure activities. Exclusive of provisions for doubtful accounts and merger-related costs, the Company's operating expenses as a percentage of revenue have generally decreased each of the last eight quarters. During fiscal 2001, CIENA's operating expenses will continue to increase in absolute dollars and may increase as percentage of revenue. We expect to preserve and enhance our market leadership and build on our installed base with new and additional products in conjunction with increased investments in selling, marketing, and customer service activities. See "Risk Factors".

LIQUIDITY AND CAPITAL RESOURCES

At October 31, 2000, CIENA's principal source of liquidity was its cash and cash equivalents. CIENA had \$143.2 million in cash and cash equivalents, and \$95.1 million in corporate debt securities and U.S. Government obligations. CIENA's corporate debt securities and U.S. Government obligations have contractual maturities of six months or less.

CIENA's operating activities provided cash of \$59.0 million, \$28.7 million, and \$48.8 million for fiscal 2000, 1999, and 1998, respectively. Cash provided by operations in fiscal 2000 was primarily attributable to a net gain adjusted for the non-cash charges of depreciation, amortization, tax benefit related to exercise of stock options, provisions for doubtful accounts, inventory obsolescence, and warranty, increases in accounts payable, and accrued expenses, offset by increases in accounts receivable and inventories.

Cash used in investing activities in fiscal 2000, 1999, and 1998 was \$103.2 million, \$149.7 million, and \$107.0 million, respectively. Included in investment activities were additions to capital equipment and leasehold improvements in fiscal 2000, 1999, and 1998 of \$123.9 million, \$46.8 million, and \$88.9 million, respectively. The capital equipment expenditures were primarily for test, manufacturing and computer equipment. CIENA expects additional combined capital

equipment and leasehold improvement expenditures of approximately \$208 million to be made during fiscal 2001 to support selling and marketing, manufacturing and product development activities and the construction of leasehold improvements for its facilities.

We generated \$43.9 million, \$13.8 million, and \$35.6 million in cash from financing activities in fiscal 2000, 1999, and 1998, respectively. During fiscal 2000, CIENA received \$44.0 million from the exercise of stock options and the sale of stock through our employee stock purchase plan. During fiscal 1999 CIENA received \$11.3 million from the exercise of stock options, the sale of stock through our employee stock purchase plan, and from the additional capitalization of Omnia and Lightera. During fiscal 1998, CIENA received approximately \$34.3 million from the issuance of stock associated with the capitalization of Omnia and Lightera, and from the exercise of stock options.

We believe that our existing cash balances and investments, together with cash flow from operations, will be sufficient to meet our liquidity and capital spending requirements at least through the end of fiscal 2001. However, possible investments in or acquisitions of complementary businesses, products or technologies may require additional financing prior to such time. There can be no assurance that additional debt or equity financing will be available when required or, if available, can be secured on terms satisfactory to us.

EFFECTS OF RECENT ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133 (SFAS No. 133), "Accounting for Derivative Instruments and Hedging Activities". This Statement requires companies to record derivatives on the balance sheet as assets or liabilities, measured at fair value. Gains or losses resulting from changes in the values of those derivatives would be accounted for depending on the use of the derivative and whether it qualifies for hedge accounting. SFAS No. 133, as amended by SFAS No. 137 "Accounting for Derivative Instruments and Hedging Activities -- Deferral of the Effective Date for SFAS No. 133", will be effective for the Company's fiscal year ending October 31, 2000. The Company believes the adoption of SFAS No. 133 and SFAS No. 137 will not have a material effect on the consolidated financial statements.

In December 1999, the Securities and Exchange Commission released Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements," (SAB 101) which clarifies the Securities and Exchange Commission's view on revenue recognition. Subsequently, the SEC released SAB 101B, which delayed the implementation date of SAB 101 for registrants with fiscal years that begin between December 16, 1999 and March 15, 2000. CIENA is required to be in conformity with the provisions of SAB 101, as amended, no later than January 31, 2001, with the impact of such adoption being treated on a cumulative basis as of November 1, 2000. While management will continue to assess SAB 101, CIENA presently believes its existing revenue recognition policies and procedures are generally in compliance with SAB 101 and, therefore, SAB 101's adoption will have no material impact on CIENA's financial condition, results of operations or cash flows.

In July 2000, the FASB's Emerging Issues Task Force ("EITF") reached a final consensus that the income tax benefit realized by a company upon the exercise of a nonqualified stock option or the disqualifying disposition of an incentive stock option should be classified in the operating section of the statement of cash flows. The consensus is effective for the Company's quarters ending after July 20, 2000. All comparative cash flow statements as presented have been restated to comply with this consensus.

In September 2000, the FASB issued SFAS No. 140, "Accounting for the Transfers and Servicing of Financial Assets and Extinguishments of Liabilities". SFAS No. 140 is effective for transfers occurring after March 31, 2001 and for disclosures relating to the securitization transactions and collateral for fiscal years ending after December 15, 2000. The Company believes the adoption of SFAS No. 140 will not have a material effect on the consolidated financial statements.

BUSINESS

OVERVIEW

CIENA is an established leader in the rapidly growing intelligent optical networking equipment market. We offer a comprehensive portfolio of products for communications service providers worldwide. Our customers include long-distance carriers, competitive and incumbent local exchange carriers, Internet service providers, wireless and wholesale carriers. CIENA offers intelligent optical transport and optical switching systems that enable service providers to provision, manage and deliver high-bandwidth services to their customers. We have pursued a strategy to develop and leverage the power of our technologies to change the fundamental economics of building carrier-class tele- and data-communications networks, thereby providing our customers with a competitive advantage. CIENA's intelligent optical networking products are designed to enable carriers to deliver any time, any size, any priority bandwidth to their customers.

Historically, the significant majority of CIENA's revenue has come from the sale of long-distance optical transport equipment. CIENA believes it is one of the worldwide market leaders in field deployment of open-architecture long-distance optical transport equipment utilizing dense wavelength division multiplexing, or DWDM, technology. The majority of CIENA's fiscal 2000 revenue was derived from sales of its long-distance optical transport products, including MultiWave CoreStream(TM) and MultiWave Sentry 4000(TM). During the fiscal year 2000, CIENA also recognized revenue from the sale of seven optical networking products including sales of its metropolitan optical transport product, MultiWave(R) Metro and its intelligent optical core switch, MultiWave CoreDirector(TM).

For the fiscal year ended October 31, 2000, CIENA recorded revenue from sales of intelligent optical networking equipment to a total of 32 customers. Our research and development efforts as well as potential future acquisition and partnership activities are targeted at capitalizing on our installed base of carrier customers and leveraging our position as a leader in the rapidly growing optical networking market.

INDUSTRY BACKGROUND

The world's tele- and data-communications infrastructure is formed by fiber-optic networks owned and operated by service providers. In recent years, the combination of several factors, including global deregulation which fueled competition among service providers and increased bandwidth demand resulting from the proliferation of the Internet and the emergence of electronic commerce, gave rise to the increased deployment of communications equipment utilizing dense wavelength division multiplexing technology.

DWDM replaces the single beam of light that traverses fiber-optic cable in legacy networks with multiple colors of light, each of which is capable of carrying tens of thousands of voice conversations or data transmissions. Prior to the emergence of DWDM, service providers could increase network capacity either by adding new physical fibers to their network or by increasing the rate of transmission through the fiber. In many cases DWDM has proven to be more cost efficient than physically deploying new fibers, and it has enabled the delivery of significantly more traffic by service providers.

The widespread adoption of DWDM enabled carriers to efficiently and economically expand network capacity, or bandwidth, while reducing bandwidth costs. CIENA believes that the application of products using DWDM has led to a dramatic decline in service providers' capital cost per bit from 1995 to present, thereby enabling pricing competition between carriers and significant bandwidth price declines of up to 80% in some U.S. regions.

NETWORK SCALABILITY CHALLENGES

For the past several years DWDM has been implemented by carriers to increase capacity between discrete points in their long-distance networks. To construct a network using DWDM equipment as its backbone, a carrier must interconnect the point-to-point high-capacity links and manage all traffic flowing through them. For example, an important element enabling this interconnection in traditional architectures has been the SONET/SDH add/drop multiplexer, or ADM. In most network architectures, a SONET ADM is used to transmit the information-carrying signal for each DWDM optical channel. A second ADM then is used to receive the information-carrying signal from each DWDM optical channel. As a result, every time an additional optical channel is deployed, two additional SONET ADMs must be purchased, installed and maintained -- one for each end of the traffic-carrying route. For example, in order to transmit/receive the traffic from a DWDM optical transport system with 96 channels of DWDM, a service provider would require a total of 192 SONET ADMs.

Though DWDM gave carriers the ability to solve the bandwidth problem in the core of their networks, the technology created operational and scalability challenges for carriers. Historically this method has been the only way available to service providers to scale their networks. Unfortunately, this approach creates upwardly spiraling costs. In addition to the capital equipment costs associated with the equipment, each SONET ADM uses valuable central office space and power. Furthermore, as the number of DWDM channels and links increases, the carrier's management of the network grows more complex, making manual service provisioning and network operation more difficult and costly.

ESCALATING OPERATIONAL COSTS

In addition to the problems inherent in scaling traditional network architectures, carriers are challenged to scale their operating staff as quickly as they can grow their networks. According to information filed by carriers with the United States Securities and Exchange Commission, many service providers are spending more on operating, growing, and managing their networks than they are on capital expenditures relating to their networks. In some cases, service providers are spending two to four dollars on network operations and support expenses for every dollar spent on network capital equipment. In addition, in many cases, network operations and support expenses are increasing at a significantly faster rate than revenues.

CIENA'S SOLUTIONS

CIENA's intelligent optical networking equipment was designed to enable service providers to transition from inefficient, legacy, voice-centric networks to more efficient data-optimized, intelligent optical networks. CIENA's systems address both the network scalability challenges and the escalating operational costs faced by service providers by:

- leveraging expertise in optics, software, systems and Application Specific Integrated Circuits, or ASICs, to develop innovative products designed to dramatically lower the cost of constructing service provider networks;
- replacing multiple traditional network elements such as ADMs and digital cross-connects with fewer, more intelligent network elements, thereby simplifying the network and lowering carriers' capital and operational costs;
- enhancing bandwidth availability to service providers, thereby allowing them to increase network bandwidth with growing Internet demand;
- lowering ongoing network operating costs by enabling carriers to more efficiently manage network traffic;

- enabling carriers to shorten the time it takes to provision services, in some cases from months to minutes, thereby accelerating the generation of revenue; and
- enabling new, revenue-generating and differentiated optical services.

Our optical networking product portfolio is targeted at the critical areas of service provider networks: long-distance and metropolitan optical transport, intelligent optical core switching and network management.

- **OPTICAL TRANSPORT.** CIENA's long-distance optical transport products, MultiWave CoreStream(TM), MultiWave Sentry(TM) and MultiWave 1600, and our short-distance products, MultiWave Metro(TM), Metro One(TM) and MultiWave Firefly(TM), utilize DWDM technology and should enable carriers to cost effectively add critical network bandwidth when and where they need it. As a result, service providers should be better able to scale their networks to meet demand.
- **INTELLIGENT OPTICAL CORE SWITCHING.** Our intelligent optical core switches, MultiWave CoreDirector(TM) and MultiWave CoreDirector CI(TM), which is currently under development, allow carriers to manage the bandwidth created with optical transport products. CoreDirector and CoreDirector CI help carriers solve both the issues of network scalability and escalating operating costs by incorporating the functionality of multiple network elements into single elements with previously unavailable switching capabilities and management.
- **NETWORK MANAGEMENT.** ON-Center, CIENA's recently introduced fully integrated family of software-based tools for comprehensive element, network and service layer management, is designed to enable accelerated deployment of new, differentiating optical services. ON-Center should also reduce network operating and management costs.

CIENA calls the network architecture created by these products "CIENA LightWorks". The components of CIENA's LightWorks can be sold together as a complete network solution or separately as best-of-breed solutions. CIENA's LightWorks architecture is designed to dramatically simplify a carrier's network by reducing the number of network elements. We believe this network simplification will enable service providers to lower capital equipment and operating costs.

STRATEGY

CIENA's strategy is to maintain and build upon its market leadership in the deployment of intelligent optical networking systems and to leverage its technologies in order to provide solutions for both voice and data communications-based network architectures. CIENA believes that the technological, operational and cost benefits of its optical networking solutions create competitive advantages for service providers worldwide. We believe our solutions will become increasingly important as these service providers are being pressed by their customers to deliver services to address the dramatic growth in Internet and other data communications traffic. CIENA's strategy includes the following initiatives:

- **EXPAND OUR BASE OF CUSTOMERS USING OUR INTELLIGENT OPTICAL NETWORKING SOLUTIONS.** We believe that achieving early widespread operational deployment of our systems in a particular carrier's network will provide CIENA significant competitive advantages with respect to additional optical networking deployments and will enhance our marketing to other carriers as a field-proven supplier. While continuing to aggressively serve our existing customers, we intend to actively pursue additional optical networking deployment opportunities among fiber-optic carriers in domestic and foreign long distance, interoffice and local exchange markets.

- INCREASE SALES AND MARKETING EFFORTS. The nature of the target customer base for all our product lines requires a focused sales effort on a customer-by-customer basis. We will continue to increase our sales and marketing efforts aimed at the worldwide market of service providers. CIENA increased the number of revenue-generating optical networking customers from 27 during 1999 to 32 in 2000. In addition, CIENA has a significant international presence, particularly in Europe. Revenues from international customers represented 33.0% of CIENA's total revenues in fiscal 2000. CIENA plans to continue to strengthen its marketing programs and to increase its domestic and international presence through both direct sales and distributor relationships.
- CONTINUE TO EMPHASIZE TECHNICAL SUPPORT AND CUSTOMER SERVICE. CIENA markets technically advanced systems to sophisticated customers. The nature of CIENA's systems and market require a high level of technical support and customer service. We believe we have a good reputation for our technical support and customer service, and we intend to emphasize our global service and support excellence and capabilities as differentiating factors in our efforts to maintain and enhance our market position. CIENA offers complete engineering, furnishing and installation services in addition to full-time customer support from strategic locations worldwide.
- MAINTAIN WORLD CLASS MANUFACTURING CAPABILITY. CIENA's optical networking systems play a critical role in our customers' networks. Quality assurance and manufacturing excellence are necessary for CIENA to achieve success. CIENA believes it has developed a world class optical manufacturing capability, and this capability provides CIENA with a significant competitive advantage. CIENA achieved ISO 9001 certification in July 1997 in further support of this element of its strategy. CIENA expects to continue to invest in both the capital and the human resources necessary to maintain and leverage this advantage. In addition, CIENA expects to utilize this expertise to leverage our manufacturing capability with contract manufacturers.
- LEVERAGE CIENA'S BANDWIDTH-OPTIMIZING TECHNOLOGY AND KNOW-HOW. We believe the overall growth in demand for bandwidth and the need for intelligent bandwidth-optimizing services in telecommunications networks will lead to transmission bottlenecks in other segments of the networks where the application of optical technologies and other high bandwidth enabling technologies may provide solutions, either within existing network architectures, or as part of the design and development of alternative data communications-based network architectures. CIENA expects to leverage the core competencies it has developed in the design, development and manufacturing of its optical transport and intelligent optical switching product lines and key enabling components by pursuing new product development efforts, and strategic alliances or acquisitions, to address these expected opportunities. CIENA intends to move aggressively to maintain leadership in the design and development of intelligent optical networking equipment, components and software which will both respond to customer needs and help customers move toward newer, higher capacity, more cost-efficient network designs for the future.

PRODUCTS

Our optical networking product portfolio is targeted at the critical areas of service provider networks: long-distance and metropolitan optical transport, intelligent optical core switching and network management. CIENA's open architecture design allows its products to operate with most carriers' existing fiber-optic transmission systems and network elements, including connecting directly to either traditional SONET equipment, ATM switches or IP routers.

LONG-DISTANCE OPTICAL TRANSPORT

PRODUCT
-----FEATURES

MULTIWAVE CORESTREAM

- CIENA's fourth generation carrier-class intelligent optical transport product.
- First commercially deployed 96-channel DWDM system with commercial shipments beginning in the third fiscal quarter of 1999.
- Utilizes DWDM technology to deliver up to 96 optical channels at 2.5Gbps (240 gigabits) or up to 48 channels at 10Gbps (480 gigabits).
- Designed for in-service growth; scalable to handle 2 terabits of traffic in the future.
- With its longer reach feature set, will ultimately be capable of transporting signals up to 5,000 kilometers without electrical regeneration.

MULTIWAVE SENTRY 4000

- CIENA's third generation carrier-class intelligent optical transport product.
- First commercially deployed 40-channel system with commercial shipments beginning in the second fiscal quarter of 1998.
- Utilizes DWDM technology to deliver up to 40 channels at 2.5Gbps (100 gigabits).

MULTIWAVE SENTRY 1600

- CIENA's second generation carrier-class intelligent optical transport product.
- Utilizes DWDM technology to deliver up to 16 channels at 2.5Gbps (40 gigabits).
- Incorporated performance monitoring capabilities, not previously available in DWDM equipment beginning in the second half of fiscal 1996.

MULTIWAVE 1600

- CIENA's first generation carrier-class intelligent optical transport product.
- First commercially deployed 16-channel system with commercial shipments beginning in the first half of fiscal 1996.
- Utilizes DWDM technology to deliver 16 channels at 2.5Gbps (40 gigabits).

METROPOLITAN OPTICAL TRANSPORT

PRODUCT
-----FEATURES

MULTIWAVE METRO

- A carrier-class optical transport product designed specifically to address the performance and economic requirements of metropolitan markets.

- Provides up to 24 duplex channels over a single fiber pair, enabling a service provider to transport up to 60Gbps.
- Supports multiple network topologies, such as rings, hubs, and stars.
- Offers a wide range of interfaces from 100 megabits per second up to 10Gbps.

MULTIWAVE METRO ONE

- Offers the same carrier-class reliability and functionality as MultiWave Metro, but for a single channel in a reduced size and reduced power consumption package.

MULTIWAVE FIREFLY

- MultiWave Firefly was developed specifically for use by carriers in short-distance, point-to-point applications.
- Multiplexes up to 24 channels at 2.5Gbps, over a single fiber pair, allowing a carrier to transport up to 60Gbps.

INTELLIGENT OPTICAL CORE SWITCHING

PRODUCT

FEATURES

MULTIWAVE COREDIRECTOR

- Provides traffic management and switching capability beyond current network solutions of up to 256 ports of OC-48 or up to 640Gbps in a single 7 foot bay.
- Designed to reduce capital equipment costs by displacing multiple traditional devices.
- CoreDirector's intelligence is designed to simplify service provisioning, in some cases reducing provisioning times from months to seconds.
- CoreDirector offers the ability to switch at the wavelength level or at levels of granularity down to an STS-1.
- CoreDirector should enable new revenue opportunities for service providers through new optical layer capabilities and services.

COREDIRECTOR CI

- When available, CoreDirector CI will provide up to 64 ports of OC-48 or up to 160Gbps in a half bay.
- CoreDirector CI will deliver CoreDirector functionality in a smaller package and at a lower entry cost that is ideal for lower capacity networks or smaller switching sites.

NETWORK MANAGEMENT

PRODUCT

FEATURES

LIGHTWORKS ON-CENTER

- A fully integrated family of software-based tools for comprehensive element, network and service layer management across service provider networks.
- ON-Center is designed to enable accelerated deployment of new, differentiating optical services, reduced network

operating and management costs, and innovative customer service solutions.

- Designed so that service providers can select any or all components necessary to meet their particular network's management needs, LightWorks ON-Center is comprised of:
 - an Optical Service Layer Management System for cross-vendor end-to-end service management;
 - an Optical Network Management System for integrated management across all of CIENA's intelligent optical transport, switching and access systems; and
 - a Modeling and Planning System for network design.

NEW OPTICAL SERVICES

In addition to allowing significant capital equipment and operational cost savings, CIENA's intelligent optical networking equipment is designed to enable its customers to offer new, revenue-generating optical layer services. CIENA's LightWorks Toolkit(TM) is designed to allow carriers to offer dynamic high-bandwidth services and handle real-time service provisioning and prioritization. By mixing and matching CIENA's ToolKit options, carriers will be able to offer customized services and further differentiate themselves from their competition.

When development is completed, the breadth of options in the LightWorks ToolKit will ultimately include:

SERVICE -----

DESCRIPTION -----

OPTICAL PRIORITY PROVISIONING

- Optical Priority Provisioning is designed to allow carriers to turn-up optical services in seconds, and to specify priority levels for further differentiation of optical services. For instance, a carrier may elect to offer multiple levels of optical bandwidth, ranging from "premium" to "best-effort" service, with each level of service being priced and delivered differently. Optical Priority Provisioning is designed to help carriers more easily meet service level agreements by assigning and adjusting traffic priorities in seconds, potentially allowing carriers to unlock more revenue from data services.
- Optical Priority Provisioning should simplify the delivery of differentiated optical services by providing access to service templates of predefined restoration priorities, preemptability, and linear, ring and mesh protection options. Using these simplified templates, service provisioners should be able to deliver optical services, at any service level, in just a few clicks of a mouse.

FLEXIBLE CONCATENATION

- In legacy networks, bandwidth demand is arbitrarily shoehorned into SONET/SDH-sized transport containers where the size of the container is fixed. For example, if a customer requires OC-15 service, the customer must purchase OC-48 service, even though only a fraction of

the 48 time slots in the transport container will be filled with bits. In this scenario, the customer is paying for bandwidth it is not using and the carrier is losing valuable network bandwidth. CIENA is using a combination of silicon and software to redefine how carriers access and deliver bandwidth.

- When available, Flexible Concatenation will allow carriers to access all time slots within the SONET/SDH frame -- even when those frames are fractionally filled. That means carriers will be able to create true OC-"N" services in which "N" can be any number between 1 and 48 and in the future will be 192 and eventually 768 instead of the current restrictions of SONET, which sets fixed sizes on transport containers. Flexible concatenation is designed to enable carriers to maximize their network bandwidth and deliver customer-specific service.

RATE ADAPTIVE GIGABIT ETHERNET

- CIENA's Rate-Adaptive Gigabit Ethernet technology uses software and ASICs to enable service providers to sell Gigabit Ethernet services in customizable increments of 50Mbps (STS-1) up to 1.25Gbps.
- When available, service providers will be able to use Rate Adaptive Gigabit Ethernet to create a wide range of customized optical service options for end-users and deliver those services over more efficient access and core networks that leverage the economies of Gigabit Ethernet transmission.

VSR OPTICS

- For increased profitability, carriers must continually drop their cost per bit. However, to stay competitive, carriers must continue to increase the value of their services. VSR (Very Short Reach) Optics are designed to provide lower-cost, high-capacity connections between Internet and optical networking systems within a service provider's central office. VSR Optics leverage Vertical Cavity Surface Emitting Laser (VCSEL) technology and Gigabit Ethernet standards to make variable-rate optical services possible and economical -- a valuable service for unpredictable bandwidth demands. When available, CIENA will apply this data rate-scalable technology to 10Gbps network connections.

TRANSPARENT SERVICE MULTIPLEXING

- As opposed to traditional SONET/SDH multiplexing, CIENA's "transparent" multiplexing is designed to enable optical services to be delivered without compromising the SONET/SDH overheads of individual tributaries that make up the aggregate signal. Enabling multiple signals to be transparently multiplexed, transported and demultiplexed means signals are delivered as if they were connected directly to the destination equipment by their own unique wavelength, maintaining the customers'

signal security and integrity. When available, Transparent Service Multiplexing (TSM) should be ideal for delivering IP traffic, wavelength services and other new optical services that CIENA's Toolkit enables. With TSM, each end device appears to communicate over its own unique wavelength while actually being economically consolidated with other signals.

WAVELENGTH BINDING

- With unprecedented traffic growth and changing traffic demands, Internet-centric carriers are looking for ways to better match the changes in IP router traffic demands with the provisioned bandwidth capacities available within their networks. To meet this need, CIENA is developing Wavelength Binding.
- Wavelength Binding will leverage intellectual property to enable a device of any speed to be connected to a network operating at a lower speed by building "virtual channels" of multiple wavelengths bound together in a single, very high-capacity bitstream. As a result, when Wavelength Binding is available, CIENA's customers will be able to deliver 40Gbps without changing their transport infrastructure. Wavelength Binding will also give carriers previously unavailable network flexibility by enabling them to bundle and unbundle wavelengths as network capacity demands change.

PRODUCT DEVELOPMENT

We believe the overall growth in utilization of fiber-optic telecommunications networks will lead to transmission bottlenecks in other segments of the networks where the application of optical networking technologies may provide solutions. We also believe there may be opportunities for us to develop products and technologies complementary to existing optical networking technologies which may broaden our ability to provide, facilitate and/or interconnect with high-bandwidth solutions offered throughout fiber-optic networks. CIENA intends to focus its product development efforts and possibly pursue strategic alliances or acquisitions to address expected opportunities in these areas, including our recently announced acquisition of Cyras Systems, Inc.

CUSTOMERS

CIENA has announced publicly relationships with the following customers:

DOMESTIC

Alltel
Bell South
Broadwing
Cable & Wireless
Digital Teleport
Enron
Genuity Solutions
Intermedia Communications
PSINet
Qwest

INTERNATIONAL

Cable & Wireless, UK
CompleTel, France
Crosswave Communications, Japan
Daini Deuden, Japan
Dynegy, Austria
ESAT Telecom, Ireland
Fibernet
Global Crossing, UK
GTS (now known as eBone), Belgium
HanseNet Telekommunikation, Germany

DOMESTIC

RCN of Pennsylvania
Sprint
Verizon
Williams Communications
WorldCom
XO Communications

INTERNATIONAL

Interoute, UK
Japan Telecom, Japan
KDD/Teleway Japan, Japan
Korea Telecom, Korea
MobilCom AG, Germany
Operadora Protel, Mexico
Telecom Developpement, France
Telia AB, Sweden
WorldCom, Europe

In addition, CIENA has a number of unannounced customer relationships.

CUSTOMERS BY CATEGORY

INTEREXCHANGE CARRIERS (IXCS)

The initial deployments of CIENA's bandwidth enhancing optical transport equipment occurred in the core of the U.S. long-distance network with the interexchange carriers, or IXCs. IXCs provide connections between local exchanges in different geographic areas. In recent years, incumbent IXCs such as Sprint, WorldCom and AT&T have seen increased competition from emerging long-distance carriers such as Qwest Communications, Global Crossing, Broadwing Communications Services, Inc., and Level 3 Communications. We expect that continued competition in long-distance call rates, as well as the carriers' desire for market and service differentiation, will continue to drive demand for the increased capacity and features offered by CIENA's optical networking equipment.

INCUMBENT LOCAL EXCHANGE CARRIERS

Incumbent local exchange carriers, such as the RBOCs, are very active in interoffice and local exchange markets and, under the Telecommunications Act of 1996, RBOCs are eligible to enter the long-distance market once they have met certain requirements for opening their local markets to competition. CIENA believes that over time the RBOCs will continue to gain approval to offer long-distance services, although when and how they will offer these services is unclear. For instance, the RBOCs' move to offering long-distance services could occur through the establishment of owned network facilities, through the purchase of long-distance capacity from other long-distance carriers, or through some combination of the two. Regardless of the timing of any such move, CIENA believes there are opportunities for in-region deployment of CIENA's long-distance and metropolitan optical transport products at certain RBOCs.

INTERNATIONAL COMPETITIVE CARRIERS

New competitive carriers are emerging as a result of deregulation in the international telecommunications markets. CIENA has concentrated its sales efforts on these emerging carriers as opposed to the traditional carriers or PTTs. During fiscal 2000, CIENA increased its announced international customer base from fourteen to eighteen customers. In many cases, these new competitive carriers do not have the installed fiber base of the larger carriers and therefore are in need of the scalable bandwidth CIENA's optical transport systems offer. In addition, because of the economies and flexibility afforded by the application of DWDM technology, CIENA's equipment is being used on several new projects where the service provider is physically constructing the network. CIENA expects that in the near term, the majority of its international revenue will come from these smaller, more aggressive competitive carriers, and CIENA will continue to concentrate its sales efforts accordingly.

COMPETITIVE LOCAL EXCHANGE CARRIERS (CLECS)

Deregulation has fueled the growth of U.S. competitive local exchange carriers, or CLECs. CIENA believes that in the short term, CLECs could benefit from the hesitancy of incumbent local exchange carriers, such as the Regional Bell Operation Companies, or RBOCs, to open their local markets to competitors, and that these CLECs are likely to move aggressively to capitalize on opportunities in the local area. CIENA recognized revenues from CLEC customers in fiscal 2000 and expects that tactical CLEC applications for its long-haul products, as well as the short-distance products, will be well suited to CLEC network applications.

NON-TRADITIONAL TELECOMMUNICATION SERVICE PROVIDERS

The growth of the Internet has produced traffic growth substantial enough to attract new, non-traditional telecommunication service providers to compete in this market as well. Both domestically and internationally, companies with rights-of-way, such as utility companies, cable TV providers, and railroads are capitalizing on their "network", whether a pipeline, a railroad, or a highway, and in some cases, are laying optical fiber and constructing telecommunications networks along those rights-of-way. The transmission capabilities of CIENA's optical networking equipment enable these new carriers to provide competitive services while purchasing and laying a minimal amount of fiber-optic cable.

MARKETING AND DISTRIBUTION

CIENA's intelligent optical networking systems require substantial investment, and our target customers in the fiber-optic telecommunications market -- where network capacity and reliability are critical -- are highly demanding and technically sophisticated. There are only a small number of such customers in any country or geographic market. Also, every network operator has unique configuration requirements, which impact the integration of optical networking systems with existing transmission equipment. The convergence of these factors leads to a very long sales cycle for optical networking equipment, often more than a year between initial introduction to CIENA and the customer's commitment to purchase, and has further led CIENA to pursue sales efforts on a focused, customer-by-customer basis. See "Management's Discussion and Analysis of Financial Conditions and Results of Operations" and "Risk Factors".

CIENA has organized its resources for the separate but coordinated approach to United States and international customers. In the United States market, a sales team, comprised of an account manager, systems engineers and technical support and training personnel, is assigned responsibility for each customer account, and for the coordination and pursuit of sales contacts. In the international market, CIENA pursues prospective customers through direct sales efforts, as well as through distributors, independent marketing representatives and independent sales consultants. Through its subsidiaries, CIENA has established offices in the U.S., Europe and Latin America, including offices in the U.K., Germany, France, Spain, Mexico and Brazil. CIENA has distributor or marketing representative arrangements, including agreements with agents in Italy, the Republic of Korea, Japan, Venezuela, Columbia and Chile.

In support of its worldwide selling 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 conducts most of the optical assembly, final assembly and final component, module and system test functions for its optical transport products at its manufacturing facilities in Maryland. We also manufacture the in-fiber Bragg gratings used in our optical transport product lines. We expect the majority of the manufacturing associated with our MultiWave CoreDirector

and CoreDirector CI products will be performed by third-party manufacturers, with only final system test and assembly performed by CIENA. We also rely on third-party manufacturers to manufacture some of our components for our products and continue to evaluate whether additional portions of our manufacturing can be done on a reliable and cost-effective basis by third-party manufacturers.

CIENA believes that portions of its manufacturing technologies and processes represent a key competitive advantage. Accordingly, we have invested significantly in automated production capabilities and manufacturing process improvements and expect to further enhance our manufacturing process with additional production process control systems. Some critical manufacturing functions require a highly skilled work force, and CIENA puts significant efforts into training and maintaining the quality of its manufacturing personnel and in maintaining its proprietary information in this area.

CIENA's optical transport product lines utilize hundreds of individual parts, many of which are customized for CIENA. Component suppliers in the specialized, high technology end of the optical communications industry are generally not as plentiful or, in some cases, as reliable, as component suppliers in more mature industries. CIENA works closely with its strategic component suppliers to pursue new component technologies that could either reduce cost or enhance the performance of our products.

COMPETITION

Competition in the telecommunications equipment industry is intense, particularly in that portion of the industry focused on delivering higher bandwidth and more cost effective services throughout the telecommunications network. CIENA believes that its position as a leading supplier of open architecture optical networking equipment and the field-tested design and performance of its optical transport products give it a competitive advantage, and CIENA expects to leverage that advantage in bringing its core switching products to market. However, competition has been and will continue to be very intense. See "Management's Discussion and Analysis of Financial Conditions and Results of Operations" and "Risk Factors".

CIENA's competition is dominated by a small number of very large, usually multinational, vertically integrated companies, each of which has substantially greater financial, technical and marketing resources, and greater manufacturing capacity as well as more established customer relationships with long distance carriers than CIENA. Included among CIENA's competitors are Alcatel Alsthom Group, Cisco, Fujitsu Group, Hitachi Ltd., Lucent Technologies Inc., NEC Corporation, Nortel Networks Corporation, Siemens AG, Telefon AB LM Ericsson and several new companies, such as ONI Systems, Sycamore Networks, Corvis Systems, and Tellium, Inc. CIENA believes each of its major competitors is in various stages of development, introduction or deployment of products directly competitive with CIENA's optical transport, core switching and service delivery systems.

In addition to optical networking equipment suppliers, traditional TDM-based transmission equipment suppliers compete with CIENA in the market for transmission capacity. Alcatel, Fujitsu, Hitachi, Lucent, NEC and Nortel are already providers of a full complement of such transmission equipment. These and other competitors have introduced or are expected to introduce equipment that will offer 10 Gbps transmission capability.

PATENTS AND OTHER INTELLECTUAL PROPERTY RIGHTS

CIENA has licensed intellectual property from third parties, including key enabling technologies with respect to the production of in-fiber Bragg gratings, utilized publicly available technology associated with Erbium-doped fiber amplifiers, and applied its design, engineering and manufacturing skills to develop its optical transport systems. These licenses expire when the last of the licensed patents expires or is abandoned. CIENA also licenses from third parties some

software components for its network management products. These licenses are perpetual but will generally terminate after an uncured breach of the agreement by CIENA. We have registered trademarks for CIENA, WaveWatcher, MODULE SCOPE, CIENA Optical Communications, Multiwave and Multiwave Sentry. CIENA also relies on contractual rights, trade secrets and copyrights to establish and protect its proprietary rights in its products.

CIENA intends to enforce vigorously its intellectual property rights if infringement or misappropriation occurs.

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 with CIENA for a period of twelve months following any termination of employment.

As of November 2000, CIENA had received fifty-eight United States patents, and had one hundred sixteen pending 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 2012. Pursuant to an agreement between CIENA and General Instrument Corporation dated March 10, 1997, CIENA is a co-owner with General Instrument Corporation of a portfolio of 27 United States and foreign patents relating to optical communications, primarily for video-on-demand applications. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors".

EMPLOYEES

As of October 31, 2000, CIENA and its subsidiaries employed 2,775 persons, of whom 527 were primarily engaged in research and development activities, 1,233 in manufacturing, 412 in installation services, 372 in sales, marketing, customer support and related activities and 231 in administration. None of CIENA's employees are currently represented by a labor union. CIENA considers its relations with its employees to be good.

UNDERWRITING

CIENA and the underwriters for the offering named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman, Sachs & Co., Morgan Stanley & Co. Incorporated, Banc of America Securities LLC and Robertson Stephens, Inc. are the representatives of the underwriters.

UNDERWRITERS -----	NUMBER OF SHARES -----
Goldman, Sachs & Co.	3,619,000
Morgan Stanley & Co. Incorporated.....	3,619,000
Banc of America Securities LLC.....	1,551,000
Robertson Stephens, Inc.	1,551,000
Dain Rauscher Incorporated	110,000
Lehman Brothers Inc.	110,000
J.P. Morgan Securities Inc.	110,000
SG Cowen Securities Corporation	110,000
Wit Soundview Corporation	110,000
UBS Warburg LLC	110,000

Total.....	11,000,000 =====

If the underwriters sell more shares than the total number set forth in the table above, the underwriters have an option to buy up to an additional 1,650,000 shares from CIENA to cover such sales. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters by CIENA. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	NO EXERCISE -----	FULL EXERCISE -----
Per share.....	\$3.55	\$3.55
Total.....	\$39,050,000	\$44,907,500

Shares sold by the underwriters to the public will initially be offered at the initial price to public set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to \$2.13 per share from the initial price to public. Any such securities dealers may resell any shares purchased from the underwriters to certain other brokers or dealers at a discount of up to \$0.10 per share from the initial price to public. If all the shares are not sold at the initial price to public, the underwriters may change the offering price and the other selling terms.

CIENA and some of its officers and directors have agreed with the underwriters not to dispose of or hedge any of our common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 90 days after the date of this prospectus, except with the prior written consent of Goldman, Sachs & Co. CIENA's agreement does not apply to any securities issued: (i) under employee benefit plans or dividend reinvestment plans, (ii) upon exercise of currently outstanding stock options, (iii) upon conversion or exchange of currently outstanding convertible or exchangeable securities, (iv) in connection with the acquisition of Cyras Systems, Inc. or (v) in connection with other mergers, acquisitions or similar transactions so long as those parties agree to be bound by the terms of the lock-up. This agreement does not restrict us from filing a shelf registration statement which includes equity securities. CIENA will issue approximately 27 million shares of common stock if the Cyras acquisition is consummated, almost all of which shares will be freely tradeable.

The common stock is quoted on the Nasdaq National Market under the symbol "CIEN".

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares from the Company in the offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the overallotment option. "Naked" short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of certain bids or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions may have the effect of preventing or retarding a decline in the market price of the common stock, and together with the imposition of the penalty bid, may stabilize, maintain, or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. These transactions may be effected on the Nasdaq National Market, in the over-the-counter market or otherwise.

CIENA has agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

CIENA estimates that its share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately \$305,000.

Some of the underwriters have from time to time performed, and may in the future perform, certain investment banking and advisory services for CIENA for which they have received, and may in the future receive, customary fees and expenses.

Lawton W. Fitt, a director of CIENA, is a Managing Director of Goldman, Sachs & Co., one of the underwriters in this offering.

LEGAL MATTERS

Hogan & Hartson L.L.P., Baltimore, Maryland, will provide CIENA with an opinion as to legal matters in connection with the common stock offered by this prospectus. Certain legal matters in connection with this offering will be passed on for the underwriters by Hale and Dorr LLP, Reston, Virginia.

EXPERTS

The consolidated financial statements of CIENA Corporation as of October 31, 2000 and 1999 and for each of the three years in the period ended October 31, 2000 incorporated in this prospectus by reference to CIENA's Annual Report on Form 10-K for the year ended October 31, 2000, as amended January 18, 2001, have been so incorporated in reliance on the report of

PricewaterhouseCoopers LLP, given on the authority of said firm as experts in auditing and accounting.

The financial statements of Cyras Systems, Inc. as of December 31, 1998 and 1999 and for the period from July 24, 1998 (inception) to December 31, 1998 and for the year ended December 31, 1999, incorporated in this prospectus by reference to the current report on Form 8-K of CIENA Corporation filed January 18, 2001, have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report, which is incorporated herein by reference, and have been so incorporated by reference in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC under the Securities Act a registration statement on Form S-3. This prospectus does not contain all of the information contained in the registration statement, certain portions of which have been omitted under the rules of the SEC. We also file annual, quarterly and special reports, proxy statements and other information with the SEC under the Exchange Act. The Exchange Act file number for our SEC filings is 000-21969. You may read and copy the registration statement and any other document we file at the following SEC public reference rooms:

Judiciary Plaza 450 Fifth Street, N.W. Rm. 1024 Washington, D.C. 20549	500 West Madison Street 14th Floor Chicago, Illinois 60661	7 World Trade Center Suite 1300 New York, New York 10048
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You may obtain information on the operation of the public reference room in Washington, D.C. by calling the SEC at 1-800-SEC-0330. We file information electronically with the SEC. Our SEC filings are available from the SEC's Internet site at <http://www.sec.gov>, which contains reports, proxy and information statements and other information regarding issuers that file electronically. You may read and copy our SEC filings and other information at the offices of Nasdaq Operations, 1735 K Street, N.W., Washington, D.C. 20006.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" the documents we file with it, which means that we can disclose important information to you by referring you to those documents instead of reproducing that information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information in this prospectus. We incorporate by reference the documents listed below:

- Our Annual Report on Form 10-K for the fiscal year ended October 31, 2000, as amended on January 18, 2001;
- Our Form 8-K filed on January 18, 2001;
- All documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and before the termination of the offering; and
- The description of common stock contained in our Form 8-A filed on January 13, 1997, as amended.

We will provide a copy of the documents we incorporate by reference, at no cost, to any person who receives this prospectus. To request a copy of any or all of these documents, you should write or telephone us at: 1201 Winterson Road, Linthicum, MD, (410) 865-8500, Attention: Director, Investor Relations.

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

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11,000,000 Shares

CIENA CORPORATION

Common Stock

[Ciena logo]

GOLDMAN, SACHS & CO.
 MORGAN STANLEY DEAN WITTER
 BANC OF AMERICA SECURITIES LLC

ROBERTSON STEPHENS

