

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM S-3  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

CIENA CORPORATION  
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE  
(STATE OR OTHER JURISDICTION OF  
INCORPORATION OR ORGANIZATION)

23-2725311  
(IRS EMPLOYER  
IDENTIFICATION NO.)

1201 WINTERSON ROAD  
LINTHICUM, MARYLAND 21090  
(410) 865-8500  
(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER,  
INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

MICHAEL O. MCCARTHY III  
SENIOR VICE PRESIDENT, GENERAL COUNSEL AND SECRETARY  
1201 WINTERSON ROAD  
LINTHICUM, MARYLAND 21090  
(410) 865-8500  
(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE,  
OF AGENT FOR SERVICE)

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(410) 659-2700

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act") check the following box:

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED(1)	PROPOSED MAXIMUM AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE	AGGREGATE OFFERING PRICE(1)(2)
Debt Securities(3).....			
Preferred Stock(3).....	\$1,500,000,000	--	\$1,500,000,000
Depositary Shares(3).....			
Warrants(3).....			
Common Stock(3)(4)(5).....			

Total.....

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED(1)	AMOUNT OF REGISTRATION FEE(2)
Debt Securities(3).....	
Preferred Stock(3).....	\$375,000
Depository Shares(3).....	
Warrants(3).....	
Common Stock(3)(4)(5).....	
Total.....	

- (1) There are being registered hereunder such indeterminate number of shares of common stock and preferred stock, such indeterminate number of warrants to purchase common stock, preferred stock or debt securities, such indeterminate number of depository shares representing an indeterminate number of fractional shares of preferred stock, and such indeterminate principal amount of debt securities or issue price of debt securities issued at original issue discount, as shall have an aggregate initial offering price not to exceed \$1,500,000,000. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o).
- (3) In addition to the securities issued directly under this registration statement, we are registering an indeterminate number of shares of common stock and preferred stock as may be issued upon conversion or exchange of the securities issued directly under this registration statement. No separate consideration will be received for any shares of common stock or preferred stock so issued upon conversion or exchange.
- (4) Includes rights to purchase Series A Junior Participating Preferred Stock attached to the Common Stock.
- (5) The aggregate amount of Common Stock registered hereunder is limited to that which is permissible under Rule 415(a)(4)(ii) under the Securities Act.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON THE DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

PROSPECTUS

SUBJECT TO COMPLETION

JANUARY 18, 2001

CIENA CORPORATION  
\$1,500,000,000

DEBT SECURITIES  
PREFERRED STOCK  
DEPOSITARY SHARES  
WARRANTS  
COMMON STOCK

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We will provide the specific terms for each of these securities and their offering prices in supplements to this prospectus. In the case of debt securities, these terms will include, as applicable, the specific designation, aggregate principal amount, maturity, rate or formula of interest, premium and terms for redemption. In the case of shares of preferred stock or depositary shares, these terms will include, as applicable, the specific title and stated value, any dividend, liquidation, redemption, conversion, voting and other rights. In the case of common stock, these terms will include the aggregate number of shares offered. In the case of warrants to purchase those securities, the terms will include term, conversion and exercise prices and other terms.

We may sell any combination of these securities in one or more offerings up to a total dollar amount of \$1,500,000,000. We may sell these securities to or through underwriters and also to other purchasers or through agents. We will set forth the names of any underwriters or agents in the accompanying prospectus supplement.

Our common stock is listed on the Nasdaq National Market under the symbol "CIEN." The closing price of our common stock on the Nasdaq National Market was \$97.06 per share on January 17, 2001. None of the other securities are currently publicly traded.

You should read carefully this prospectus, the documents incorporated by reference in the prospectus and any prospectus supplement before you invest. We strongly recommend that you read carefully the risks we describe in the accompanying prospectus supplement, as well as the risk factors in our most current reports to the SEC, for a fuller understanding of the risks and uncertainties that we face. See "Risk Factors" on page 7.

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NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

This prospectus may not be used to consummate sales of securities unless it is accompanied by a prospectus supplement.

The date of this prospectus is \_\_\_\_\_, 2001.

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## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC using a "shelf" registration process. Under this shelf process we may offer, from time to time, in one or more offerings:

- our debt securities;
- shares of our preferred stock;
- depositary shares;
- warrants to purchase our common stock, preferred stock, depositary shares or debt securities; or
- shares of our common stock.

The total offering price of these securities will not exceed \$1,500,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities, we will provide you with a prospectus supplement that will describe the specific amounts, prices and terms of the securities we offer. The prospectus supplement also may add, update or change information contained in this prospectus.

We may sell the securities to or through underwriters, dealers or agents or directly to purchasers. We and our agents reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. A prospectus supplement, which we will provide to you each time we offer securities, will provide the names of any underwriters, dealers or agents involved in the sale of the securities, and any applicable fee, commission or discount arrangements with them. See "Plan of Distribution."

## 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

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 and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act:

- 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.

## SUMMARY

This summary contains a general summary of the information contained in this Prospectus. It may not include all the information that is important to you. You should read the entire Prospectus, the Prospectus Supplement delivered with the Prospectus, and the documents incorporated by reference before making an investment decision.

## CIENA CORPORATION

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 intelligent optical transport and 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 disruptive 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.

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.

## SUMMARY OF THE SECURITIES WE ARE OFFERING

We may offer any of the following securities from time to time:

- debt securities
- preferred stock
- depositary shares
- warrants to purchase common stock, preferred stock, depositary shares or debt securities; or
- common stock

When we use the term "securities" in this prospectus, we mean any of the securities we may offer with this prospectus, unless we say otherwise. The total dollar amount of all securities that we may issue will not exceed \$1,500,000,000. If we issue debt securities at a discount from their original stated principal amount, then, for purposes of calculating the total dollar amount of all securities issued under this prospectus, we will treat the initial offering price of the debt securities as the total original principal amount of the debt securities. This prospectus, including the following summary, describes the general terms that may apply to the securities; the specific terms of any particular securities that we may offer will be described in a separate supplement to this prospectus.

## DEBT SECURITIES

Our debt securities may be senior or subordinated in right of payment. For any particular debt securities we offer, the applicable prospectus supplement will describe the specific designation, the aggregate principal or face amount and the purchase price; the ranking, whether senior or subordinated; the stated maturity; the redemption terms, if any; the conversion terms, if any; the rate or manner of calculating the rate and the payment dates for interest, if any; the amount or manner of calculating the amount payable at maturity and whether that amount may be paid by delivering cash, securities or other property; and any other specific terms. We will issue the senior and subordinated debt securities under separate indentures between us and a trustee we will identify in an applicable prospectus supplement.

## PREFERRED STOCK AND DEPOSITARY SHARES

We may offer our preferred stock in one or more series. For any particular series we offer, the applicable prospectus supplement will describe the specific designation; the aggregate number of shares offered; the rate and periods, or manner of calculating the rate and periods, for dividends, if any; the stated value and liquidation preference amount, if any; the voting rights, if any; the terms on which the series will be convertible into or exchangeable for other securities or property, if any; the redemption terms, if any; and any other specific terms. We may also offer depositary shares, each of which would represent an interest in a fractional share or multiple shares of preferred stock. We may issue the depositary shares under deposit agreements between us and one or more depositaries.

## WARRANTS

We may offer warrants to purchase our debt securities, preferred stock, depositary shares or common stock.

For any particular warrants we offer, the applicable prospectus supplement will describe the underlying security; the expiration date; the exercise price or the manner of determining the exercise price; the amount and kind, or the manner of determining the amount and kind, of security to be delivered by us upon exercise; and any other specific terms. We may issue the warrants under warrant agreements between us and one or more warrant agents.

## COMMON STOCK

We may offer shares of our common stock. Our common stock currently is traded on Nasdaq under the symbol "CIEN".

## LISTING

If any securities are to be listed or quoted on a securities exchange or quotation system, the applicable prospectus supplement will say so.

## RATIO OF EARNINGS TO FIXED CHARGES

We present below the ratio of our earnings to our fixed charges for each of the fiscal years ended October 31, 2000, 1999, 1998, 1997 and 1996

	YEARS ENDED OCTOBER 31,				
	1996	1997	1998	1999	2000
Ratio of earnings to fixed charges.....	33.8x	153.1x	36.2x	--	25.9x
	=====	=====	=====	=====	=====

These computations include CIENA and its consolidated subsidiaries. For these ratios "earnings" represents income (loss) before taxes plus fixed charges. "Fixed charges" consists of interest on all indebtedness and interest expense under operating leases deemed by us to be representative of the interest factor. Due to the loss before income taxes in the year ended October 31, 1999, the ratio coverage was less than 1:1. CIENA must have generated additional earnings of \$5,991,000 to achieve a coverage ratio of 1:1 for the year ended October 31, 1999.

## SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus, any prospectus supplement and the documents we incorporate by reference contain forward-looking statements. We generally identify forward-looking statements using words like "believe," "intend," "expect," "may," "should," "plan," "project," "contemplate," "anticipate" or similar statements. We base these statements on our beliefs as well as assumptions we made using information currently available to us. Because these statements reflect our current views concerning future events, these



statements involve risks, uncertainties and assumptions. These risks, uncertainties and assumptions are described in the risk factors set forth in any prospectus supplement and in the reports we file with the SEC that are incorporated by reference in this prospectus. Actual results may differ significantly from the results discussed in these forward-looking statements. We do not undertake to update our forward-looking statements or risk factors to reflect future events or circumstances.

## 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 in the accompanying prospectus supplement, our Annual Report on Form 10-K for the year ended October 31, 2000, filed on December 7, 2000, 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.

## USE OF PROCEEDS

Unless we specify otherwise in a prospectus supplement, we intend to use the net proceeds from the sales of securities to provide additional funds for our operations and for other general corporate purposes which may include, among other things:

- the repayment of indebtedness;
- working capital;
- capital expenditures; and
- acquisitions.

The precise amount and timing of the application of proceeds will depend upon our funding requirements in the future. We may set forth additional information on the use of net proceeds from the sale of securities we offer under this prospectus in a prospectus supplement relating to the specific offering.

## DESCRIPTION OF COMMON STOCK AND PREFERRED STOCK

The following description of our common stock and preferred stock, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the common stock and preferred stock that we may offer under this prospectus. For the complete terms of our common stock and preferred stock, please refer to our charter and bylaws that are filed as exhibits to our reports incorporated by reference into the registration statement which includes this prospectus. The General Corporation Law of Delaware, as amended, may also affect the terms of these securities. While the terms we have summarized below will apply generally to any future common stock or preferred stock that we may offer, we will describe the particular terms of any series of these securities in more detail in the applicable prospectus supplement, which may differ from the terms we describe below to the extent indicated in the applicable prospectus supplement.

## AUTHORIZED AND OUTSTANDING CAPITAL STOCK

Under the provisions of our certificate of incorporation, we have authority to issue 480,000,000 shares of capital stock, consisting of 460,000,000 shares of common stock, par value \$.01 per share, and 20,000,000 shares of preferred stock, par value \$.01 per share. As of January 11, 2001, 287,595,957 shares of common stock (adjusted to reflect a 2-for-1 stock split paid on September 18, 2000), and no shares of preferred stock were issued and outstanding. In addition, 30,306,339 shares of common stock were issuable upon exercise of stock options outstanding on that date, and we have agreed to issue approximately 27,000,000 additional shares of common stock in connection with our acquisition of Cyras Systems, Inc. announced on December 19, 2000. The outstanding shares of common stock are fully paid and nonassessable.

## COMMON STOCK

The rights of the holders of common stock discussed below are subject to those rights our board of directors may decide to confer on holders of preferred stock that may be issued in the future. Any rights conferred on preferred stockholders may adversely affect the rights of holders of common stock.

**VOTING RIGHTS.** Each holder of common stock is entitled to attend all special and annual meetings of the stockholders and to vote upon any matter properly considered and acted upon by the stockholders, including, without limitation, the election of directors. Holders of common stock are entitled to one vote per share.

**LIQUIDATION RIGHTS.** In the event of any dissolution, liquidation or winding up of CIENA, whether voluntary or involuntary, the holders of common stock and holders of any class or series of stock entitled to participate with them, will be entitled to participate in the distribution of any assets remaining after we have paid all of our debts and liabilities and have paid, or set aside for payment, to the holders of any class of stock having preference over the common stock in the event of dissolution, liquidation or winding up, the full preferential amounts, if any, to which they are entitled.

**DIVIDENDS.** Dividends may be paid on the common stock and on any class or series of stock entitled to participate with the common stock in the payment of dividends when and as declared by the board.

**OTHER RIGHTS AND RESTRICTIONS.** The holders of common stock have no preemptive or subscription rights to purchase additional securities issued by us, nor any rights to convert their common stock into other securities of CIENA or to have their shares redeemed by us. Our common stock is not subject to redemption by us. The rights, preferences and privileges of common stockholders are subject to the rights of the holders of any series of preferred stock which we may designate in the future. Our charter and bylaws do not restrict the ability of a holder of common stock to transfer his or her shares of common stock. When we issue shares of common stock under this prospectus, the shares will be fully paid and non-assessable.

**LISTING.** Our common stock is listed on the Nasdaq National Market.

**TRANSFER AGENT AND REGISTRAR.** The transfer agent and registrar for our common stock is Equiserve, Boston, MA.

## PREFERRED STOCK

**GENERAL.** We are authorized to issue, without stockholder approval, up to 20,000,000 shares of preferred stock having rights senior to those of our common stock. As of the date of this prospectus, we have no preferred stock outstanding. However, we have classified shares of Series A junior participating preferred stock in connection with the establishment of our stockholder rights plan, as described below, and we have issued rights that are in some cases exercisable for shares of Series A junior participating preferred stock. Our board is authorized to issue the preferred stock in one or more series and to fix and designate the rights, preferences, privileges and restrictions of the preferred stock, including:

- dividend rights;
- conversion rights;
- voting rights;
- redemption rights and terms of redemption; and
- liquidation preferences.

Our board may fix the number of shares constituting any series and the designations of these series.

The rights, preferences, privileges and restrictions of the preferred stock of each series will be fixed by a certificate of designation relating to each series. The prospectus supplement relating to each series will specify the terms of the preferred stock, including:

- the maximum number of shares in the series and the distinctive designation;
- the terms on which dividends will be paid, if any;
- the terms on which the shares may be redeemed, if at all;
- the liquidation preference, if any;
- the terms of any retirement or sinking fund for the purchase or redemption of the shares of the series;
- the terms and conditions, if any, on which the shares of the series will be convertible into, or exchangeable for, shares of any other class or classes of capital stock;
- the voting rights, if any, on the shares of the series; and
- any or all other preferences and relative, participating, operational or other special rights or qualifications, limitations or restrictions of the shares.

We will describe the specific terms of a particular series of preferred stock in the prospectus supplement relating to that series. The description of preferred stock above and the description of the terms of a particular series of preferred stock in the prospectus supplement are not complete. You should refer to the applicable certificate of designation for complete information. The prospectus supplement will also contain a description of U.S. federal income tax consequences relating to the preferred stock, if material.

**VOTING RIGHTS.** The General Corporation Law of Delaware provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving fundamental changes in the rights of holders of that preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

**OTHER.** Our issuance of preferred stock may have the effect of delaying or preventing a change in control. Our issuance of preferred stock could decrease the amount of earnings and assets available for distribution to the holders of common stock or could adversely affect the rights and powers, including voting rights, of the holders of common stock. The issuance of preferred stock could have the effect of decreasing the market price of our common stock.

#### IMPORTANT CHARTER AND STATUTORY PROVISIONS

**CLASSIFIED BOARD.** Our certificate of incorporation provides for the division of our board into three classes of directors, serving staggered three-year terms. Our certificate of incorporation further provides that the approval of the holders of at least two-thirds of the shares entitled to vote thereon and the approval of a majority of the entire board are necessary for the alteration, amendment or repeal of certain sections of our certificate of incorporation relating to the election and classification of our board, action by written consent, limitation of director liability, indemnification and the vote requirements for amendments to our certificate of incorporation. These provisions may deter hostile takeovers or delay changes in control or management.

**ACTION BY WRITTEN CONSENTS.** Our certificate of incorporation eliminates action by written consent of stockholders. This provision, which makes it difficult for stockholders to act outside of a special meeting, may also deter hostile takeovers or delay changes in control or management.

**IMPORTANT STATUTORY PROVISIONS.** We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, this statute prohibits a publicly held Delaware corporation from

engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to that date, the corporation's board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the person becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding, for purposes of determining the number of shares outstanding, shares owned by directors or employee stock plans; or
- on or after the date the stockholder became an interested stockholder, the business combination is approved by the corporation's board of directors and authorized by the affirmative vote, and not by written consent, of at least two-thirds of the outstanding voting stock of the corporation excluding that stock owned by the interested stockholder.

A "business combination" includes a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person, other than the corporation and any direct or indirect wholly-owned subsidiary of the corporation, who together with affiliates and associates, owns or, as an affiliate or associate, within three years prior, did own 15% or more of the corporation's outstanding voting stock.

Section 203 expressly exempts from the requirements described above any business combination by a corporation with an interested stockholder who becomes an interested stockholder in a transaction approved by that corporation's board of directors.

**STOCKHOLDER RIGHTS PLAN.** In December 1997, our board adopted a Stockholders Right Plan. This plan is designed to deter any potential coercive or unfair takeover tactics in the event of an unsolicited takeover attempt. It is not intended to prevent a takeover of CIENA on terms that are favorable and fair to all shareholders and will not interfere with a merger approved by the board of directors. Each right entitles shareholders to buy one one-thousandth of a share of our Series A junior participating preferred stock. The rights will be exercisable only if a person or a group acquires or announces a tender or exchange offer to acquire 15% or more of our common stock or if we enter into other business combination transactions not approved by the board of directors. In the event the rights become exercisable, the rights plan allows for our shareholders to acquire stock of CIENA or the surviving corporation, whether or not CIENA is the surviving corporation, having a value twice that of the exercise price of the rights. The rights were distributed to shareholders of record in January 1998. The rights will expire December 2007 and are redeemable for \$.001 per right by our board under certain circumstances.

**LIMITATIONS OF DIRECTOR LIABILITY.** Delaware law authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breach of directors' fiduciary duty of care. Although Delaware law does not change directors' duty of care, it enables corporations to limit available relief to equitable remedies such as injunction or rescission. Our certificate of incorporation limits the liability of directors to us or our stockholders to the full extent permitted by Delaware law. Specifically, directors are not personally liable for monetary damages to CIENA or its stockholders for breach of the director's fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to CIENA or its stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; and
- any transaction from which the director derived an improper personal benefit.

**INDEMNIFICATION.** To the maximum extent permitted by law, our bylaws provide for mandatory indemnification of directors and officers against any expense, liability or loss to which they may become subject, or which they may incur as a result of being or having been a director or officer. In addition, we

must advance or reimburse directors and officers for expenses they incur in connection with indemnifiable claims. We also have entered into indemnification agreements with our officers and directors providing for similar mandatory indemnification and expense reimbursement.

We also maintain directors' and officers' liability insurance.

#### DESCRIPTION OF DEPOSITARY SHARES

The following description is a general summary of the terms of the depositary shares which we may issue. This summary does not purport to be complete and is subject to, and is qualified in its entirety by reference to, all of the provisions of the applicable deposit agreement and related depositary receipts. Specific deposit agreements and depositary receipts will contain additional important terms and provisions and will be filed as exhibits to reports incorporated by reference into the registration statement which includes this prospectus before we issue and depositary shares. This summary of deposit agreements, depositary shares and depositary receipts relates to terms and conditions applicable to these types of securities generally. The particular terms of any series of depositary shares will be summarized in the applicable prospectus supplement and may differ from the terms summarized below, to the extent indicated in the applicable prospectus supplement.

#### GENERAL

We may issue depositary receipts for depositary shares, each of which will represent a fractional interest of a share of a particular series of preferred stock, as specified in the applicable prospectus supplement. Shares of preferred stock of each series represented by depositary shares will be deposited under a separate deposit agreement between the "depositary" named in the deposit agreement and us. Subject to the terms of the deposit agreement, each owner of a depositary receipt will be entitled, in proportion to the fractional interest of a share of a particular series of preferred stock represented by the depositary shares evidenced by that depositary receipt, to all the rights and preferences of the preferred stock represented by those depositary shares, including dividend, voting, conversion, redemption and liquidation rights.

The depositary shares will be evidenced by depositary receipts issued pursuant to the applicable deposit agreement. Immediately following the issuance and delivery of our preferred stock to the depositary, we will cause the depositary to issue, on our behalf, the depositary receipts. Copies of the applicable form of deposit agreement and depositary receipt may be obtained from us upon request, and the statements made in this summary relating to the deposit agreement and the depositary receipts to be issued under the deposit agreement are summaries of provisions of the deposit agreement and the related depositary receipts.

#### DIVIDENDS AND OTHER DISTRIBUTIONS

The depositary will distribute all cash dividends or other cash distributions received in respect of the preferred stock to the record holders of depositary receipts evidencing the related depositary shares in proportion to the number of such depositary receipts owned by such holders, subject to the obligations of holders to file proofs, certificates and other information and to pay some charges and expenses to the depositary.

In the event of a distribution other than in cash, the depositary will distribute property received by it to the record holders of depositary receipts entitled to that property, subject to the obligations of holders to file proofs, certificates and other information and to pay some charges and expenses to the depositary, unless the depositary determines that it is not feasible to make the distribution, in which case the depositary may, with our approval, sell the property and distribute the net proceeds from the sale to the holders.

No distribution will be made in respect of any depositary share to the extent that it represents any preferred stock converted into other securities.

## WITHDRAWAL OF PREFERRED STOCK

Upon surrender of the depositary receipts at the corporate trust office of the depositary, unless the related depositary shares have previously been redeemed or converted into other securities, the holders of those depositary receipts will be entitled to delivery of the number of whole or fractional shares of the preferred stock and any money or other property represented by the depositary shares evidenced by the depositary receipts. If the holder delivers depositary receipts evidencing a number of depositary shares greater than the number of depositary shares representing the number of shares of preferred stock to be withdrawn, the depositary will deliver to the holder at the same time a new depositary receipt evidencing the balance.

## REDEMPTION OF DEPOSITARY SHARES

Whenever we redeem shares of preferred stock held by the depositary, the depositary will redeem the number of depositary shares representing shares of the preferred stock so redeemed, provided we have paid in full to the depositary the redemption price of the preferred stock to be redeemed plus an amount equal to any dividends on the preferred stock accrued and unpaid to the date fixed for redemption. The redemption price per depositary share will be equal to the corresponding proportion of the redemption price and any other amounts per share payable with respect to the preferred stock. If fewer than all the depositary shares are to be redeemed, the depositary shares to be redeemed will be selected pro rata, as nearly as may be practicable without creating fractional depositary shares, or by another equitable method.

From and after the date fixed for redemption, all dividends in respect of the shares of preferred stock called for redemption will cease to accrue, the depositary shares called for redemption will no longer be deemed to be outstanding and all rights of the holders of the depositary receipts evidencing the depositary shares called for redemption will cease, except the right to receive any moneys payable upon the redemption and any money or other property to which the holders of the depositary receipts were entitled upon the redemption and surrender thereof to the depositary.

## VOTING OF THE PREFERRED STOCK

Upon receipt of notice of any meeting at which the holders of the preferred stock are entitled to vote, the depositary will mail the information contained in the notice of meeting to the record holders of the depositary receipts evidencing the depositary shares which represent such preferred stock. Each record holder of these depositary receipts on the record date will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the amount of preferred stock represented by the holder's depositary shares. The depositary will vote the amount of preferred stock represented by the depositary shares in accordance with the instructions, and we will agree to take all reasonable action which may be deemed necessary by the depositary in order to enable the depositary to do so. The depositary will abstain from voting the amount of preferred stock represented by the depositary shares to the extent it does not receive specific instructions from the holders of depositary receipts evidencing the depositary shares. The depositary shall not be responsible for any failure to carry out any instruction to vote, or for the manner or effect of any such vote made, as long as such action or non-action is in good faith and does not result from the depositary's negligence or willful misconduct.

## LIQUIDATION PREFERENCE

In the event of our liquidation, dissolution or winding up, whether voluntary or involuntary, the holders of each depositary receipt will be entitled to the fraction of the liquidation preference accorded each share of preferred stock represented by the depositary shares evidenced by such depositary receipt, as set forth in the applicable prospectus supplement.

## CONVERSION OF PREFERRED STOCK

The depositary shares, as such, are not convertible into our common stock or any of our other securities or property. Nevertheless, if specified in the applicable prospectus supplement relating to an

offering of depositary shares, the depositary receipts may be surrendered by their holders to the depositary with written instructions to the depositary to instruct us to cause conversion of the preferred stock represented by the depositary shares evidenced by the depositary receipts into whole shares of our common stock, other shares of our preferred stock or other of our equity or debt securities. We have agreed that upon receipt of those instructions and any amounts payable in respect thereof, we will cause the conversion thereof utilizing the same procedures as those provided for delivery of preferred stock to effect such conversion. If the depositary shares evidenced by a depositary receipt are to be converted in part only, a new depositary receipt or receipts will be issued for any depositary shares not to be converted. No fractional shares of common stock will be issued upon conversion, and if conversion would result in a fractional share being issued, we will pay an amount in cash equal to the value of the fractional interest based upon the average of the closing prices of the common stock for a specified period of time prior to the conversion.

#### AMENDMENT AND TERMINATION OF THE DEPOSIT AGREEMENT

The form of depositary receipt evidencing the depositary shares which represent the preferred stock and any provision of the deposit agreement may at any time be amended by agreement between the depositary and us. However, any amendment that materially and adversely alters the rights of the holders of depositary receipts or that would be materially and adversely inconsistent with the rights granted to the holders of the related preferred stock will not be effective unless such amendment has been approved by the existing holders of at least a majority of the depositary shares evidenced by the depositary receipts then outstanding. Subject to certain exceptions in the deposit agreement, no amendment may impair the right of any holder of depositary receipts to surrender any depositary receipt with instructions to deliver to the holder the related preferred stock and all money and other property, if any, represented thereby, except in order to comply with law. Every holder of an outstanding depositary receipt at the time any such amendment becomes effective shall be deemed, by continuing to hold such receipt, to consent and agree to such amendment and to be bound by the deposit agreement as amended thereby.

Unless specified otherwise in the applicable prospectus supplement, we may terminate the deposit agreement upon not less than 30 days prior written notice to the depositary if a majority of each class of depositary shares affected by such termination consents, at which time the depositary will deliver or make available to each holder of depositary receipts, upon surrender of the depositary receipts held by such holder, such number of whole or fractional shares of preferred stock as are represented by the depositary shares evidenced by such depositary receipts, together with any other property held by the depositary with respect to such depositary receipt. In addition, the deposit agreement will automatically terminate if:

- all outstanding depositary shares shall have been redeemed,
- there shall have been a final distribution in respect of the related preferred stock in connection with any liquidation, dissolution or winding up of our company and such distribution shall have been distributed to the holders of depositary receipts evidencing the depositary shares representing such preferred stock, or
- each share of the related preferred stock shall have been converted into our securities not represented by depositary shares.

#### CHARGES OF PREFERRED STOCK DEPOSITARY

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the deposit agreement. In addition, we will pay the fees and expenses of the depositary in connection with the performance of its duties under the deposit agreement. However, holders of depositary receipts will pay the fees and expenses of the depositary for any duties the holders request it to perform which are outside of those expressly provided for in the deposit agreement.



## MISCELLANEOUS

The depositary will forward to holders of depositary receipts any reports and communications from us which the depositary receives with respect to the related preferred stock.

Unless specified otherwise in the applicable prospectus supplement, neither we nor the depositary will be liable if either of us is prevented from or delayed in performing its obligations under the deposit agreement, whether by law or any circumstances beyond its control. The obligations of the depositary and our company under the Deposit Agreement will be limited to performing their duties thereunder in good faith and without negligence, in the case of any action or inaction in the voting of preferred stock represented by the depositary shares, gross negligence or willful misconduct. We and the depositary will not be obligated to prosecute or defend any legal proceeding in respect of any depositary receipts, depositary shares or shares of preferred stock represented thereby unless satisfactory indemnity is furnished. We and the depositary may rely on written advice of counsel or accountants, or information provided by persons presenting shares of preferred stock represented thereby for deposit, holders of depositary receipts or other persons believed in good faith to be competent to give such information, and on documents believed in good faith to be genuine and signed by a proper party.

In the event the depositary receives conflicting claims, requests or instructions from any holders of depositary receipts, on the one hand, and us, on the other hand, the depositary shall be entitled to act on the claims, requests or instructions received from us.

## DESCRIPTION OF DEBT SECURITIES

We may offer any combination of senior debt securities or subordinated debt securities. Debt securities are unsecured obligations to repay advanced funds. We may issue the senior debt securities and the subordinated debt securities under separate indentures between us, as issuer, and the trustee or trustees identified in the prospectus supplement. The form for each type of indenture is filed as an exhibit to the registration statement of which this prospectus is a part.

The prospectus supplement will describe the particular terms of any debt securities we may offer and may differ from the terms summarized below. The following summaries of the debt securities and the indentures are not complete. We urge you to read the indentures filed as exhibits to the registration statement which includes this prospectus and the description of the debt securities included in the prospectus supplement.

## GENERAL

We may issue an unlimited principal amount of debt securities in separate series. We may specify a maximum aggregate principal amount for the debt securities of any series. The debt securities will have terms that are consistent with the indentures. Unless the prospectus supplement indicates otherwise, senior debt securities will be unsecured and unsubordinated obligations and will rank equal with all our other unsecured and unsubordinated debt. Subordinated debt securities will be paid only if all payments due under our senior indebtedness, including any outstanding senior debt securities, have been made.

The indentures might not limit the amount of other debt that we may incur or whether that debt is senior to the debt securities offered by this prospectus, and might not contain financial or similar restrictive covenants. The indentures might not contain any provision to protect holders of debt securities against a sudden or dramatic decline in our ability to pay our debt.

The prospectus supplement will describe the debt securities and the price or prices at which we will offer the debt securities. The description will include:

- the title and form of the debt securities;
- any limit on the aggregate principal amount of the debt securities or the series of which they are a part;

- the person to whom any interest on a debt security of the series will be paid;
- the date or dates on which we must repay the principal;
- the rate or rates at which the debt securities will bear interest, if any, the date or dates from which interest will accrue, and the dates on which we must pay interest;
- if applicable, the duration and terms of the right to extend interest payment periods;
- the place or places where we must pay the principal and any premium or interest on the debt securities;
- the terms and conditions on which we may redeem any debt security, if at all;
- any obligation to redeem or purchase any debt securities, and the terms and conditions on which we must do so;
- the denominations in which we may issue the debt securities;
- the manner in which we will determine the amount of principal of or any premium or interest on the debt securities;
- the currency in which we will pay the principal of and any premium or interest on the debt securities;
- the principal amount of the debt securities that we will pay upon declaration of acceleration of their maturity;
- the amount that will be deemed to be the principal amount for any purpose, including the principal amount that will be due and payable upon any maturity or that will be deemed to be outstanding as of any date;
- if applicable, that the debt securities are defeasible and the terms of such defeasance;
- if applicable, the terms of any right to convert debt securities into, or exchange debt securities for, shares of common stock or other securities or property;
- whether we will issue the debt securities in the form of one or more global securities and, if so, the respective depositaries for the global securities and the terms of the global securities;
- the subordination provisions that will apply to any subordinated debt securities;
- any addition to or change in the events of default applicable to the debt securities and any change in the right of the trustee or the holders to declare the principal amount of any of the debt securities due and payable; and
- any addition to or change in the covenants in the indentures.

We may sell the debt securities at a substantial discount below their stated principal amount. We will describe U.S. federal income tax considerations, if any, applicable to debt securities sold at an original issue discount in the prospectus supplement. An "original issue discount security" is any debt security sold for less than its face value, and which provides that the holder cannot receive the full face value if maturity is accelerated. The prospectus supplement relating to any original issue discount securities will describe the particular provisions relating to acceleration of the maturity upon the occurrence of an event of default. In addition, we will describe U.S. federal income tax or other considerations applicable to any debt securities that are denominated in a currency or unit other than U.S. dollars in the prospectus supplement.

#### CONVERSION AND EXCHANGE RIGHTS

The prospectus supplement will describe, if applicable, the terms on which you may convert debt securities into or exchange them for common stock or other securities or property. The conversion or

exchange may be mandatory or may be at your option. The prospectus supplement will describe how the number of shares of common stock or other securities or property to be received upon conversion or exchange would be calculated.

#### SUBORDINATION OF SUBORDINATED DEBT SECURITIES

Unless the prospectus supplement indicates otherwise, the following provisions will apply to the subordinated debt securities. The indebtedness underlying the subordinated debt securities will be payable only if all payments due under our senior indebtedness, including any outstanding senior debt securities, have been made. If we distribute our assets to creditors upon any dissolution, winding-up, liquidation or reorganization or in bankruptcy, insolvency, receivership or similar proceedings, we must first pay all amounts due or to become due on all senior indebtedness before we pay the principal of, or any premium or interest on, the subordinated debt securities. In the event the subordinated debt securities are accelerated because of an event of default, we may not make any payment on the subordinated debt securities until we have paid all senior indebtedness or the acceleration is rescinded. If the payment of subordinated debt securities accelerates because of an event of default, we must promptly notify holders of senior indebtedness of the acceleration.

If we experience a bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of subordinated debt securities may receive less, ratably, than our other creditors. The indenture for subordinated debt securities may not limit our ability to incur additional senior indebtedness.

#### FORM, EXCHANGE AND TRANSFER

We will issue debt securities only in fully registered form, without coupons, and, unless the prospectus supplement indicates otherwise, only in denominations of \$1,000 and integral multiples thereof. The holder of a debt security may elect, subject to the terms of the indentures and the limitations applicable to global securities, to exchange them for other debt securities of the same series of any authorized denomination and of similar terms and aggregate principal amount.

Holders of debt securities may present them for exchange as provided above or for registration of transfer, duly endorsed or with the form of transfer duly executed, at the office of the transfer agent we designate for that purpose. We will not impose a service charge for any registration of transfer or exchange of debt securities, but we may require a payment sufficient to cover any tax or other governmental charge payable in connection with the transfer or exchange. We will name the transfer agent in the prospectus supplement. We may designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, but we must maintain a transfer agent in each place in which we will pay on debt securities.

If we redeem the debt securities, we will not be required to issue, register the transfer of or exchange any debt security during a specified period prior to mailing a notice of redemption. We are not required to register the transfer of or exchange any debt security selected for redemption, except the unredeemed portion of the debt security being redeemed.

#### GLOBAL SECURITIES

The debt securities may be represented, in whole or in part, by one or more global securities that will have an aggregate principal amount equal to that of all debt securities of that series. Each global security will be registered in the name of a depository identified in the prospectus supplement. We will deposit the global security with the depository or a custodian, and the global security will bear a legend regarding the restrictions on exchanges and registration of transfer.

No global security may be exchanged in whole or in part for debt securities registered, and no transfer of a global security in whole or in part may be registered, in the name of any person other than the depository or any nominee or successor of the depository unless:

- the depository is unwilling or unable to continue as depository; or
- the depository is no longer in good standing under the Exchange Act or other applicable statute or regulation.

The depository will determine how all securities issued in exchange for a global security will be registered.

As long as the depository or its nominee is the registered holder of a global security, we will consider the depository or the nominee to be the sole owner and holder of the global security and the underlying debt securities. Except as stated above, owners of beneficial interests in a global security will not be entitled to have the global security or any debt security registered in their names, will not receive physical delivery of certificated debt securities and will not be considered to be the owners or holders of the global security or underlying debt securities. We will make all payments of principal, premium and interest on a global security to the depository or its nominee. The laws of some jurisdictions require that some purchasers of securities take physical delivery of such securities in definitive form. These laws may prevent you from transferring your beneficial interests in a global security.

Only institutions that have accounts with the depository or its nominee and persons that hold beneficial interests through the depository or its nominee may own beneficial interests in a global security. The depository will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants. Ownership of beneficial interests in a global security will be shown only on, and the transfer of those ownership interests will be effected only through, records maintained by the depository or any such participant.

The policies and procedures of the depository may govern payments, transfers, exchanges and other matters relating to beneficial interests in a global security. We and the trustee will assume no responsibility or liability for any aspect of the depository's or any participant's records relating to, or for payments made on account of, beneficial interests in a global security.

#### PAYMENT AND PAYING AGENTS

Unless the prospectus supplement indicates otherwise, we will pay principal and any premium or interest on a debt security to the person in whose name the debt security is registered at the close of business on the regular record date for such interest.

Unless the prospectus supplement indicates otherwise, we will pay principal and any premium or interest on the debt securities at the office of our designated paying agent. Unless the prospectus supplement indicates otherwise, the corporate trust office of the trustee will be the paying agent for the debt securities.

Any other paying agents we designate for the debt securities of a particular series will be named in the prospectus supplement. We may designate additional paying agents, rescind the designation of any paying agent or approve a change in the office through which any paying agent acts, but we must maintain a paying agent in each place of payment for the debt securities.

The paying agent will return to us all money we pay to it for the payment of the principal, premium or interest on any debt security that remains unclaimed for a specified period. Thereafter, the holder may look only to us for payment, as an unsecured general creditor.

#### CONSOLIDATION, MERGER AND SALE OF ASSETS

Under the terms of the indentures, so long as any securities remain outstanding, we may not consolidate or enter into a share exchange with or merge into any other person, in a transaction in which

we are not the surviving corporation, or sell, convey, transfer or lease our properties and assets substantially as an entirety to any person, unless:

- the successor assumes our obligations under the debt securities and the indentures; and
- we meet the other conditions described in the indentures.

#### EVENTS OF DEFAULT

Each of the following will constitute an event of default under each indenture:

- failure to pay the principal of or any premium on any debt security when due;
- failure to pay any interest on any debt security when due, for more than a specified number of days past the due date;
- failure to deposit any sinking fund payment when due;
- failure to perform any covenant or agreement in the indenture, which failure continues for a specified number of days after written notice has been given by the trustee or the requisite holders of the debt securities of that series;
- certain events of bankruptcy, insolvency or reorganization; and
- any other event of default specified in the prospectus supplement.

If an event of default occurs and continues, both the trustee and holders of a specified percentage in aggregate principal amount of the outstanding securities of that series may declare the principal amount of the debt securities of that series to be immediately due and payable. The holders of a majority in aggregate principal amount of the outstanding securities of that series may, under certain circumstances, rescind and annul the acceleration if all events of default, other than the nonpayment of accelerated principal, have been cured or waived.

Except for certain duties in case of an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request or direction of any of the holders, unless the holders have offered the trustee reasonable indemnity. If they provide this indemnification, the holders of a majority in aggregate principal amount of the outstanding securities of any series may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities of that series.

No holder of a debt security of any series may institute any proceeding with respect to the indentures, or for the appointment of a receiver or a trustee, or for any other remedy, unless:

- the holder has previously given the trustee written notice of a continuing event of default;
- the holders of a specified percentage in aggregate principal amount of the outstanding securities of that series have made a written request upon the trustee, and have offered reasonable indemnity to the trustee, to institute the proceeding; and
- the trustee has failed to institute the proceeding for a specified period of time after its receipt of the notification; and
- the trustee has not received a direction inconsistent with the request within a specified number of days.

## MODIFICATION AND WAIVER

We and the trustee may change an indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the indenture; and
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of notes may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, we and the trustee may only make the following changes with the consent of the holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of notes;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption, of any debt securities; or
- reducing the percentage of debt securities the holders of which are required to consent to any amendment.

The holders of a majority in principal amount of the outstanding debt securities of any series may waive any past default under the indenture with respect to debt securities of that series, except a default in the payment of principal, premium or interest on any debt security of that series or in respect of a covenant or provision of the indenture that cannot be amended without each holder's consent.

Except in certain limited circumstances, we may set any day as a record date for the purpose of determining the holders of outstanding debt securities of any series entitled to give or take any direction, notice, consent, waiver or other action under the indentures. In certain limited circumstances, the trustee may set a record date. To be effective, the action must be taken by holders of the requisite principal amount of such debt securities within a specified period following the record date.

## DEFEASANCE

To the extent stated in the prospectus supplement, we may elect to apply the provisions in the indentures relating to defeasance and discharge of indebtedness, or to defeasance of certain restrictive covenants, to the debt securities of any series. The indentures provide that, upon satisfaction of the requirements described below, we may terminate all of our obligations under the debt securities of any series and the applicable indenture, which is known as legal defeasance, other than our obligation:

- to maintain a registrar and paying agents and hold moneys for payment in trust;
- to register the transfer or exchange of the debt securities; and
- to replace mutilated, destroyed, lost or stolen debt securities.

In addition, we may terminate our obligation to comply with any restrictive covenants under the debt securities of any series or the applicable indenture, which is known as covenant defeasance.

We may exercise our legal defeasance option even if we have previously exercised our covenant defeasance option. If we exercise either defeasance option, payment of the debt securities may not be accelerated because of the occurrence of events of default.

To exercise either defeasance option as to debt securities of any series, we must irrevocably deposit in trust with the trustee money and/or obligations backed by the full faith and credit of the United States that will provide money in an amount sufficient in the written opinion of a nationally recognized firm of

independent public accountants to pay the principal of, premium, if any, and each installment of interest on the debt securities. We may only establish this trust if, among other things:

- no event of default shall have occurred or be continuing;
- in the case of legal defeasance, we have delivered to the trustee an opinion of counsel to the effect that we have received from, or there has been published by, the Internal Revenue Service a ruling or there has been a change in law, which in the opinion of our counsel, provides that holders of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred;
- in the case of covenant defeasance, we have delivered to the trustee an opinion of counsel to the effect that the holders of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred; and
- we satisfy other customary conditions described in the applicable indenture.

#### NOTICES

We will mail notices to holders of debt securities as indicated in the prospectus supplement.

#### TITLE

We may treat the person in whose name a debt security is registered as the absolute owner, whether or not such debt security may be overdue, for the purpose of making payment and for all other purposes.

#### GOVERNING LAW

The indentures and the debt securities will be governed by and construed in accordance with the laws of the state of New York.

#### DESCRIPTION OF WARRANTS

##### GENERAL

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement and may differ from the terms described below.

We may issue, together with other securities or separately, warrants to purchase our debt securities, common stock, preferred stock or depository shares. We will issue the warrants under warrant agreements to be entered into between us and a bank or trust company, as warrant agent, all as set forth in the applicable prospectus supplement. The warrant agent will act solely as our agent in connection with the warrants of the series being offered and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

The applicable prospectus supplement will describe the following terms, where applicable, of warrants in respect of which this prospectus is being delivered:

- the title of the warrants;
- the designation, amount and terms of the securities for which the warrants are exercisable and the procedures and conditions relating to the exercise of such warrants;
- the designation and terms of the other securities, if any, with which the warrants are to be issued and the number of warrants issued with each such security;
- the price or prices at which the warrants will be issued;
- the aggregate number of warrants;
- any provisions for adjustment of the number or amount of securities receivable upon exercise of the warrants or the exercise price of the warrants;
- the price or prices at which the securities purchasable upon exercise of the warrants may be purchased;
- if applicable, the date on and after which the warrants and the securities purchasable upon exercise of the warrants will be separately transferable;
- if applicable, a discussion of the material United States federal income tax considerations applicable to the exercise of the warrants;
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants;
- the date on which the right to exercise the warrants shall commence, and the date on which the right shall expire;
- the maximum or minimum number of warrants which may be exercised at any time; and
- information with respect to book-entry procedures, if any;

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

#### EXERCISE OF WARRANTS

Each warrant will entitle the holder thereof to purchase for cash the amount of debt securities, shares of preferred stock, shares of common stock, or depository shares at the exercise price as will in each case be set forth in, or be determinable as set forth in, the applicable prospectus supplement. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Warrants may be exercised as set forth in the applicable prospectus supplement relating to the warrants offered thereby. Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will, as soon as practicable, forward the purchased securities. If less than all of



the warrants represented by the warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

#### ENFORCEABILITY OF RIGHTS OF HOLDERS OF WARRANTS

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, that holder's warrants.

#### PLAN OF DISTRIBUTION

We may sell the securities being offered hereby in one or more of the following ways from time to time:

- through agents to the public or to investors;
- to underwriters for resale to the public or to investors; or
- directly to investors.

We will set forth in a prospectus supplement the terms of the offering of securities, including:

- the name or names of any agents or underwriters;
- the purchase price of the securities being offered and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any initial public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchanges on which such securities may be listed.

#### AGENTS

We may designate agents who agree to use their reasonable or best efforts to solicit purchases for the period of their appointment or to sell securities on a continuing basis.

#### UNDERWRITERS

If we use underwriters for a sale of securities, the underwriters will acquire the securities for their own account. The underwriters may resell the securities in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. The underwriters will be obligated to purchase all the securities of the series offered if they purchase any of the securities of that series. We may change from time to time any initial public offering price and any discounts or concessions the underwriters allow or reallocate or pay to dealers. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement naming the underwriter the nature of any such relationship.

**DIRECT SALES**

We may also sell securities directly to one or more purchasers without using underwriters or agents.

Underwriters, dealers and agents that participate in the distribution of the securities may be underwriters as defined in the Securities Act and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify in the applicable prospectus supplement any underwriters, dealers or agents and will describe their compensation. We may have agreements with the underwriters, dealers and agents to indemnify them against specified civil liabilities, including liabilities under the Securities Act. Underwriters, dealers and agents may engage in transactions with or perform services for us or our subsidiaries in the ordinary course of their businesses.

**TRADING MARKETS AND LISTING OF SECURITIES**

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is listed on the Nasdaq National Market. We may elect to list any other class or series of securities on any exchange, but we are not obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the securities.

**STABILIZATION ACTIVITIES**

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

**PASSIVE MARKET MARKING**

Any underwriters who are qualified market makers on the Nasdaq National Market may engage in passive market making transactions in the securities on the Nasdaq National Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

**LEGAL MATTERS**

Hogan & Hartson LLP, Baltimore, Maryland, will provide us with an opinion as to certain legal matters in connection with the securities we are offering.

## 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 by reference in this prospectus, have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report incorporated by reference herein, 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.

## PART II

## INFORMATION NOT REQUIRED IN PROSPECTUS

## ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the fees and expenses in connection with the issuance and distribution of the securities being registered. Except for the SEC registration fee, all amounts are estimates.

Securities and Exchange Commission registration fee.....	\$375,000
Transfer agent's and trustee's fees and expenses.....	25,000
Printing and engraving expenses.....	50,000
Legal fees and expenses.....	100,000
Accounting fees and expenses.....	35,000
Miscellaneous expenses.....	25,000
	-----
Total.....	\$610,000
	=====

## ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporation Law, as amended ("DGCL") authorizes a court to award, or a corporation's board of directors to grant indemnity to directors and officers under some circumstances for liabilities incurred in connection with their activities in such capacities (including reimbursement for expenses incurred). The Registrant's Third Amended and Restated Certificate of Incorporation provides that no director of the Registrant will be personally liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Registrant or to its stockholders, (ii) for acts or omissions not made in good faith or which involved intentional misconduct or a knowing violation of the law, (iii) under Section 174 of the DGCL, or (iv) for any transactions from which the director derives an improper personal benefit. In addition, the Registrant's Amended and Restated Bylaws provide that any director or officer who was or is a party or is threatened to be made a party to any action or proceeding by reason of his or her services to the Registrant will be indemnified to the fullest extent permitted by the DGCL.

The Registrant has entered into agreements with each of its executive officers and directors under which the Registrant has agreed to indemnify each of them against expenses and losses incurred for claims brought against them by reason of their being an officer or director of the Registrant. There is no pending litigation or proceeding involving a director or officer of the Registrant as to which indemnification is being sought, nor is the Registrant aware of any pending or threatened litigation that may result in claims for indemnification by any director or executive officer.

## ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

## (a) Exhibits:

EXHIBIT NUMBER -----	DESCRIPTION -----
1.1+	Form of Underwriting Agreement
3.1*	Certificate of Amendment to Third Restated Certificate of Incorporation of the Registrant
3.2*	Third Restated Certificate of Incorporation
3.3*	Amended and Restated Bylaws of the Registrant
3.5****	Certificate of Amendment to Third Restated Certificate of Incorporation dated March 23, 1998
3.6****	Certificate of Amendment to Third Restated Certificate of Incorporation dated March 16, 2000
4.1**	Rights Agreement dated December 29, 1997
4.2***	Amendment to Rights Agreement
4.3*	Form of Common Stock Certificate
4.4+	Form of Senior Indenture
4.5+	Form of Subordinated Indenture
4.6+	Form of Certificate of Designation with respect to Preferred Stock
4.7+	Form of Deposit Agreement
4.8+	Form of Warrant
4.9+	Form of Supplemental Indenture
5.1	Opinion of Hogan & Hartson L.L.P. (filed herewith)
12.1	Statement of Computation of Ratio of Earnings to Fixed Charges
23.1	Consent of PricewaterhouseCoopers LLP (filed herewith)
23.2	Consent of Hogan & Hartson LLP (included in Exhibit 5.1)
23.3	Consent of Deloitte & Touche LLP (filed herewith)
24.1	Powers of Attorney (included on signature page)

- 
- + To be filed by amendment or as an exhibit to a report pursuant to Section 13(a), 13(c) or 15(d) of the Exchange Act.
- \* Incorporated by reference to the Company's Registration Statement on Form S-1 (333-17729).
- \*\* Incorporated by reference from the Company's Form 8-K dated December 29, 1997.
- \*\*\* Incorporated by reference from the Company's Form 8-K dated October 14, 1998.
- \*\*\*\* Incorporated by reference from the Company's Form 10-Q dated May 18, 2000.

## ITEM 17. UNDERTAKINGS.

## (a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was

registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price, set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

provided, however, that paragraphs (i) and (ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference into the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) The undersigned Registrant hereby undertakes to supplement the prospectus, after the expiration of the subscription period, to set forth the results of the subscription offer, the transactions by the underwriters during the subscription period, the amount of unsubscribed securities to be purchased by the underwriters, and the terms of any subsequent reoffering thereof. If any public offering by the underwriters is to be made on terms differing from those set forth on the cover page of the prospectus, a post-effective amendment will be filed to set forth the terms of such offering.

(d) The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance under Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(e) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its

counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(f) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) or Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Act.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Linthicum, State of Maryland, on January 18, 2001.

## CIENA CORPORATION

By: /s/ PATRICK H. NETTLES, PH.D.

-----  
Patrick H. Nettles, Ph.D.  
Chairman and Chief Executive Officer

## POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Patrick H. Nettles, Ph.D., Joseph R. Chinnici and Michael O. McCarthy III, and each of them, with full power of substitution and resubstitution and each with full power to act without the other, his or her true and lawful attorney-in-fact and agent, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and any related Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission or any state, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their, his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

By: /s/ PATRICK H. NETTLES, PH.D. ----- Patrick H. Nettles, Ph.D.	Chairman and Chief Executive Officer (Principal Executive Officer)	Date: January 18, 2001
By: /s/ GARY B. SMITH ----- Gary B. Smith	President and Director	Date: January 18, 2001
By: /s/ JOSEPH R. CHINNICI ----- Joseph R. Chinnici	Sr. Vice President, Chief Financial Officer (Principal Financial Officer)	Date: January 18, 2001
By: /s/ ANDREW C. PETRIK ----- Andrew C. Petrik	Vice President, Controller and Treasurer (Principal Accounting Officer)	Date: January 18, 2001
By: /s/ STEPHEN P. BRADLEY ----- Stephen P. Bradley	Director	Date: January 18, 2001
By: /s/ HARVEY B. CASH ----- Harvey B. Cash	Director	Date: January 18, 2001
By: /s/ JOHN R. DILLON ----- John R. Dillon	Director	Date: January 18, 2001



By: /s/ LAWTON W. FITT

Director

Date: January 18, 2001

-----  
Lawton W. Fitt

By: /s/ JUDITH M. O'BRIEN

Director

Date: January 18, 2001

-----  
Judith M. O'Brien

By: /s/ GERALD H. TAYLOR

Director

Date: January 18, 2001

-----  
Gerald H. Taylor

## EXHIBIT INDEX

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4.6+	Form of Certificate of Designation with respect to Preferred Stock
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4.8+	Form of Warrant
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24.1	Powers of Attorney (included on signature page)
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**	Incorporated by reference from the Company's Form 8-K dated December 29, 1997.
***	Incorporated by reference from the Company's Form 8-K dated October 14, 1998.
****	Incorporated by reference from the Company's Form 10-Q dated May 18, 2000.

Hogan & Hartson L.L.P.  
111 South Calvert Street, Suite 1600  
Baltimore, Maryland 21202

January 18, 2001

Board of Directors  
CIENA Corporation  
1201 Winterson Road  
Linthicum, MD 21090

Ladies and Gentlemen:

We are acting as counsel to CIENA Corporation, a Delaware corporation (the "Company"), in connection with the Company's registration statement on Form S-3 (the "Registration Statement"), filed with the Securities and Exchange Commission relating to the proposed public offering of up to \$1,500,000,000 in aggregate principal amount or value of one or more series of senior or subordinated debt securities (the "Debt Securities"), shares of common stock, par value \$.01 per share (the "Common Stock"), shares of preferred stock, par value \$.01 per share (the "Preferred Stock"), warrants to purchase Common Stock or Preferred Stock (the "Warrants") or depositary shares representing interests in Preferred Stock (the "Depositary Shares"). The Debt Securities, the Common Stock, the Preferred Stock, the Warrants and the Depositary Shares are herein referred to as "Securities." The Securities may be offered and sold by the Company from time to time as set forth in the prospectus which forms a part of the Registration Statement (the "Prospectus"), and as to be set forth in one or more supplements to the Prospectus (each, a "Prospectus Supplement"). This opinion letter is furnished to you at your request to enable you to fulfill the requirements of Item 601(b)(5) of Regulation S-K, 17 C.F.R. Section 229.601(b)(5), in connection with the Registration Statement.

For purposes of this opinion letter, we have examined copies of the following documents:

1. An executed copy of the Registration Statement.
2. The Third Restated Certificate of Incorporation of the Company, as certified by the Secretary of State of the State of Delaware on January 16, 2001 and by the Secretary of the Company on the date hereof as then being complete, accurate and in effect (the "Certificate of Incorporation").

3. The Amended and Restated Bylaws of the Company, as certified by the Secretary of the Company on the date hereof as then being complete, accurate and in effect (the "Bylaws").
4. Resolutions of the Board of Directors of the Company adopted by written consent on January 14, 2001, as certified by the Secretary of the Company on the date hereof as then being complete, accurate and in effect, relating to the filing by the Company of the Registration Statement and related matters.

In our examination of the aforesaid documents, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the accuracy and completeness of all documents submitted to us, the authenticity of all original documents, and the conformity to authentic original documents of all documents submitted to us as copies (including telecopies). As to matters of fact relevant to the opinions expressed herein, we have relied on the representations and statements of fact made in the aforesaid documents. We have also independently established the facts so relied on. This opinion letter is given, and all statements herein are made, in the context of the foregoing.

For purposes of this opinion letter, we have assumed that

- (i) the issuance, sale, amount, and terms of the Securities to be offered from time to time will be duly authorized and established by proper action of the Board of Directors of the Company, consistent with the procedures and terms described in the Registration Statement (each, a "Board Action") and in accordance with the Certificate of Incorporation, Bylaws and applicable Delaware law;
- (ii) any Debt Securities will be issued pursuant to an Indenture entered into by the Company and duly qualified trustee (the "Trustee");
- (iii) any Warrants will be issued under one or more warrant agreements (each, a "Warrant Agreement"), each to be between the Company and a financial institution identified therein as a warrant agent (each, a "Warrant Agent");

- (iv) prior to the issuance of shares of Preferred Stock or Securities convertible into or exchangeable for Preferred Stock, including Depositary Shares, an appropriate Certificate of Designation relating to a class or series of the Preferred Stock to be issued will have been duly authorized and adopted and filed with the Secretary of State of the State of Delaware (the "Certificate of Designation"); and
- (v) any Depositary Shares will be issued by the Depositary (as defined below) under one or more deposit agreements (each, a "Deposit Agreement"), each to be between the Company and a financial institution identified therein as the depositary (each, a "Depositary").

This opinion letter is based as to matters of law solely on applicable provisions of the following, as currently in effect: (i) the Delaware General Corporation Law, as amended, and (ii) as to the opinions given in paragraphs (a), (d) and (e), New York contract law (but not including any statutes, ordinances, administrative decisions, rules or regulations of any political subdivision of the State of New York). We express no opinion herein as to any other laws, statutes, ordinances, rules, or regulations. As used herein, the term "Delaware General Corporation Law, as amended" includes the statutory provisions contained therein, all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting these laws.

Based upon, subject to and limited by the foregoing, we are of the opinion that:

(a) following (i) effectiveness of the Registration Statement, (ii) due execution and delivery of an applicable Indenture by the Company and the Trustee named therein, (iii) final action of the Board of Directors duly authorizing the issuance of any series of Debt Securities, the terms of which have been duly established in accordance with the provisions of the Indenture, (iv) due authentication by the Trustee, and (v) due execution and delivery of such Debt Securities on behalf of the Company against payment therefor in accordance with the terms of such Board Action, any applicable underwriting agreement or purchase agreement, the Indenture and any applicable supplemental indenture, and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, the Debt Securities will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

(b) following (i) final action of the Board of Directors of the Company authorizing an issuance of Common Stock, (ii) effectiveness of the Registration Statement, (iii) issuance and delivery of certificates for Common Stock against payment therefor in accordance with the terms of such Board Action and any applicable underwriting agreement or purchase agreement, and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, or upon the exercise of any Warrants for Common Stock in accordance with the terms thereof, or conversion or exchange of Preferred Stock or Debt Securities that, by their terms, are convertible into or exchangeable for Common Stock, the Common Stock will be validly issued, fully paid, and nonassessable;

(c) following (i) final action of the Board of Directors of the Company authorizing and establishing a series of the Preferred Stock, in accordance with the terms of the Certificate of Incorporation, the Bylaws and applicable law, (ii) filing of an appropriate Certificate of Designation with respect to such Preferred Stock, (iii) effectiveness of the Registration Statement, (iv) final action of the Board of Directors authorizing issuance of such shares of Preferred Stock, and (v) receipt by the Company of the consideration for the Preferred Stock specified in the resolutions of the Board of Directors, the Preferred Stock will be validly issued, fully paid, and nonassessable.

(d) following (i) effectiveness of the Registration Statement, (ii) due authorization by the Board of Directors of the Company of a Warrant Agreement and the specific terms of the underlying Warrants conforming to the description thereof in the Registration Statement and/or the applicable Prospectus Supplement and delivery of such Warrant Agreement by the Company and the Warrant Agent named therein, (iii) authentication by the Warrant Agent, if any, of Warrants conforming to the requirements of the related Warrant Agreement, and (iv) due execution and delivery on behalf of the Company of such Warrants against payment therefor in accordance with the terms of such Board Action, any applicable underwriting agreement or purchase agreement and the applicable Warrant Agreement and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, and assuming that the terms of the Warrants as set forth in the Warrant Agreement do not violate any law applicable to the

Company or result in a default under or breach of any agreement or instrument binding upon the Company, the Warrants will constitute valid and binding obligations of the Company, enforceable in accordance with their terms.

(e) following (i) effectiveness of the Registration Statement, (ii) due authorization by the Board of Directors of the Company of a Depositary Agreement and the specific terms of the Depositary Shares conforming to the description thereof in the Registration Statement and/or the applicable Prospectus Supplement and delivery of such Depositary Agreement by the Company and the Depositary Trustee named therein, (iii) authentication by the Depositary Trustee, if any, of Depositary Shares conforming to the requirements of the related Depositary Agreement, and (iv) due execution and delivery on behalf of the Company of such Depositary Shares against payment therefor in accordance with the terms of such Board Action, any applicable underwriting agreement or purchase agreement and the applicable Depositary Agreement and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, and assuming that the terms of the Depositary Shares as set forth in the Depositary Agreement do not violate any law applicable to the Company or result in a default under or breach of any agreement or instrument binding upon the Company, the Depositary Shares will constitute valid and binding obligations of the Company, enforceable in accordance with their terms.

To the extent that the obligations of the Company under any Indenture may be dependent upon such matters, we assume for purposes of this opinion that the Trustee is duly organized, validly existing and in good standing under the laws of its jurisdiction of organization; that the Trustee is duly qualified to engage in the activities contemplated by the Indenture; that the Indenture has been duly authorized, executed and delivered by the Trustee and constitutes the valid and binding obligation of the Trustee enforceable against the Trustee in accordance with its terms; that the Trustee is in compliance, with respect to acting as a trustee under the Indenture, with all applicable laws and regulations; and that the Trustee has the requisite organizational and legal power and authority to perform its obligations under the Indenture.

To the extent that the obligations of the Company under any Warrant Agreement may be dependent upon such matters, we assume for purposes of this opinion that the applicable Warrant Agent is duly organized, validly existing, and in good standing under the laws of its jurisdiction of organization; that the Warrant Agent is duly qualified to engage in the activities contemplated by the Warrant Agreement; that the Warrant Agreement has been duly authorized, executed, and

delivered by the Warrant Agent and constitutes the valid and binding obligation of the Warrant Agent enforceable against the Warrant Agent in accordance with its terms; that the Warrant Agent is in compliance, with respect to acting as a Warrant Agent under the Warrant Agreement, with all applicable laws and regulations; and that the Warrant Agent has the requisite organizational and legal power and authority to perform its obligations under the Warrant Agreement.

To the extent that the obligations of the Company and the rights of any holder of Depositary Shares under any Deposit Agreement may be dependent upon such matters, we assume for purposes of this opinion that the applicable Depositary is duly organized, validly existing and in good standing under the laws of its jurisdiction of organization; that the Depositary is duly qualified to engage in the activities contemplated by the Deposit Agreement; that the Deposit Agreement has been duly authorized, executed and delivered by the Depositary and constitutes a valid and binding obligation of the Depositary enforceable against the Depositary and the Company in accordance with its terms; that the Depositary is in compliance, with respect to acting as a Depositary under the Deposit Agreement, with all applicable laws and regulations; and that the Depositary has the requisite organizational and legal power and authority to perform its obligations under the Deposit Agreement.

The opinions expressed in Paragraphs (a), (d) and (e) above shall be understood to mean only that if there is a default in performance of an obligation, (i) if a failure to pay or other damage can be shown, and (ii) if the defaulting party can be brought into a court which will hear the case and apply the governing law, then, subject to the availability of defenses and to the exceptions set forth in Paragraphs (a), (d) and (e) the court will provide a money damage (or perhaps injunctive or specific performance) remedy.

In addition to the qualifications, exceptions and limitations elsewhere set forth in this opinion letter, our opinions expressed above are also subject to the effect of: (i) bankruptcy, insolvency, reorganization, receivership, moratorium or other laws affecting creditors' rights (including, without limitation, the effect of statutory and other law regarding fraudulent conveyances, fraudulent transfers and preferential transfers); and (ii) the exercise of judicial discretion and the application of principles of equity including, without limitation, requirements of good faith, fair dealing, reasonableness, conscionability and materiality (regardless of whether the applicable agreements are considered in a proceeding in equity or at law).

This opinion letter has been prepared for your use in connection with the Registration Statement and speaks as of the date hereof. We assume no obligation to advise you of any changes in the foregoing subsequent to the delivery of this opinion letter.



We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the reference to this firm under the caption "Legal Matters" in the Prospectus constituting a part of the Registration Statement. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Act.

Very truly yours,

/s/ HOGAN & HARTSON L.L.P.

HOGAN & HARTSON L.L.P.

## Computation of Ratio of Earnings to Fixed Charges

	1996	Years Ended October 31,		1999	2000
		1997	1998		
	-----				
	(\$000's in thousands)				
Pre-tax income (loss) from continuing operations	\$ 20,816	\$ 188,056	\$ 81,900	\$ (5,991)	\$ 120,574
	-----				
Fixed Charges:					
Interest expense	443	408	313	504	340
Appropriate portion (1/3) of rentals	192	829	2,013	3,135	4,506
	-----				
Total Fixed Charges	635	1,237	2,326	3,639	4,846
	-----				
Pre-tax income (loss) from continuing operations plus fixed charges	\$ 21,451	\$ 189,293	\$ 84,226	\$ (2,352)	\$ 125,420
	=====				
Ratio of earnings to fixed charges	33.8x	153.1x	36.2x	-	25.9x
	=====				

## CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our reports dated December 6, 2000 relating to the consolidated financial statements and financial statement schedule, which appears in CIENA Corporation's Annual Report on Form 10-K for the year ended October 31, 2000, as amended. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/PricewaterhouseCoopers LLP  
McLean, VA  
January 17, 2001

## EXHIBIT 23.3

## Consent of Deloitte &amp; Touche LLP

We consent to the incorporation by reference in this Registration Statement of CIENA Corporation on Form S-3 of our report dated August 2, 2000 (December 18, 2000 as to Note 12) related to the financial statements of Cyras Systems, Inc. as of December 31, 1998 and 1999, and for the period from July 24, 1998 (inception) through December 31, 1998 and for the year ended December 31, 1999, appearing in the Current Report on Form 8-K of CIENA Corporation dated December 18, 2000, and to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Deloitte & Touche LLP

San Jose, California

January 16, 2001