

Registration No. 333-_____

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-8
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

(I.R.S. employer identification no.)

920 ELKRIDGE LANDING ROAD
LINTHICUM, MD 21090

(Address of principal executive offices)

CIENA CORPORATION AMENDED AND RESTATED
1994 EMPLOYEE STOCK OPTION PLAN
CIENA CORPORATION 1996 OUTSIDE DIRECTORS
STOCK OPTION PLAN

(Full title of the plan)

G. ERIC GEORGATOS
VICE PRESIDENT, GENERAL COUNSEL
AND SECRETARY
CIENA CORPORATION
920 ELKRIDGE LANDING ROAD
LINTHICUM, MD 21090
(410) 865-8500

(Name, address and telephone number, including area code, of agent for service)

Copy to:
MICHAEL J. SILVER
HOGAN & HARTSON L.L.P.
111 SOUTH CALVERT STREET
BALTIMORE, MD 21202
(410) 659-2700

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered	Proposed maximum offering price per share (1)	Proposed maximum aggregate offering price (1)	Amount of registration fee (1)
COMMON STOCK, PAR VALUE \$.01	(a) 12,613,955 (b) 8,186,045	\$(a) 3.0669 \$(b) 32.875	\$(a) 38,685,738.59 \$(b) 269,116,229.38	\$(a) 11,722.95 \$(b) 81,550.37 Total: \$93,273.32

(1) Estimated pursuant to Rule 457(c) and (h) solely for purposes of calculating the amount of the registration fee, based on (a) the weighted average option exercise price of \$3.0669 per share for the 12,613,955 shares issuable upon exercise of currently outstanding options and (b) the average of the high and low prices per share of CIENA Corporation Common Stock, par value \$.01 per share, on May 7, 1997, as reported on the Nasdaq National Market with respect to the other 8,186,045 shares otherwise issuable under the plans listed above.

CIENA CORPORATION

SHARES OF COMMON STOCK
PAR VALUE \$.01 PER SHARE

OFFERED PURSUANT TO THE

CIENA CORPORATION
AMENDED AND RESTATED 1994 EMPLOYEE STOCK OPTION PLAN
1996 OUTSIDE DIRECTORS STOCK OPTION PLAN

This Prospectus covers an aggregate of 20,800,000 shares of common stock, par value \$.01 per share (the "Common Stock"), of CIENA Corporation, a Delaware corporation ("the "Company") which are issuable or have been issued upon exercise of stock options granted under the Amended and Restated 1994 Employee Stock Option Plan (the "Employee Plan") and the 1996 Outside Directors Stock Option Plan (the "Directors Plan," and, together with the Employee Plan, the "Plans"). This Prospectus also covers the resale of (i) the Common Stock issuable upon exercise of such options and (ii) the restricted Common Stock previously issued upon the exercise of options granted pursuant to the Plans. See "General Information."

NO PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS, OTHER THAN THOSE CONTAINED HEREIN, IN CONNECTION WITH THE OFFER CONTAINED IN THIS PROSPECTUS, AND, IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SECURITIES IN ANY JURISDICTION TO ANY PERSON TO WHOM IT IS UNLAWFUL TO MAKE SUCH OFFER OR SOLICITATION IN SUCH JURISDICTION. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER SHALL UNDER ANY CIRCUMSTANCES CREATE ANY IMPLICATION THAT THERE HAS BEEN NO CHANGE IN THE AFFAIRS OF THE COMPANY OR IN THE PLANS SINCE THE DATE HEREOF, OR THAT THE INFORMATION CONTAINED OR INCORPORATED BY REFERENCE HEREIN IS CORRECT AS OF ANY TIME SUBSEQUENT TO ITS DATE.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION, NOR HAS THE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is May 14, 1997

GENERAL INFORMATION

THIS DOCUMENT CONSTITUTES PART OF THE PROSPECTUS COVERING SECURITIES THAT HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). The Prospectus does not contain all of the information set forth in the registration statement filed with the Securities and Exchange Commission (the "Commission") for registration of such securities (the "Registration Statement"), certain portions of which have been omitted in accordance with the rules and regulations of the Commission. The information omitted may be obtained from the Commission's Public Reference Room upon payment of prescribed fees or by accessing the Commission's World Wide Web site at <http://www.sec.gov>. The Company undertakes to provide without charge to each person to whom a copy of this Prospectus is delivered, upon written or oral request of such person, a copy of any or all documents or parts thereof containing information incorporated by reference in Item 3 of Part II of the Registration Statement, other than the exhibits to such documents (unless such exhibits are specifically incorporated by reference into such documents), which documents are incorporated by reference in this Prospectus. Such requests should be directed to CIENA Corporation, Attention: Eric Georgatos. The Company's telephone number is (301) 317-5800. Additional copies of this Prospectus also may be obtained upon request at such address or telephone number.

This Prospectus covers (i) the sale of shares of Common Stock (the "Shares") issuable by the Company upon exercise of options granted under the Plans, (ii) the resale of shares held by affiliates and (iii) the resale of restricted shares held by affiliates and non-affiliates ("Restricted Shares"). Such shares may be treasury shares or authorized but unissued shares. Each option and Restricted Share will be evidenced by a written agreement (an "Option Agreement") specifying, among other things, the times during which, and the terms and conditions upon which, the option may be exercised.

The Employee Plan was adopted by the Board of Directors of the Company (the "Board") by resolution on August 16, 1994 and was duly approved by the stockholders of the Company. The Employee Plan became effective on August 15, 1994. The Directors Plan was adopted by the Board by resolution on June 21, 1996 and became effective on that date. Except with respect to options then outstanding, the Plans will expire on the date as of which the Board, in its sole discretion, determines that the Plans shall terminate. The Board may modify the Plans in any respect but must obtain stockholder approval for certain modifications.

Option holders ("Optionees") and stockholders who are affiliates of the Company may sell the Common Stock acquired under this Prospectus only pursuant to a registration statement and prospectus or pursuant to an available exemption from the registration requirements of the Securities Act. An "affiliate" is a person who directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Company. Persons who are affiliates of the Company should consult both their own and the Company's counsel if they wish to resell shares acquired under this Prospectus. Shareholders who acquired Restricted Shares through the exercise of options or through a restricted stock award may resell the shares pursuant to this Registration Statement by means of the reoffer prospectus which is included as part of this Registration Statement. However, until such time as the Company meets the registrant requirements of Form S-3, the amount of securities to be reoffered or resold by means of the reoffer prospectus by any person (and any other person with whom he or she is acting in concert for the purpose of selling securities of the Company) may not exceed, during any three month period, the amount specified in Rule 144(E) of the Securities Act of 1933. Optionees who are not affiliates of the Company may sell shares acquired under this Prospectus without regard to these restrictions.

In addition, Optionees who are officers or directors of the Company or beneficial owners of more than 10% of the Common Stock are advised to consult their counsel as to the applicability of Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), to their transactions under the Plans. Section 16 requires persons subject to its provisions to file reports

with the Commission of their transactions in the Company's equity securities. Moreover, persons subject to Section 16 may be required to turn over to the Company any profits realized upon a purchase and sale of the Company's equity securities within a period of less than six months.

THE SUMMARIES HEREIN OF THE PLANS DO NOT PURPORT TO BE COMPLETE, AND REFERENCE IS MADE TO THE PLANS (COPIES OF WHICH ARE FILED AS EXHIBITS TO THE REGISTRATION STATEMENT AND ARE INCORPORATED HEREIN BY REFERENCE) FOR A FULL AND COMPLETE STATEMENT OF THE TERMS AND PROVISIONS THEREOF. Copies of the Plans are available from the Company upon request and will be separately sent or given to participants in the Plans, as specified by Rule 428(b)(1) of the Securities Act. Each Optionee should refer to the Plans and his or her particular Option Agreement for information concerning the specific terms and conditions of his or her option.

The principal executive offices of the Company are located at 8530 Corridor Road, Savage, MD 20763. Its telephone number is (301) 317-5800.

RISK FACTORS

This Prospectus should be read in conjunction with the risk factors contained in the Company's Form 8-K filed with the Commission on February 19, 1997, as modified by those risk factors contained in subsequent periodic reports filed with the Commission.

SUMMARY DESCRIPTIONS
OF THE
CIENA CORPORATION
AMENDED AND RESTATED 1994 EMPLOYEE STOCK OPTION PLAN
AND THE
1996 OUTSIDE DIRECTORS STOCK OPTION PLAN

THE QUESTIONS AND ANSWERS SET FORTH BELOW HAVE BEEN PREPARED TO PROVIDE YOU WITH A BRIEF DESCRIPTION OF THE PLANS IN AN EASY-TO-READ FORMAT. FOR A DETAILED DESCRIPTION OF YOUR STOCK OPTION BENEFITS, PLEASE REFER TO YOUR OPTION AGREEMENT AND THE PLANS. THESE SUMMARY DESCRIPTIONS OF THE PLANS CONSTITUTE PART OF THE PROSPECTUS COVERING THE SHARES OF THE COMMON STOCK THAT HAVE BEEN REGISTERED PURSUANT TO THE SECURITIES ACT.

QUESTION: WHAT IS AN OPTION?

ANSWER: An option is a right to buy securities, such as shares of common stock, subject to terms and conditions specified in an underlying agreement. Stock options can be granted pursuant to a stand-alone agreement or, as in this case, under a stock option plan.

QUESTION: HOW LONG MAY OPTIONS BE GRANTED UNDER THE PLANS?

ANSWER: Options may be granted under the Plans until the Board terminates the Plans or any of the following "transfer of control" events occur: (i) the Company's dissolution or liquidation, (ii) a merger, consolidation, or reorganization with one or more other entities in which the stockholders of the Company do not retain at least a majority of the beneficial interest in the surviving corporation, (iii) a sale of all or substantially all of the assets of the Company to another entity, or (iv) the direct or indirect sale or exchange of all or substantially all of the capital stock of the Company to another entity in which the stockholders of the Company do not hold at least a majority of the beneficial interest in such entity's voting stock.

QUESTION: WILL A CHANGE IN CONTROL OF THE COMPANY AFFECT MY OPTION?

ANSWER: Thirty days prior to the proposed effective date of any transfer of control, each Optionee under a stock option agreement outstanding for 335 days or more shall be credited, as of the proposed effective date of the transfer of control, and if still employed by the Company on that date, with 100% of such shares, for purposes of determining the percentage of shares which shall be immediately exercisable and/or fully vested under each Option Agreement. Furthermore, in the event of a transfer of control, the surviving or acquiring corporation shall either assume the Company's rights and obligations under outstanding Option Agreements or substitute options of the surviving or acquiring corporation for such outstanding options. In the event the surviving or acquiring corporation elects not to assume or substitute for such outstanding options in connection with the transfer of control, any unexercisable and/or unvested shares subject to such outstanding stock option agreements shall be

immediately exercisable and fully vested as of the date 30 days prior to the proposed effective date of the transfer of control.

QUESTION: WILL A CHANGE IN CAPITALIZATION OF THE COMPANY AFFECT MY OPTION?

ANSWER: If the number of outstanding shares of Common Stock is increased or decreased or changed into or exchanged for a different number or kind of shares or other securities of the Company by reason of any recapitalization, reclassification, stock split-up, combination of shares, exchange of shares, stock dividend or other distribution payable in capital stock, or other increase or decrease in such shares effected without receipt of consideration by the Company, a proportionate and appropriate adjustment shall be made by the Company in the number and class of shares of Common Stock subject to the Plans, and to any outstanding options and their exercise price. In the event a majority of the shares which are of the same class as the shares that are subject to outstanding options are exchanged for, converted into, or otherwise become (whether or not pursuant to a transfer of control) shares of another corporation, the Company may unilaterally amend the outstanding options to provide that such options are exercisable for shares in the other corporation. In the event of any such amendment, the number of shares and the exercise price will be adjusted in a fair and equitable manner.

QUESTION: AM I ENTITLED TO EXERCISE ANY OF THE STOCK OWNERSHIP RIGHTS FOR COMMON STOCK PRIOR TO EXERCISING MY OPTION?

ANSWER: You will have no dividend, voting or other stockholder rights with respect to any Common Stock issuable pursuant to your options until you exercise an option, in whole or in part.

QUESTION: CAN MY OPTION BE AMENDED WITHOUT MY CONSENT?

ANSWER: No.

QUESTION: ARE THE SHARES OF COMMON STOCK ISSUABLE UNDER THE PLANS REGISTERED WITH THE COMMISSION?

ANSWER: All shares of Common Stock currently issuable under the Plans have been registered with the Commission on a Form S-8 Registration Statement (the "Registration Statement").

QUESTION: DOES THE REGISTRATION STATEMENT CONTAIN ANY INFORMATION ABOUT THE PLANS AND THE COMPANY'S OPERATIONS AND FINANCIAL CONDITION?

ANSWER: Part I of the Registration Statement includes this reoffer Prospectus and incorporates by reference the Company's final prospectus with respect to the Company's initial public offering of the Common Stock, dated February 7, 1997, and filed with the Commission under the Securities Act, and all reports since filed, and to be filed, with the Commission. Such information also is incorporated by reference in and constitutes part of this summary description and the Prospectus of which this summary description is a part. The Registration Statement contains some disclosure which is not incorporated into this summary description, but which may be obtained from the Commission's Public Reference Room upon payment of prescribed fees or by accessing the Commission's World Wide Web site at <http://www.sec.gov>.

QUESTION: HOW CAN I OBTAIN THE INFORMATION INCORPORATED BY REFERENCE INTO THE REGISTRATION STATEMENT, AND ANY OTHER RELEVANT INFORMATION?

ANSWER: The Company undertakes to provide to you and all other participating employees, without charge, upon written or oral request, a copy of any document or any part of such a document containing information incorporated by reference in the Registration Statement. In addition, this summary description is accompanied by a copy of the Company's final prospectus dated February 7, 1997, which contains audited financial information for the Company's latest fiscal year. Requests for information should be directed to Eric Georgatos, 8530 Corridor Road, Savage, MD 20763 (telephone number: (301) 317-5800).

QUESTION: WHEN AND HOW IS THE EXERCISE PRICE OF AN OPTION DETERMINED?

ANSWER: The exercise price is fixed by the Committee and stated in each Option Agreement. In the case of an incentive stock option, the exercise price per share of Common Stock may not be less than the fair market value of the Common Stock on the date the option is granted (as determined in good faith by the Committee). In the case of certain 10% stockholders, the exercise price applicable to an incentive stock option may not be less than 110% of the fair market value of the Common Stock on the date the option is granted. Options will qualify as incentive stock options only to the extent that the aggregate fair market value of the Common Stock covered by incentive stock options that become exercisable for the first time by any Optionee during any calendar year does not exceed \$100,000. In the case of a non-incentive stock option, the exercise price per share may not be less than 85% of the fair market value of the Common Stock on the date the option is granted (as determined in good faith by the Committee).

QUESTION: HOW IS FAIR MARKET VALUE DETERMINED?

ANSWER: If the Common Stock continues to be quoted on the Nasdaq National Market (or is listed on an established national or regional stock exchange, or is publicly traded on an established securities market), the fair market value will be the closing price of the Common Stock in that market (or the highest such price if there is more than one such market) on the trading day immediately preceding the Grant Date (as defined below) or other determination date. If there is no such closing price, then the fair market value will be the mean between the highest bid and lowest asked prices, or between the high and low sale prices on such date, or, if no sale of the Common Stock has been made on such day, on the next preceding day on which any such sale is made. If the Common Stock is not so quoted, listed or traded, the fair market value of the Common Stock will be determined in good faith by the Board. "Grant Date" means the later of (i) the date as of which the Committee approves the grant and (ii) the date as of which the Optionee enters the relationship with the Company resulting in his or her being eligible for grants.

QUESTION: HOW DO I EXERCISE MY OPTION?

ANSWER: You may exercise your option, in whole or in part, by delivery of a written notice to the Committee which specifies the number of shares for which the option is being exercised and which is accompanied by payment in full of the applicable exercise price.

QUESTION: WHAT ARE THE PERMISSIBLE METHODS OF PAYMENT OF THE AGGREGATE EXERCISE PRICE?

ANSWER: Under the Employee Plan, the permissible methods of payment are: (i) cash, a check payable to the Company, or a cash equivalent, (ii) tender to the Company of shares of Common Stock having a fair market value on the date of exercise equal to the aggregate exercise price, or (iii) a recourse promissory note in a form approved by the Company, (iv) the assignment of the proceeds of a sale of some or all of the shares being acquired upon the exercise of the option, or (v) some combination of the foregoing. Under the Directors Plan, the permissible methods of payment are: (i) cash, or check payable to the Company, or cash equivalent, (ii) tender to the Company of shares of Common Stock having a fair market value equal to the aggregate exercise price, (iii) by the assignment of the proceeds of a sale or loan with respect to some or all of the shares being acquired upon exercise of the option or (iv) any combination of the foregoing.

QUESTION: WHO WILL ISSUE THE SHARES OF COMMON STOCK UPON EXERCISE OF THE OPTION?

ANSWER: The shares will be issued directly by the Company's transfer agent and registrar, The First National Bank of Boston, upon the written instruction of the Company.

QUESTION: ARE THERE ANY RESTRICTIONS ON THE SALE OR ISSUANCE OF SHARES OF COMMON STOCK BY THE COMPANY?

ANSWER: The Company is not required to sell or issue any shares of Common Stock under any option if the sale or issuance would constitute a violation by the Optionee or the Company of any provision of any law or regulation of any governmental authority, including, without limitation, any federal or state securities laws or regulations.

QUESTION: ARE THERE ANY RESTRICTIONS ON RESALE OF SHARES OF COMMON STOCK ISSUABLE UNDER THE PLANS?

ANSWER: The Securities Act requires every person who offers or sells securities to register such securities with the Commission unless an exemption from registration is available. If you are an "affiliate" of the Company, you may sell the Common Stock acquired under the Plan only pursuant to a registration statement and prospectus or pursuant to an available exemption from the registration requirements of the Securities Act. In addition, public sales of Common Stock by affiliates that are not sold pursuant to a registration statement and prospectus generally can be made only in compliance with the applicable limitations of Rule 144 under the Securities Act. These limitations (i) restrict the amount of shares that can be sold by an affiliate during any three-month period to the greater of 1% of the then-outstanding shares of Common Stock or the average weekly reported trading volume of the Common Stock during the four calendar weeks preceding such sale, (ii) require that current information about the Company be publicly available at the time of sale, (iii) require the sale to be made either in unsolicited brokers' transactions or directly to a market maker, and (iv) require the seller to file a notice of the proposed sale with the Commission at the time the order to sell is placed with the broker, unless the amount to be sold neither exceeds 500 shares nor involves proceeds greater than \$10,000. If you are not an affiliate of the Company, you may sell shares acquired under the Plans without regard to these restrictions. For additional restrictions on resale of your Common Stock, if any, please refer to your Option Agreement.

QUESTION: MAY OPTIONS BE ASSIGNED OR TRANSFERRED TO THIRD PARTIES?

ANSWER: Options may not be assigned or transferred, other than by will or the laws of descent and distribution. During an Optionee's lifetime, only such Optionee (or, in the event of the Optionee's legal incapacity or incompetency, the Optionee's guardian or legal representative) may exercise his or her options.

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THE EMPLOYEE PLAN

QUESTION: WHAT IS THE PURPOSE OF THE EMPLOYEE PLAN?

ANSWER: The purpose of the Employee Plan is to attract, retain and reward persons providing services to the Company and to motivate such persons to contribute to the growth and profits of the Company in the future.

QUESTION: WHAT OPTIONS MAY BE GRANTED UNDER THE EMPLOYEE PLAN?

ANSWER: The Employee Plan provides for grants of options to purchase shares of Common Stock. Incentive stock options and non-incentive stock options may be granted under the Employee Plan, the tax consequences of which to you and the Company are slightly different, as outlined below.

QUESTION: HOW MANY SHARES OF COMMON STOCK ARE ISSUABLE UNDER THE EMPLOYEE PLAN?

ANSWER: 20,050,000 shares of Common Stock are issuable under the Employee Plan.

QUESTION: WHO IS ELIGIBLE TO PARTICIPATE IN THE EMPLOYEE PLAN?

ANSWER: Options may be granted only to employees (including officers) and directors of the Company or to individuals who are rendering services as consultants, advisors or other independent contractors to the Company. The Board or a duly appointed committee of the Board (the "Committee") acting as the Employee Plan administrator shall determine who is eligible to receive options under the Employee Plan.

QUESTION: DOES MY STATUS AS AN OPTIONEE GIVE ME ANY RIGHTS AS AN EMPLOYEE?

ANSWER: Nothing in the Employee Plan or in any option granted or Option Agreement entered into pursuant to the Employee Plan shall confer on any person any right to remain in the employ of the Company or any of its subsidiaries or interfere in any way with the right of the Company or any of its subsidiaries either to increase or decrease the compensation of any person or to terminate any employment or other relationship between any person and the Company or any of its subsidiaries.

QUESTION: HOW ARE OPTIONS GRANTED UNDER THE EMPLOYEE PLAN?

ANSWER: Subject to the terms and conditions of the Employee Plan, the Committee may grant to eligible individuals options to purchase such number of shares of Common Stock, on such terms and conditions and with such limitations as the Committee may determine. All options granted will be evidenced by a written Option Agreement, which shall be executed by the Company and the Optionee.

QUESTION: WHEN IS MY OPTION EXERCISABLE?

ANSWER: An option may be granted pursuant to a vesting schedule under which an option or portions of any option may not be exercised until certain dates or during certain periods of time. However, notwithstanding a specific vesting schedule, the Board may choose to accelerate the date on which an option becomes exercisable. You should consult your Option Agreement to determine the specific vesting schedule applicable to you. Once your options become exercisable, you may exercise them, in whole or in part, at any time, as provided in your Option Agreement, prior to the termination of your option or the expiration of a ten-year period from the date on which the option was granted, or, in the case of certain 10% stockholders, prior to the expiration of a five-year period from the date of grant.

QUESTION: WHO ADMINISTERS THE EMPLOYEE PLAN?

ANSWER: The Employee Plan may be administered by the Board or by a duly appointed committee of the Board (the "Committee"). At the time of appointment to the Committee and during all periods of service on the Committee, each Committee member must qualify as a "disinterested person," as defined in Rule 16b-3 of the Exchange Act.

QUESTION: WHAT ARE THE POWERS OF THE BOARD AND THE COMMITTEE WITH REGARD TO THE EMPLOYEE PLAN?

ANSWER: The Board may delegate full power and authority to the Committee to take all actions and make all determinations that are required or that it deems necessary or appropriate under the Employee Plan or any Option Agreement. The Committee also prescribes the terms and provisions of each option granted under the Employee Plan. All interpretations of the Committee of the Employee Plan, any option granted, or any Option Agreement are final.

QUESTION: CAN THE EMPLOYEE PLAN BE AMENDED WITHOUT MY CONSENT?

ANSWER: The Board or the Committee may terminate or amend the Employee Plan or any option at any time but must obtain the approval of stockholders for any modification that (a) increases the total number of shares subject to options unless such increase results from a change in capitalization, (b) changes the class eligible to receive Incentive Stock Options, (c) expands the class eligible to receive nonstatutory stock options or (d) requires the approval of stockholders pursuant to Rule 16b-3 of the Exchange Act.

QUESTION: MAY THE BOARD ADOPT INCENTIVE COMPENSATION ARRANGEMENTS IN ADDITION TO THE EMPLOYEE PLAN?

ANSWER: Yes.

QUESTION: UNDER WHAT CIRCUMSTANCES WILL MY OPTION TERMINATE?

ANSWER: Generally, options expire 10 years from the date of grant (or five years in the case of certain 10% stockholders). Your Option Agreement may contain other provisions for termination in the event of disability, death or the termination of your employment. In addition, your option may terminate, together with the Employee Plan and all other outstanding options issued to other employees, following the occurrence of certain transfer of control events (as described above).

QUESTION: IS THE EMPLOYEE PLAN SUBJECT TO THE EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974 (ERISA) OR IS IT A QUALIFIED PLAN UNDER SECTION 401(a) OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE "INTERNAL REVENUE CODE")?

ANSWER: No.

* * *

THE DIRECTORS PLAN

QUESTION: WHAT IS THE PURPOSE OF THE DIRECTORS PLAN?

ANSWER: The purpose of the Directors Plan is to attract and retain the best possible non-employee members of the Board and to provide additional incentives to those directors to promote the success of the Company.

QUESTION: WHAT OPTIONS MAY BE GRANTED UNDER THE DIRECTORS PLAN?

ANSWER: The Directors Plan provides for grants of options to purchase shares of Common Stock. The Directors Plan is a "formula" plan providing for automatic grants of stock options to eligible non-employee directors of the Company. Options granted under the Directors Plan are not intended to qualify as incentive stock options for tax law purposes.

QUESTION: HOW MANY SHARES OF COMMON STOCK ARE ISSUABLE UNDER THE DIRECTORS PLAN?

ANSWER: 750,000 shares of Common Stock are issuable under the Directors Plan. If any option granted under the Directors Plan expires, terminates or is terminated or canceled for any reason before it is exercised in full, the shares of Common Stock that were subject to the unexercised portion of such option shall be available for future options granted under the Directors Plan.

QUESTION: WHO IS ELIGIBLE TO PARTICIPATE IN THE DIRECTORS PLAN?

ANSWER: Options may be granted only to persons who, at the time of grant, is a director of the Company who is not an employee (an "Outside Director").

QUESTION: WHO ADMINISTERS THE DIRECTORS PLAN, AND WHAT ARE THE POWERS AND RESPONSIBILITIES OF SUCH ENTITY?

ANSWER: The Directors Plan may be administered by the Board or by the Committee. All questions of interpretation of the Directors Plan or of any option shall be determined by the Board, and such determination shall be final and binding upon all persons having an interest in the Directors Plan or such option. The Board shall have no authority, discretion, or power to select the Outside Directors who will receive options, to set the exercise price of the options, to determine the number of shares of Common Stock to be subject to an option or the time at which an option shall be granted, to establish the duration of an option, or to alter any other terms or conditions specified in the Directors Plan, except in the sense of administering the Directors Plan subject to the provisions of the Directors Plan.

QUESTION: HOW ARE OPTIONS GRANTED UNDER THE DIRECTORS PLAN?

ANSWER: Options will be granted automatically under the Directors Plan. Upon assuming directorship, each new director will automatically be granted an initial option to

purchase 75,000 shares of Common Stock. Thereafter, each director will receive options to purchase 25,000 shares of Common Stock on the date of each annual meeting of stockholders, provided that the director continues to serve in such capacity.

QUESTION: WHEN IS MY OPTION EXERCISABLE?

ANSWER: Unless your Option Agreement provides otherwise, initial options are exercisable over a period of three years and annual grants are exercisable in full on the first anniversary of the date of grant.

QUESTION: CAN THE DIRECTORS PLAN BE AMENDED WITHOUT MY CONSENT?

ANSWER: The Board may modify the Directors Plan from time to time in any respect it may deem advisable, provided that the Directors Plan may not be amended more than once in any six-month period other than to comport with changes in the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), the Employee Retirement Income Security Act of 1974 (ERISA), or the rules promulgated thereunder.

QUESTION: UNDER WHAT CIRCUMSTANCES WILL MY OPTION TERMINATE?

ANSWER: Your options will terminate as provided in your Option Agreement. Your options may also terminate upon transfer of control of the Company, as described above.

QUESTION: DOES MY STATUS AS AN OPTIONEE GIVE ME ANY RIGHTS AS A DIRECTOR?

ANSWER: Nothing in the Directors Plan will confer on any person any right to continue as a member of the Board or interfere in any way with the right of the Company to terminate such relationship.

QUESTION: IS THE DIRECTORS PLAN SUBJECT TO ERISA OR IS IT A QUALIFIED PLAN UNDER SECTION 401(a) OF THE INTERNAL REVENUE CODE?

ANSWER: No.

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The following portion of this summary description that relates to federal income tax consequences is intended to summarize the general principles of current federal income tax law applicable to incentive stock options and non-incentive stock options that may be granted under the Plans. While it is believed that the following statements accurately summarize existing provisions of the Internal Revenue Code and its legislative history and regulations, and the applicable administrative and judicial interpretations, these statements are only summaries, and the rules in question are quite detailed and complicated. Moreover, legislative, administrative, regulatory or judicial changes or interpretations may occur that would modify such statements. Individual financial situations may vary, and state and local tax consequences may be significant. Therefore, you should consult your own tax advisors concerning the tax consequences of the grant, exercise or surrender of options granted to you under the Plans and the disposition of any shares of Common Stock acquired pursuant to the exercise of such options.

QUESTION: WHAT ARE THE FEDERAL INCOME TAX CONSEQUENCES OF AN INCENTIVE STOCK OPTION?

ANSWER: If you are an employee of the Company or any of the Company's subsidiaries from the date an option is granted through a date within three months before the date of exercise of the option, you will not recognize income at the time an incentive stock option is exercised (except that the alternative minimum tax may apply) and will recognize long term capital gain upon a subsequent disposition of the shares if you hold the shares for at least two years after the date of grant and for one year after the date of exercise. The three-month period is extended to one year if your employment is terminated as a result of death or disability. If the one-year and two-year holding period mentioned above are not met, you will recognize ordinary income upon the disposition of the shares in an amount equal to the excess of the fair market value of the shares at the time the option was exercised over its exercise price. The balance of the realized gain, if any, will be capital gain.

QUESTION: WHAT ARE THE FEDERAL INCOME TAX CONSEQUENCES OF TENDERING SHARES OF COMMON STOCK IN PAYMENT OF THE EXERCISE PRICE FOR SHARES UNDERLYING AN INCENTIVE STOCK OPTION?

ANSWER: If you exercise an incentive stock option by tendering shares of Common Stock with a fair market value equal to part or all of the exercise price, the exchange of shares will be treated as a nontaxable exchange (except that this treatment would not apply if you acquired the shares being transferred pursuant to the exercise of an incentive stock option and had not satisfied the special holding period requirements summarized above).

QUESTION: WHAT ARE THE FEDERAL INCOME TAX CONSEQUENCES OF A NON-INCENTIVE STOCK OPTION?

ANSWER: If you are a holder of a non-incentive stock option, you will recognize ordinary income in an amount equal to the difference between the exercise price and the fair market value of the Common Stock at the time of exercise. If the Company complies with applicable reporting requirements, it will generally be entitled to a business expense deduction in the same amount and at the same time as you recognize any ordinary income on exercise (subject to certain limitations). Upon a subsequent sale or exchange of shares acquired pursuant to the exercise of a non-incentive stock option, you will have a taxable gain or loss, measured by the difference between the amount realized on disposition and the tax basis of the shares (generally, the amount paid for the shares plus the amount treated as ordinary income at the time the option was exercised).

QUESTION: WHAT ARE THE FEDERAL TAX CONSEQUENCES OF SURRENDERING SHARES OF COMMON STOCK IN PAYMENT OF THE EXERCISE PRICE FOR A NON-INCENTIVE STOCK OPTION?

ANSWER: If you surrender shares of Common Stock in payment of part or all of the exercise price of a non-incentive stock option, no gain or loss will be recognized with respect to the shares surrendered (regardless of whether the shares were acquired pursuant to the exercise of an incentive stock option), and you will be treated as receiving an equivalent number of shares pursuant to the exercise of the option in a nontaxable exchange. The basis of the shares surrendered will be treated as the substituted tax basis for an equivalent number of shares received, and the new shares will be treated as having been held for the same holding period as had expired with respect to the transferred shares. The difference between the aggregate exercise price and the aggregate fair market value of the shares received pursuant to the exercise of the option will be taxed as ordinary income (just as if you had paid the exercise price in cash).

* * *

The foregoing is only a summary of some of the material provisions and operational features of the CIENA Corporation Amended and Restated 1994 Employee Stock Option Plan and the 1996 Outside Directors Stock Option Plan. Please refer to the Plans for further information regarding the Plans and the rights of Optionees under the Plans. To the extent that this summary description conflicts with any provision in the Plans or in any particular Option Agreement issued thereunder, such conflicting provision of the Plans or Option Agreement shall control.

INCORPORATION BY REFERENCE

The Company hereby incorporates by reference into this Prospectus the following documents filed by it with the Commission:

- (a) All reports filed by the Company with the Commission pursuant to Section 13(a) or 15(d) of the Securities and Exchange Act of 1934 since October 31, 1996; and
- (c) The description of the Company's common stock contained in the Company's Registration Statement on Form S-1, No. 333-17729, filed with the Commission on December 12, 1996, which is an exhibit to the Company's Form 8-A registration statement filed with the Commission on January 13, 1997.

In addition, all documents filed by the Company subsequent to the date hereof pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities remaining unsold, shall be deemed to be incorporated by reference in this Prospectus and to be part of hereof from the date of filing of such documents.

This Prospectus does not contain all of the information set forth in the Registration Statement, certain portions of which have been omitted in accordance with the rules and regulations of the Commission. The information omitted may be obtained as described under "General Information."

SELLING STOCKHOLDERS

The following table sets forth information about certain selling securityholders. Excluded from this table are non-affiliates who, as of May 13, 1997, hold the lesser of 1000 shares or one percent of the shares issuable under the Plans.

NAME OF SELLING STOCKHOLDER	NUMBER OF SHARES OFFERED
ALEXANDER, STEPHEN B [VICE PRESIDENT, TRANSPORT PRODUCTS]	50,000
BACHISM, BETH L	7,290
BAUTISTA, LAURIE N	10,000
BILTER, DENNIS L	25,000
BOGDAN, FRANCIS J	3,000
BURKE, MARGARET A	75,000
BUTTS, GILBERT K	5,000
CHADDICK, STEVE [SENIOR VICE PRESIDENT, PRODUCTS AND TECHNOLOGIES]	300,000
CHAMBERLAIN, MICHELE	1,200
CHEN, TAI-SEUNG	37,875
CHINNICI, JOSEPH R [VICE PRESIDENT, FINANCIE AND CHIEF FINANCIAL OFFICER]	7,500
CHURCHMAN, LISA A	6,500
CONDICT, KEITH A	100,000
DIROCCO, DAWN M	6,600
DUBLIN, BARBARA	2,000
EVANS, DAVID	116,000
FAGEN, MICHAEL W [VICE PRESIDENT, BUSINESS DEVELOPMENT]	250,000
FOUST, BRIAN W	4,000
GEORGATOS, G. ERIC [VICE PRESIDENT, GENERAL COUNSEL AND SECRETARY]	20,800
GOODALL, LINDA P	2,500
GRIMES, WILLIAM F	6,165
HARMON, STEPHEN R	75,000
HEMING, JOSEPH W	5,000
HOSFORD, THOMAS R	12,500
HUANG, LARRY P [SENIOR VICE PRESIDENT, SALES AND MARKETING]	600,000
JOHNSON, GARY P	43,750
JOHNSON, PAMELA L	1,000
JONES, WESLEY R	75,000
KINAMONT, KAREN R	1,000
KIRBY, YVETTE S	2,000
LANE, MICHAEL R	3,125
LEVINSON, LAWRENCE C	13,500
LITZ, ROY C	21,800
MADAK, DAWN	7,500
MALIK, IFRAN	100,000
MARLOW, SHIRLEY	1,000
MECKLEY, MICHAEL J	6,000
MILNE, DAWN C	7,500
MIZRAHI, VICTOR	50,000
MORAN, DAVID J	1,900
MURRAY, ANNE S	7,500
NACE, WANDA B	2,500
NEWMAN, DONALD T	70,000
O'LEARY, MARILYN F	2,500
PFEIFFER, VON C	3,500
POLIFKO, DAVID M	25,000
POOLADDEJ, JAMSHID	79,165
PRADIEU, IVES G	2,000
PRICE, TRACY	2,000
RANSFORD, MICHAEL J	5,600
ROOT, JAMES H	1,250
SEIDMAN, REBECCA K [VICE PRESIDENT, HUMAN RESOURCES DEVELOPMENT]	12,500
SELIG, NANCY G	2,500
SMITH, CECIL D	17,500
SRIDHAR, BALAKRISHNAN	5,000
VANDEVERE, JAMES M	12,500
WEST, JAMES H	12,500
WHISNANT, JEFFREY K	30,000
WIDMAN, RICHARD L	5,800
WISEMAN, RONALD L	125,000
WOLFF, JOHN P	4,000
YAFFE, HENRY H	17,000
YU, ZHENGCHEN	1,200
Total Shares	2,510,520

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

CIENA Corporation (the "Registrant") hereby incorporates by reference into this Registration Statement the following documents filed by it with the Commission:

- (a) The Registrant's final prospectus dated February 7, 1997, as filed with the Commission pursuant to Rule 424(b) of the Securities Act and which contains audited financial statements for the fiscal year ended October 31, 1996;
- (b) The description of the Registrant's Common Stock, \$.01 par value per share (the "Common Stock"), contained in the Registrant's Registration Statement on Form 8-A filed with the Commission on January 13, 1997;

In addition, all documents and reports filed by the Registrant subsequent to the date hereof pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act, and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part of hereof from the date of filing of such documents or reports. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequent filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable (the Common Stock is registered under Section 12(g) of the Exchange Act).

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Item 14 of Part II of the Registration Statement of the Registrant on Form S-1 (Registration No. 333-17729) is hereby incorporated by reference into this Registration Statement.

* * *

Insofar as indemnification for liabilities arising under the Securities Act 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 therefore is unenforceable. In the event that a claim for indemnification against such liabilities is asserted by such person in connection with the offering of the Common Stock (other than for 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) 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 the issue.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

Exhibit Number -----	Description -----
3.1	Certificate of Amendment to Third Restated Certificate of Incorporation of Registrant (filed as Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-17729) (the "Initial Form S-1") and incorporated herein by reference).
3.2	Third Restated Certificate of Incorporation of Registrant (filed as Exhibit 3.2 to the Initial Form S-1 and incorporated herein by reference).
4.1	Form of Common Stock Certificate (filed as Exhibit 4.1 to the Initial Form S-1 and incorporated herein by reference).
5.1	Opinion of Hogan & Hartson L.L.P. regarding the legality of the securities being registered.

- 10.1 Form of Indemnification Agreement for officers and directors of CIENA Corporation (filed as Exhibit 10.1 to the Registrant's Initial Form S-1 and incorporated herein by reference).
- 10.2 Amended and Restated 1994 Stock Option Plan (filed as Exhibit 10.2 to the Initial Form S-1 and incorporated herein by reference).
- 10.3 Forms of Employee Stock Option Agreement (filed as Exhibit 10.3 to the Initial Form S-1 and incorporated herein by reference).
- 10.4 1996 Outside Directors Stock Option Plan (filed as Exhibit 10.4 to the Initial Form S-1 and incorporated herein by reference).
- 10.5 Forms of 1996 Outside Directors Stock Option Agreement (filed as Exhibit 10.5 to the Initial Form S-1 and incorporated herein by reference).
- 10.6 Form of Amendment No. 1 to Indemnification Agreement for officers and directors of CIENA Corporation.
- 23.1 Consent of Price Waterhouse LLP.
- 23.2 Consent of Hogan & Hartson L.L.P. (included in their opinion filed as Exhibit 5.1 hereto).
- 24.1 Power of Attorney (included on signature page).
- 99.2 Section 145 of the Delaware General Corporation Law.

ITEM 9. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

(a) 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;

(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 a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(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 (a)(i) and (a)(ii) do not apply if the Registration Statement is on Form S-3 or Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(b) 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.

(c) 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.

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 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 therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

The undertaking concerning indemnification is set forth under the response to Item 6.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Savage, State of Maryland, on May 14, 1997.

CIENA CORPORATION

By: /s/ Patrick H. Nettles

Patrick H. Nettles
President, Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Patrick H. Nettles, Joseph R. Chinnici and G. Eric Georgatos, jointly and severally, each in his own capacity, as true and lawful attorneys-in-fact, with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), any Registration Statement relating to this Registration Statement under Rule 462, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done 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, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE

TITLE

DATE

/s/ Patrick H. Nettles

President, Chief Executive Officer and
Director (Principal Executive Officer)

May 14, 1997

Patrick H. Nettles

/s/ Joseph R. Chinnici

Vice President, Finance and Chief
Financial Officer (Principal Financial
Officer)

May 14, 1997

Joseph R. Chinnici

/s/ Andrew C. Petrik ----- Andrew C. Petrik	Controller and Treasurer (Principal Accounting Officer)	May 14, 1997
/s/ Jon W. Bayless ----- Jon W. Bayless	Director	May 14, 1997
/s/ Harvey B. Cash ----- Harvey B. Cash	Director	May 14, 1997
/s/ Clifford W. Higgerson ----- Clifford W. Higgerson	Director	May 14, 1997
/s/ Billy B. Oliver ----- Billy B. Oliver	Director	May 14, 1997
/s/ Michael J. Zak ----- Michael J. Zak	Director	May 14, 1997
/s/ David R. Huber, Ph.D. ----- David R. Huber, Ph.D.	Director	May 14, 1997

EXHIBIT INDEX

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24.1	Power of Attorney (included on signature page).	
99.2	Section 145 of the Delaware General Corporation Law.	

*incorporated by reference

May 14, 1997

Board of Directors
CIENA Corporation
8530 Corridor Road
Savage, Maryland 20763

Dear Gentlemen:

This firm has acted as special counsel to CIENA Corporation (the "Company"), a Delaware corporation, in connection with its registration, pursuant to a registration statement on Form S-8 filed on or about the date hereof (the "Registration Statement"), of 20,800,000 shares (the "Shares") of Common Stock, par value \$.01 per share, of the Company ("Common Stock"), issued or issuable under the Company's (i) Amended and Restated 1994 Employee Stock Option Plan (the "Employee Plan") and (ii) 1996 Outside Directors Stock Option Plan (the "Directors Plan," and, together with the Employee Plan, the "Plans"). This letter is furnished to you pursuant to the requirements of Item 601(b)(5) of Regulation S-K, 17 C.F.R. Section 229.601(b)(5), in connection with such registration.

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

1. An executed copy of the Registration Statement.
2. A copy of the Employee Plan, as certified by certain officers of the Company on the date hereof as being complete, accurate and in effect.
3. A copy of the Directors Plan, as certified by certain officers of the Company on the date hereof as being complete, accurate and in effect.
4. The Third Restated Certificate of Incorporation of the Company, as amended, as certified on May 6, 1997 by the Secretary of State of the State of Delaware and on the date hereof by certain officers of the Company as being complete, accurate and in effect.
5. The Amended and Restated Bylaws of the Company as certified by certain officers of the Company on the date hereof as being complete, accurate and in effect.
6. Resolutions of the Board of Directors of the Company adopted on August 16, 1994 and June 21, 1996, as certified by certain officers of the Company on the date hereof as being complete, accurate and in effect, relating to, among other things, approval of the Plans and amendments thereto.

7. A certificate of certain officers of the Company, dated May 14, 1997, as to certain facts relating to the Company.

For purposes of rendering this opinion, we have not, except as specifically identified above, made any independent review or investigation of factual or other matters, including the organization, existence, good standing, assets, business or affairs of the Company. In our examination of the aforesaid certificates, records and 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). We also have assumed the accuracy, completeness and authenticity of the foregoing certifications (of public officials, governmental agencies and departments and corporate officers) and statements of fact, on which we are relying, and have made no independent investigations thereof. In rendering this opinion we have relied as to factual matters, without independent investigation, upon the representations, warranties and certifications made by the Company and upon the officers' certificate identified in Paragraph 7 above. This opinion is given in the context of the foregoing.

This opinion is based as to matters of law solely on the General Corporation Law of the State of Delaware, as amended, and we express no opinion as to any other laws, statutes, regulations, or ordinances, including without limitation any federal or state tax or securities laws or regulations. We note that our firm only requires lawyers to be qualified to practice law in the District of Columbia, Virginia, or Maryland.

Based upon, subject to, and limited by the foregoing, we are of the opinion that the Shares, when issued and delivered in the manner and on the terms contemplated in the Registration Statement and the Plans (with the Company having received the consideration therefor, the form of which is in accordance with applicable law), will be validly issued, fully paid and non-assessable.

We assume no obligation to advise you of any changes in the foregoing subsequent to the delivery of this opinion. This opinion has been prepared solely for your use in connection with the filing of the Registration Statement on the date of this letter, and should not be quoted in whole or in part or otherwise be referred to, nor be filed with or furnished to any governmental agency or other person or entity, without the prior written consent of this firm.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Securities Act of 1933, as amended.

Very truly yours,

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

AMENDMENT NO. 1 TO INDEMNIFICATION AGREEMENT

This Amendment No. 1 is entered into as of the ___ day of February 1997, by and between CIENA Corporation, a Delaware corporation (the "Company") and _____ ("Indemnitee") with respect to the following facts:

- A. The Company and Indemnitee have entered into an Indemnification Agreement dated as of April 26, 1996 (the "Indemnification Agreement").
- B. At the time of entering into the Indemnification Agreement, the Company did not recall that it had by letter to Sevin Rosen Fund IV L.P. dated December 21, 1995 (the "December 1995 Letter"), agreed to make reasonable efforts to develop an indemnification agreement with each of its directors providing for, among other things, indemnification coverage similar to that provided for directors for an investor entity which is or becomes a party to litigation solely because one of such investor entity's employees is a director of the Company.
- C. The Company desires to amend the Indemnification Agreement to accord with its understanding of the December 1995 Letter.

NOW, THEREFORE, in consideration of the December 1995 Letter, the parties hereby amend the Indemnification Agreement to add the following:

1. In the event Indemnitee is or becomes a party to or witness or other participant in, or is threatened to be made a party to or witness or other participant in, a Claim by reason of (or arising in part out of) an Indemnifiable Event, AND any entity which is a stockholder of the Company and for which the Indemnitee then serves as a partner, director, officer or employee (an "Investor Entity") also is or becomes a party to such Claim solely because Indemnitee is a partner, director, officer or employee of such Investor Entity, the Company will indemnify Indemnitee and such Investor Entity (as if such Investor Entity were also an Indemnitee), to the fullest extent authorized by law, against any and all Expenses and Losses (including all interest, assessments and other charges paid or payable in connection with or in respect of such Expenses and Losses) of such Claim, whether or not such Claim proceeds to judgment or is settled or otherwise is brought to a final disposition, subject in each case, to the further provisions of this Agreement. Notwithstanding the foregoing, no indemnification of the Investor Entity will be provided (or if being provided, will be continued) if at any time the Company's counsel reasonably concludes that there may be a conflict of interest between the Indemnitee and the Investor Entity in the conduct of any defense of the Claim.
2. The foregoing amendment shall be effective February 18, 1997.
3. Capitalized terms used herein and not otherwise defined shall have the meaning assigned to them in the Indemnification Agreement.

In witness whereof, the Company and Indemnitee have executed this Amendment No. 1 as of the day and year first above written.

CIENA Corporation

By: _____

Title: _____

INDEMNITEE

Print Name

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated November 27, 1996, except as to the stock split, share authorizations and Registration Statement authorization described in Note 14, which is as of December 10, 1996, which appears on page F-2 of CIENA Corporation's Registration Statement on Form S-1 dated February 7, 1997.

/s/ PRICE WATERHOUSE LLP

PRICE WATERHOUSE LLP

May 9, 1997

Section 145 of the General Corporation Law of the State of Delaware provides as follows:

(a) A corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

(b) A corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

(c) To the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section, or defense of any claim, issue or matter therein, he shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him in connection therewith.

(d) Any indemnification under subsections (a) and (b) of this section (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in subsections (a) and (b) of this section. Such determination shall be made (1) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (2) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (3) by the stockholders.

(e) Expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by the corporation as authorized in this section. Such expenses (including attorneys' fees) incurred by other employees and agents may be so paid upon such terms and conditions, if any, as the board of directors deems appropriate.

(f) The indemnification and advancement of expenses provided by, or granted pursuant to, the other subsections of this section shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office.

(g) A corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify him against such liability under this section.

(h) For purposes of this section, references to "the corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employee or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under this section with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(i) For purposes of this section, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to any employee benefit plan; and references to "serving at the request of the corporation" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section.

(j) The indemnification and advancement of expenses provided by, or granted pursuant to, this section shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

(k) The Court of Chancery is hereby vested with exclusive jurisdiction to hear and determine all actions for advancement of expenses or indemnification brought under this section or under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise. The Court of Chancery may summarily determine a corporation's obligation to advance expenses (including attorneys' fees).