

UNITED STATES 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)

3661
(Primary standard industrial
classification code number)

23-2725311
(I.R.S. Employer
Identification Number)

1201 Winterson Road
Linthicum, MD 21090
(410) 865-8500

(Address, including zip code, and telephone number, including area code, of
registrant's principal executive offices)

Russell B. Stevenson, Jr.
Senior Vice President, General Counsel and Secretary
Ciena Corporation
1201 Winterson Road
Linthicum, MD 21090
(410) 865-8500

(Address, including zip code, and telephone number, including area code, of agent for service)

with copies to:
Michael J. Silver
Hogan & Hartson L.L.P.
111 South Calvert Street, Suite 1600
Baltimore, MD 21202
(410) 659-2700

**Approximate date of commencement of proposed sale to the public: From time to time after the
effective date of this Registration Statement.**

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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, please 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 this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to Be Registered	Amount to Be Registered	Proposed Maximum Offering Price Per Share (1)	Proposed Maximum Aggregate Offering Amount (1)	Amount of Registration Fee
Common Stock, par value \$0.01 per share	2,465,391 shares (2)	\$26.41	\$65,110,976	\$2,558.86

(1) Pursuant to Rule 457(c) under the Securities Act, the registration fee has been calculated based on the average of the high and low prices of the Registrant's common stock as reported on the NASDAQ Global Select Market on February 29, 2008.

(2) Pursuant to Rule 416 under the Securities Act, the number of shares of common stock registered hereby shall include an indeterminate number of shares of common stock that may be issued in connection with a stock split, stock dividend, recapitalization or similar event.



**Ciena Corporation
1201 Winterson Road
Linthicum, MD 21090
(410) 865-8500**

**2,465,391 Shares
Common Stock**

We have prepared this prospectus to allow the selling stockholders we identify in this prospectus and any accompanying prospectus supplement, and their transferees, to sell up to 2,465,391 shares of our common stock that were issued by us under the terms of the Agreement and Plan of Merger, dated January 22, 2008, under which we acquired World Wide Packets, Inc. We will not receive any of the proceeds from the disposition of these shares by the selling stockholders, but we will incur expenses in connection with the offering.

The selling stockholders may dispose of these shares through one or more of the means described in the section entitled "Plan of Distribution" beginning on page 7.

Our common stock is listed on the NASDAQ Global Select Market under the symbol "CIEN." On March 3, 2008, the last reported sales price of our common stock on the NASDAQ Global Select Market was \$25.95 per share.

Investing in our common stock involves risks. See "Risk Factors" beginning on page 2.

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.

The date of this prospectus is March 4, 2008.

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You should rely only on the information contained in this prospectus, in an accompanying prospectus supplement or incorporated by reference herein or therein. We have not authorized anyone to provide you with information or make any representation that is different. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or a solicitation of an offer to buy any securities other than the registered securities to which they relate, and this prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction where, or to any person to whom, it is unlawful to make such an offer or solicitation. You should not assume that the information contained in this prospectus and any accompanying prospectus supplement is correct on any date after the respective dates of the prospectus and such prospectus supplement or supplements, as applicable, even though this prospectus and such prospectus supplement or supplements are delivered or shares are sold pursuant to the prospectus and such prospectus supplement or supplements at a later date. Since the respective dates of the prospectus contained in this registration statement and any accompanying prospectus supplement, our business, financial condition, results of operations and prospects might have changed.

When used in this prospectus, except where the context otherwise requires, the terms “we,” “us,” and “our” refer to Ciena Corporation.

We have a 52 or 53 week fiscal year, which ends on the Saturday nearest to the last day of October in each year. For purposes of financial statement presentation, each fiscal year is described as having ended on October 31. Fiscal 2003, fiscal 2004, fiscal 2005 and fiscal 2006 each consisted of 52 weeks and fiscal 2007 consisted of 53 weeks.

SUMMARY

The following summary may not contain all the information that may be important to you. You should read the entire prospectus, as well as the information to which we refer you and the information incorporated by reference, before making an investment decision.

Ciena Corporation is a supplier of communications networking equipment, software and services that support the transport, switching, aggregation and management of voice, video and data traffic. Our products are used, individually or as part of an integrated solution, in communications network infrastructures operated by telecommunications service providers, cable operators, governments and enterprises around the globe. Our products facilitate the cost-effective delivery of enterprise and consumer-oriented communication services. Through our FlexSelect™ Architecture, we specialize in transitioning legacy communications networks to converged, next-generation architectures, better able to handle increased traffic and to deliver more efficiently a broader mix of high-bandwidth communications services. By improving network productivity, reducing costs and enabling integrated service offerings, our converged Ethernet infrastructure and broadband access products create business and operational value for our customers.

This prospectus is part of an automatic shelf registration statement that we filed with the Securities and Exchange Commission, or SEC, as a “well-known seasoned issuer” as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act, using a “shelf” registration process. Under this process, selling stockholders named herein or in an accompanying prospectus supplement, or their transferees, may sell shares of our common stock from time to time. Each time any selling stockholder sells shares of our common stock under the registration statement of which this prospectus is a part, the selling stockholder may, as required by applicable law, provide a prospectus and any prospectus supplement containing specific information about the terms of the applicable offering. Such prospectus supplement may add, update or change information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement together with additional information described below under the heading “Where to Find Additional Information” before you decide whether to invest in our common stock.

The Offering

Common stock offered by this prospectus	2,465,391 shares of common stock owned by the selling stockholders.
Selling Stockholders	All of the common stock covered hereby is being offered by the selling stockholders named herein or in an accompanying prospectus supplement, or their transferees. See “Selling Stockholders.”
Use of Proceeds	We will not receive any proceeds from the disposition of shares in this offering.
Plan of Distribution	The selling stockholders may dispose of the shares covered hereby from time to time as described in the section entitled “Plan of Distribution” beginning on page 7.
Trading	Our common stock is listed on the NASDAQ Global Select Market under the symbol “CIEN.”
Risk Factors	See “Risk Factors” and the other information contained in this prospectus and the documents we incorporate by reference for a discussion of factors you should consider carefully before deciding to invest in shares of our common stock.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider and evaluate all of the information contained in this prospectus and in the documents we incorporate herein by reference before you decide to purchase our common stock. In particular, you should carefully consider and evaluate the risks and uncertainties described in Item 1A of our Annual Report on Form 10-K for the fiscal year ended October 31, 2007, under the heading "Risk Factors," as updated by our Quarterly Reports on Form 10-Q and any other subsequently filed reports incorporated herein by reference. Any of the risks and uncertainties set forth therein could materially and adversely affect our business, results of operations and financial condition, which in turn could materially and adversely affect the trading price of our common stock being offered by this prospectus. As a result, you could lose all or part of your investment.

FORWARD-LOOKING STATEMENTS

Some of the statements contained, or incorporated by reference, in this prospectus discuss future expectations, contain projections of results of operations or financial condition or state other "forward-looking" information within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. Those statements are subject to known and unknown risks, uncertainties and other factors that could cause the actual results to differ materially from those contemplated by the statements. The "forward-looking" information is based on various factors and was derived using numerous assumptions. In some cases, you can identify these so-called "forward-looking statements" by words like "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," or "continue" or the negative of those words and other comparable words. You should be aware that those statements only reflect our predictions. Actual events or results may differ substantially. Important factors that could cause our actual results to be materially different from the forward-looking statements are disclosed in the information incorporated by reference in this prospectus, including in Item 1A, "Risk Factors" of our Form 10-K for the fiscal year ended October 31, 2007, as updated by our Quarterly Reports on Form 10-Q and any other subsequently filed reports incorporated herein by reference.

We undertake no obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

We will not receive any proceeds from the disposition of the shares of common stock covered hereby by the selling stockholders or their transferees.

The selling stockholders will pay any underwriting discounts and commissions and expenses they incur for brokerage, accounting or tax or legal services or any other expenses they incur in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus. These may include, without limitation, all registration and filing fees, NASDAQ listing fees, fees and expenses of our counsel and accountants, and blue sky fees and expenses.

SELLING STOCKHOLDERS

We are registering 2,465,391 shares covered by this prospectus on behalf of the selling stockholders named in the table below. We issued all of the shares to the selling stockholders in a private placement in connection with our acquisition of World Wide Packets, Inc. We are registering the shares of common stock in order to permit the selling stockholders, and their respective donees, pledgees, transferees or other successors-in-interest, to resell or otherwise dispose of the shares from time to time. Except for the ownership of shares of our common stock, the selling stockholders have not had any material relationship with us within the past three years.

The following table sets forth the name of each selling stockholder, the shares of common stock beneficially owned by each selling stockholder and the shares of common stock that may be disposed of by each selling stockholder or its transferees under this prospectus. The information is based on information provided by or on behalf of the selling stockholders to us and is as of the date of this prospectus. Because the selling stockholders may dispose of all or some portion of the common stock, no estimate can be given as to the amount of the common stock that will be held by the selling stockholders upon termination of this offering. For purposes of the table below, however, we have assumed that after termination of this offering none of the shares covered by this prospectus will be held by the selling stockholders.

<u>Name of Selling Stockholder</u>	<u>Shares of Common Stock Beneficially Owned Prior to Offering</u>	<u>Maximum Number of Shares That May Be Sold Pursuant to This Prospectus</u>	<u>Shares of Common Stock Beneficially Owned After Offering</u>	<u>Percent of Shares Owned After Offering(1)</u>
Alexander W. Duff	287	287	0	0.0%
Alps Electric Co. Ltd.(2)	5,777	5,777	0	0.0%
ARGC VI, L.P.(3)	2,485	2,485	0	0.0%
Argo II: The Wireless-Internet Fund L.P.(4)	378,604	378,604	0	0.0%
Arnold G. Peterson	2,407	2,407	0	0.0%
Azure I, L.P.(5)	289	289	0	0.0%
Azure Partners I, L.P.(5)	7,756	7,756	0	0.0%
Azure Venture Partners I, L.P.(5)	488,730	488,730	0	0.0%
Azure Ventures I, L.P.(5)	14,745	14,745	0	0.0%
Boardman Capital Partners, LLC(6)	14,047	14,047	0	0.0%
Cascadia Capital, LLC(7)	20,552	20,552	0	0.0%
Daniel L. Burstein	1,016	1,016	0	0.0%
David E. Curry (8)	4,366	4,366	0	0.0%
Daniel T. Reiner (9)	67,161	67,161	0	0.0%

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to Offering	Maximum Number of Shares That May Be Sold Pursuant to This Prospectus	Shares of Common Stock Beneficially Owned After Offering	Percent of Shares Owned After Offering(1)
Andrew R. Reiner	33,920	33,920	0	0.0%
Eagle River Holdings, LLC (10)	267,800	267,800	0	0.0%
Entrepia Fund II, L.P.(11)	70,233	70,233	0	0.0%
Entrepia Fund North, L.P.(12)	84,214	84,214	0	0.0%
Fred H. Faltersack, Trustee of the Faltersack Family Trust dated 5/25/1995(13)	437	437	0	0.0%
Frey Consulting(14)	2,233	2,233	0	0.0%
Hans G. Roderich	404	404	0	0.0%
Joel D. Hornstein	2,093	2,093	0	0.0%
Joel D. Hornstein and Emily Putnam Hornstein	265	265	0	0.0%
John C. Rudolf	985	985	0	0.0%
Madrona Managing Director Fund, LLC(15)	41,488	41,488	0	0.0%
Madrona Venture Fund I-A, L.P.(15)	315,729	315,729	0	0.0%
Madrona Venture Fund I-B, L.P.(15)	34,362	34,362	0	0.0%
Mary Ann Barkshire	158	158	0	0.0%
Millennium Technology Ventures LP(16)	13,803	13,803	0	0.0%
Northwest Venture Partners III, LP(17)	259,191	259,191	0	0.0%
Oasis Holdings LLC(18)	5,766	5,766	0	0.0%
Rally Capital, LLC(19)	267,800	267,800	0	0.0%
Rolling Bay Ventures LLC(20)	3,769	3,769	0	0.0%
Rosetta Group, L.L.C.(21)	5,738	5,738	0	0.0%
Summit Capital Partners, LP(22)	985	985	0	0.0%
Venture Lending & Leasing IV, LLC(23)	26,150	26,150	0	0.0%
Western United Life Assurance Company(24)	19,646	19,646	0	0.0%

- (1) Based on 87,046,455 shares of common stock outstanding as of January 28, 2008.
- (2) The shares are owned directly by Alps Electric Co, Ltd., a publicly traded Japanese company listed on the Tokyo Stock Exchange.
- (3) The shares are owned directly by ARGV VI, L.P. Henry Haight is the general partner of ARGV VI, L.P. and has sole voting and dispositive power over these shares.
- (4) The shares are directly held by Argo II: The Wireless-Internet Fund L.P. and indirectly by Argo Global Capital II Partners, L.P., Argo GP, Inc., Henry Haight and TelSystems, Inc. Argo Global Capital II Partners is the general partner of Argo II: The Wireless-Internet Fund, L.P. Argo GP, Inc. is the general partner of Argo Global Capital II Partners, L.P. Henry Haight and TelSystems, Inc. own all of the outstanding shares of Argo GP, Inc.
- (5) Azure Capital Partners VC Administrators, LLC is the General Partner of Azure I, L.P., Azure Partners I, L.P., Azure Venture Partners I, L.P., and Azure Venture I, L.P. (the "Azure entities"). Michael K. Kwatinetz, Robert C. Lester, Paul A. Ferris and Paul J. Weinstein are the managing members of Azure Capital Partners VC Administrators, LLC and share voting and dispositive power over the shares held by the Azure entities. The managing members disclaim beneficial ownership of the shares held by the Azure entities except to the extent of their indirect pecuniary interest in their distributive shares therein.
- (6) The shares are owned directly by Boardman Capital Partners, LLC. Brian D. Owen is the managing member of Boardman Capital Partners, LLC and has sole voting and dispositive power over the shares.
- (7) Michael Butler in his capacity as Chief Executive Officer of Cascadia Capital, LLC, and Nancy Greer in her capacity as Managing Director and Chief Financial Officer of Cascadia Capital, LLC share voting and dispositive power of these shares.

- (8) David E. Curry owns the shares directly. Mr. Curry was the Vice-Chairman and President of World Wide Packets, Inc.
- (9) Daniel T. Reiner owns the shares directly. Mr. Reiner was the Chairman and Chief Executive Officer of World Wide Packets, Inc.
- (10) The shares are directly held by Eagle River Holdings, LLC, and indirectly by Eagle River, Inc., Craig O. McCaw, an individual and Benjamin G. Wolff, an individual. Eagle River, Inc. is the manager of Eagle River Holdings, LLC. Mr. McCaw is the sole shareholder of Eagle River, Inc. Mr. Wolff is the President of Eagle River, Inc. Mr. McCaw and Mr. Wolff share voting and dispositive power over these shares.
- (11) The shares are directly held by Entrepia Fund II, L.P., and indirectly by Entrepia Management, L.P., Entrepia Ventures, Inc., S. Gene Kawaratan and Amit Srivastava. Entrepia Management, L.P. is the general partner of Entrepia Fund II, L.P. Entrepia Ventures, Inc. is the general partner of Entrepia Management, L.P. S. Gene Kawaratan is the Chief Executive Officer of Entrepia Ventures, Inc. Amit Srivastava is the President of Entrepia Ventures, Inc. Mr. Kawaratan and Mr. Srivastava share voting and dispositive power of these shares.
- (12) The shares are directly held by Entrepia Fund North, L.P., and indirectly by Entrepia Canada Management, L.P., Entrepia Canada Co., S. Gene Kawaratan and Amit Srivastava. Entrepia Canada Management, L.P. is the general partner of Entrepia Fund North, L.P. Entrepia Canada Co. is the general partner of Entrepia Canada Management, L.P. S. Gene Kawaratan is the Chief Executive Officer of Entrepia Canada Co. Amit Srivastava is the President of Entrepia Canada Co. Mr. Kawaratan and Mr. Srivastava share voting and dispositive power of these shares.
- (13) The shares are held directly by Fred H. Faltersack, Trustee for the Faltersack Family Trust dated 5/25/1995.
- (14) The shares are directly owned by Matthew Frey, doing business as Frey Consulting. Mr. Frey was the President and Chief Operating Officer of World Wide Packets, Inc.
- (15) The shares are held directly by Madrona Venture Fund I-A, L.P., Madrona Venture Fund I-B, L.P., and Madrona Managing Director Fund, LLC. Madrona Investment Partners, LLC is the general partner of Madrona Venture Fund I-A, L.P. and Madrona Venture Fund I-B, L.P. Tom A. Alberg, Paul B. Goodrich, Matthew S. McIlwain, and Greg Gottesman are the managing members of Madrona Managing Director Fund, LLC and Madrona Investment Partners, LLC, and share voting and dispositive power over the shares.
- (16) The shares are owned directly by Millennium Technology Ventures, LP. Daniel L. Burnstein and Samuel Schwerin share voting and dispositive power over the shares.
- (17) The shares are owned directly by Northwest Venture Partners III, L.P. and Northwest Venture Associates, LLC holds sole voting and dispositive power of the shares as the manager of Northwest Venture Partners III, L.P.
- (18) The shares are owned directly by Oasis Holdings, LLC. William C. Newton is the managing member of Oasis Holdings, LLC and has sole voting and dispositive power over the shares.
- (19) The shares are owned directly by Rally Capital, LLC. Dennis M. Weibling is the managing member of Rally Capital, LLC and has sole voting and dispositive power over the shares.
- (20) The shares are owned directly by Rolling Bay Ventures, LLC. Geoffrey R. Entress is the managing member of Rolling Bay Ventures, LLC and has sole voting and dispositive power over the shares.

- (21) The shares are owned directly by Rosetta Group, LLC. Mel A. Shaftel is the managing member of Rosetta Group, LLC and has sole voting and dispositive power over the shares.
- (22) The shares are owned directly by Summit Capital Partners, LP. John Rudolf and Matt Rudolf are the managing members of Summit Capital Partners I, LLC, the general partner for Summit Capital Partners, LP, and have investment power and voting control over the shares.
- (23) The shares are owned directly by Venture Lending & Leasing IV, LLC, and indirectly by Westech Investment Advisers, Inc., Ronald W. Swanson and Salvador O. Guterrez. Westech Investment Advisers, Inc. is the managing member of Venture Lending & Leasing IV, LLC and has the power to direct voting and disposition of the shares. Mr. Swanson and Mr. Guterrez own 100% of the outstanding shares of Westech Investment Advisers, Inc.
- (24) The shares are owned directly by Western United Life Assurance Company.

Information concerning the selling stockholders may change from time to time and any such changed information will be set forth in supplements to this prospectus if and when necessary.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- on the NASDAQ Global Select Market or any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share; and
- a combination of any such methods of sale, or any other available means allowable under law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment or supplement to this prospectus amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage

in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling stockholders also may resell all or a portion of the shares in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares purchased by them may be deemed to be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against losses, claims, damages or liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus. We may be indemnified by the selling stockholders against losses, claims, damages or liabilities, including liabilities under the Securities Act that may arise from written information furnished to us by the selling stockholders specifically for use in this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until March 3, 2009.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” in this prospectus certain information we file with the SEC, which means that we may disclose important information in this prospectus by referring you to the document that contains the information. The information incorporated by reference is considered to be a part of this prospectus, and the information we file later with the SEC will automatically update and supersede the information filed earlier. We incorporate by reference the documents listed below (and any amendments thereto) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until the offering of the shares covered by this prospectus is completed; *provided, however*, that we are not incorporating by reference any documents or information, including parts of documents that we file with the SEC, that are deemed to be furnished and not filed with the SEC:

- our Annual Report on Form 10-K for the fiscal year ended October 31, 2007, filed with the SEC on December 27, 2007;
- our Current Reports on Form 8-K filed with the SEC on December 13, 2007 (as to Item 5.02 only), January 2, 2008, January 24, 2008 and February 1, 2008; and
- the description of our common stock as set forth in our Registration Statement filed under Section 12 of the Exchange Act on Form 8-A on January 13, 1997, including any amendment or report filed with the SEC for the purpose of updating such description.

You may obtain copies of any of these filings by contacting us at the address and phone number indicated below or by contacting the SEC as described below under the section entitled “Where You Can Find More Information.” Documents incorporated by reference are available from us without charge, excluding all exhibits unless an exhibit has been specifically incorporated by reference into this prospectus, by requesting them in writing, by telephone or via the Internet at:

Ciena Corporation
1201 Winterson Road
Linthicum, MD 21090
(410) 865-8500
Attn: Corporate Secretary
Internet Website: www.ciena.com

The information contained on our website does not constitute a part of this prospectus, and our website address supplied above is intended to be an inactive textual reference only and not an active hyperlink to our website.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC under the Securities Act a registration statement on Form S-3, of which this prospectus is a part, including exhibits, schedules and amendments filed with, or incorporated by reference in, the registration statement, with respect to the securities registered hereby. This prospectus and any accompanying prospectus supplement do not contain all of the information set forth in the registration statement and exhibits and schedules to the registration statement. For further information with respect to our company and the securities registered hereby, reference is made to the registration statement, including the exhibits to the registration statement, and the documents incorporated by reference therein. Statements contained in this prospectus and any accompanying prospectus supplement as to the contents of any contract or other document referred to in, or incorporated by reference in, this prospectus and any accompanying prospectus supplement are not necessarily complete and, where that contract or other document is an exhibit to the registration statement, or a document incorporated by reference, each statement is qualified in all respects by the exhibit to which the reference relates.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Copies of the registration statement, including the exhibits and schedules to the registration statement, may be examined without charge at the public reference room of the SEC, 100 F Street, N.E., Washington, D.C. 20549. Information about the operation of the public reference room may be obtained by calling the SEC at 1-800-SEC-0330. Copies of all or a portion of the documents we file with the SEC can be obtained from the public reference room of the SEC upon payment of prescribed fees. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Our SEC filings are available to you on the SEC's website at <http://www.sec.gov>.

We undertake no obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.

LEGAL MATTERS

Hogan & Hartson L.L.P., Baltimore, Maryland has passed upon certain legal matters in connection with the common stock offered hereby.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended October 31, 2007 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

Securities and Exchange Commission filing fee	\$	2,559
Accounting fees and expenses		12,500
Legal fees and expenses		25,000
Miscellaneous		5,000
Total expenses	\$	45,509

All of the above fees and expenses will be paid by the registrant. Other than the Securities and Exchange Commission filing fee, all fees and expenses are estimated.

Item 15. Indemnification of Directors and Officers.

Under Section 145 of the Delaware General Corporation Law (“DGCL”), a corporation may indemnify its directors, officers, employees and agents and its former directors, officers, employees and agents and those who serve, at the corporation’s request, in such capacities with another enterprise, against expenses (including attorneys’ fees), as well as judgments, fines and settlements in nonderivative lawsuits, actually and reasonably incurred in connection with the defense of any action, suit or proceeding in which they or any of them were or are made parties or are threatened to be made parties by reason of their serving or having served in such capacity. The DGCL provides, however, that such person must have acted in good faith and in a manner such person reasonably believed to be in (or not opposed to) the best interests of the corporation and, in the case of a criminal action, such person must have had no reasonable cause to believe his or her conduct was unlawful. In addition, the DGCL does not permit indemnification in an action or suit by or in the right of the corporation, where such person has been adjudged liable to the corporation, unless, and only to the extent that, a court determines that such person fairly and reasonably is entitled to indemnity for costs the court deems proper in light of liability adjudication. Indemnity is mandatory to the extent a claim, issue or matter has been successfully defended.

The Third Restated Certificate of Incorporation, as amended, of Ciena Corporation (the “Ciena Certificate”) contains provisions that provide that no director of Ciena shall be liable for breach of fiduciary duty as a director, except for: (1) any breach of the directors’ duty of loyalty to Ciena or its stockholders; (2) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of the law; (3) liability under Section 174 of the DGCL; or (4) any transaction from which the director derived an improper personal benefit. The Ciena Certificate contains provisions that further provide for the indemnification of directors and officers to the fullest extent permitted by the DGCL. Under the bylaws of Ciena, Ciena is required to advance expenses incurred by an officer or director in defending any such action if the director or officer undertakes to repay such amount if it is determined that the director or officer is not entitled to indemnification. In addition, Ciena has entered into indemnification agreements with each of its directors and executive officers pursuant to which Ciena has agreed to indemnify such persons as permitted by the DGCL. Ciena has obtained directors and officers liability insurance against certain liabilities, including liabilities under the Securities Act.

Item 16. Exhibits.

The following exhibits are filed herewith:

<u>Exhibit Number</u>	<u>Description</u>
4.1 (1)	Specimen Stock Certificate
5.1	Opinion of Hogan & Hartson L.L.P. (filed herewith)
23.1	Consent of Hogan & Hartson L.L.P. (contained in Exhibit 5.1)
23.2	Consent of PricewaterhouseCoopers LLP (filed herewith)
24.1	Power of Attorney (included with signature page)

(1) Incorporated by reference from the Registrant's Annual Report on Form 10-K filed December 27, 2007.

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;

(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)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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.

(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.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

B. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) 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.

C. 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 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 has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

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 Linthicum, Maryland on March 4, 2008.

CIENA CORPORATION

By: /s/ Gary B. Smith
Gary B. Smith
President and Chief Executive Officer

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POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Gary B. Smith and Russell B. Stevenson, Jr., and each of them, his or her true and lawful attorney-in-fact and agents, with full power of substitution and resubstitution, from such person and in each person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to the Registration Statement 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, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Patrick H. Nettles, Ph.D.</u> Patrick H. Nettles, Ph.D.	Executive Chairman of the Board of Directors	March 4, 2008
<u>/s/ Gary B. Smith</u> Gary B. Smith	President, Chief Executive Officer and Director (Principal Executive Officer)	March 4, 2008
<u>/s/ James E. Moylan</u> James E. Moylan, Jr.	Senior Vice President, Finance and Chief Financial Officer (Principal Financial Officer)	March 4, 2008
<u>/s/ Andrew C. Petrik</u> Andrew C. Petrik	Vice President, Controller and Treasurer (Principal Accounting Officer)	March 4, 2008
<u>/s/ Stephen P. Bradley</u> Stephen P. Bradley	Director	March 4, 2008
<u>/s/ Harvey B. Cash</u> Harvey B. Cash	Director	March 4, 2008
<u>/s/ Bruce L. Claffin</u> Bruce L. Claffin	Director	March 4, 2008

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Lawton W. Fitt</u> Lawton W. Fitt	Director	March 4, 2008
<u>/s/ Judith M. O'Brien</u> Judith M. O'Brien	Director	March 4, 2008
<u>/s/ Michael J. Rowny</u> Michael J. Rowny	Director	March 4, 2008
<u>/s/ Gerald H. Taylor</u> Gerald H. Taylor	Director	March 4, 2008

EXHIBIT INDEX

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24.1	Power of Attorney (included with signature page)

(1) Incorporated by reference from the Registrant's Annual Report on Form 10-K filed December 27, 2007.

March 4, 2008

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 2,465,391 shares of the Company’s common stock, par value \$0.01 per share (the “**Shares**”), issued in a transaction exempt from registration under the Securities Act of 1933, as amended (the “**Securities Act**”) pursuant to the Agreement and Plan of Merger, dated as of January 22, 2008 (the “**Merger Agreement**”), between the Company, Wolverine Acquisition Subsidiary, Inc. (“**Merger Sub**”), World Wide Packets, Inc. (“**WWP**”), and Daniel Reiner, as Stockholders’ Representative. The Merger Agreement provides for the merger of Merger Sub with and into WWP and related transactions (the “**Merger**”). All of the Shares are contemplated to be sold by the selling stockholders named in the prospectus which forms a part of the Registration Statement on a delayed or continuous basis pursuant to Rule 415 under the Securities Act. The Shares were issued to the selling stockholders in the Merger. 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. § 229.601(b)(5), in connection with the Registration Statement.

For purposes of this opinion letter, we have examined copies of the following documents (the “**Documents**”):

1. An executed copy of the Registration Statement.
 2. An executed copy of the Merger Agreement.
 3. The Third Restated Certificate of Incorporation of the Company, as amended, as certified by the Secretary of State of the State of Delaware on February 27, 2008 and by the Secretary of the Company on the date hereof as then being complete, accurate and in effect.
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4. 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.
5. Certain resolutions of the Board of Directors of the Company adopted at a meeting of the Board of Directors on January 21, 2008, as certified by the Secretary of the Company on the date hereof as being complete, accurate and in effect, relating to, among other things, the authorization of the Merger Agreement, the issuance of the Shares, the filing of the Registration Statement, and arrangements in connection therewith.
6. The Certificate of Merger filed with the Secretary of State of the State of Delaware on March 3, 2008, in connection with the Merger.
7. A certificate of an officer of the Company, dated as of the date hereof, as to certain facts relating to the Company.

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 of the Documents, the authenticity of all originals of the Documents and the conformity to authentic originals of all of the Documents submitted to us as copies (including telecopies). As to all matters of fact relevant to the opinions expressed and other statements made herein, we have relied on the representations and statements of fact made in the Documents, we have not independently established the facts so relied on, and we have not made any investigation or inquiry other than our examination of the Documents. This opinion letter is given, and all statements herein are made, in the context of the foregoing.

This opinion letter is based as to matters of law solely on the Delaware General Corporation Law, as amended. 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 the Shares are validly issued, fully paid and nonassessable.

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

Board of Directors
Ciena Corporation
March 4, 2008
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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 Securities Act.

Very truly yours,

/s/ Hogan & Hartson L.L.P.

HOGAN & HARTSON L.L.P.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated December 27, 2007 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Ciena Corporation's Annual Report on Form 10-K for the year ended October 31, 2007. We also consent to the references to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

McLean, Virginia

March 3, 2008