FORM 4

obligations may continue. See Instruction 1(b).

Check this box if no longer subject to Section 16. Form 4 or Form 5

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL OMB Number: Estimated average burden

0.5

hours per response:

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person* <u>ALEXANDER STEPHEN B</u> | | | | | | 2. Issuer Name and Ticker or Trading Symbol CIENA CORP [CIEN] | | | | | | | | | | Check a | ionship of Reportin all applicable) Director Officer (give title | | Person(s) to Issuer 10% Owner | | wner |
|--|---|--|--|-------|---|---|-----|----|---|------------------------------------|-----------------|--------------------|---|-----------|----------------------|--|---|---|--|---|--|
| (Last) (First) (Middle) C/O CIENA CORPORATION 1201 WINTERSON ROAD | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 07/16/2007 | | | | | | | | | | | X | belov | v) | chnolo | Other (specify below) nnology Officer | |
| (Street) LINTHICUM, MD 21090 (City) (State) (Zip) | | | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | | Individ ine) X | dual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Date) | | | | | | Exe Day/Year) if a | | | A. Deemed xecution Date, any Month/Day/Year) | | Transaction D | | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 5) | | | 4 and Secur Benet | | cially I Following | 6. Own Form: (D) or I (I) (Inst | Direct Indirect | 7. Nature of Indirect Beneficial Ownership |
| | | | | | | | | | | Code | v | Amount | (A) or (D) Pr | | Price | 1 | Transa | action(s) 3 and 4) | | | (Instr. 4) |
| Common Stock 07/16/ | | | | | | /2007 | | | | | | 250 | | D | \$38.58 | | 88,073 | |] | D | |
| Common Stock 07/16/2 | | | | | | /2007 | | | | | | 1,000 | | D | \$38.56 | | 87,073 | |] | D | |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deem Execution if any (Month/Da | Date, | | ransaction Code (Instr. | | | | 6. Date E Expiratio (Month/D | n Dat | е | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | ount | 8. Prio Deriva Secur (Instr. | vative urity | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4) | Ow For Dire or I (I) (| Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | Code | v | \ (| A) | | Date Exercisal | | Expiration Date | Title | of Sha | | | | | | | |

Explanation of Responses:

1. Sales were effected pursuant to Rule 10b5-1 trading plan dated 12/20/06.

By: Erik Lichter For: Stephen B. Alexander

07/17/2007

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.