FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

3

| OMB APP | ROVAL |
|-------------|--------|
| OMP Number: | 2225.0 |

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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* ALEXANDER STEPHEN B (Last) (First) (Middle) C/O CIENA CORPORATION 1201 WINTERSON ROAD | | | | | 2. Issuer Name and Ticker or Trading Symbol CIENA CORP [CIEN] 3. Date of Earliest Transaction (Month/Day/Year) 03/15/2007 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | | X | II app Direct Office below Sr V | olicable) etor er (give title v) P Chief Te | chnol | Person(s) to Issuer 10% Owner Other (specify below) nology Officer illing (Check Applicable | | |
|--|---|---|--------------|--------------------------------------|--|---|--|----------|---|------------------|---------------------------|--|------|-----------------------|--|---|---|----------------------------|---|--|--|
| (Street) LINTHICUM, MD 21090 (City) (State) (Zip) | | | | | | 4. Il Allichanicht, Date di Originali Filed (World Day) Teal) | | | | | | | | | | X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| (=:9) | | | ble I - No | n-Deriv | ative | Se | ecur | rities A | \ca | uired. | Dis | posed o | f. o | r Ben | eficia | ally O | wne | ed | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Date) | | | | | action 2/ Ex Day/Year) if | | 2A. Deemed Execution Date, if any (Month/Day/Year) | | 3. Transaction Code (Instr. | | 4. Securities Acquired (A | | | (A) or | A) or 5. 4 and S | | 5. Amount of Securities Beneficially Owned Following Reported | | vnership n: Direct or Indirect nstr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | Code | v | Amount | | | | (A) or (D) | Price | Trai | | action(s) 3 and 4) | | | , | | | | |
| Common Stock 03/15/ | | | | | | /2007 | | | | S ⁽¹⁾ | | 50 | | D | \$25.64 | | 9 | 93,728 | | D | |
| Common Stock 03/15 | | | | | | /2007 | | | | S ⁽¹⁾ | | 100 | | D | \$25.62 | | 93,628 | | L | D | |
| Common Stock 03/15 | | | | | 5/2007 | | | | | S ⁽¹⁾ | | 1,100 | | D | \$25 | .61 | 92,528 | | L | D | |
| | | • | Fable II - I | | | | | | | | | sed of, onvertib | | | | y Owi | ned | | | | |
| 1. Title of Derivative Security (Instr. 3) | ve Conversion Date Execution Date or Exercise (Month/Day/Year) if any | | n Date, | 4. Transaction Code (Instr. 8) | | on or. D | of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | Date Expiration Expiration Date Month/Day/Year) Date Expiration Exercisable Date | | | Amount of Securities Underlying Derivative Security (Instrand 4) Amount of Securities Underlying Derivative Security (Instrand 4) | | ount nber | 8. Pric Deriva Securi (Instr. | tive ty | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | O Fe Di oi (I) | 0. Ownership orm: Oirect (D) or Indirect () (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |

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

03/16/2007

** 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.