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 hours per response: 0.5

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* SMITH GARY B | | | | | | 2. Issuer Name and Ticker or Trading Symbol CIENA CORP [CIEN] | | | | | | | | | Check all | applicable) irector | Ü | Person(s) to Issuer 10% Owner | | |
|---|---|--|---|---------|---|---|---|-------|------------------|--|----------------------|--|-------------------|---|--|--|---|---|--|--|
| (Last) (First) (Middle) C/O CIENA CORPORATION 1201 WINTERSON ROAD | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 04/29/2006 | | | | | | | | | | | X Officer (give title below) Other (sp below) President and CEO | | | | |
| (Street) LINTHICUM MD 21090 (City) (State) (Zip) | | | | | - 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | ine) X F F | | | | | |
| | | Tab | le I - No | n-Deri | vative | Se | curiti | es Ac | quired | , Dis | posed o | f, or | Bene | efici | ally Ov | vned | | | | |
| 1. Title of Security (Instr. 3) 2. Transa Date (Month/D | | | | | action 2A. Deemed Execution Date, if any (Month/Day/Year) | | | | | ties Acquired (A) d Of (D) (Instr. 3, 4 | | | nd Se Be Ov | Amount of curities neficially vned Following ported | 6. Owne Form: D (D) or In (I) (Instr. | irect direct | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |
| | | | | | | | | | Code | v | Amount | | (A) or (D) | Price | _ Tra | ansaction(s) str. 3 and 4) | | | (111301. 4) | |
| Common Stock 04/29/ | | | | | | /2006 | | | | | 13,416 | (1) | A | \$ | 50 | 396,176 | | | | |
| Common Stock 04/29/3 | | | | | | 5 | | | | | 6,869(| 2) | D | \$4 | .09 | 389,280 | | | | |
| | | Ta | | | | | | | | | osed of, onvertib | | | | | ed | | | | |
| 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/D | n Date, | Date, Trans Code | | of Deriving Security (A) of Disput of (Inst | of I | | Exerci on Dai Day/Ye | | 7. Title and Amount of Securities Underlying Derivative Security (Instr and 4) | | ount | 8. Price Derivati Security (Instr. 5 | derivative Securities | Own Forn Direc or In (I) (Ir | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | Code | V | (A) | (D) | Date Exercisa | | Expiration Date | Title | of | nber res | | | | | | |

Explanation of Responses:

- 1. Shares reported as acquired were previously reported in Table I of reporting person's Form 4 filed on November 3, 2005. The amount reported as acquired represents shares that vested on April 29, 2006 and that were not forfeited to cover tax liabilities of the grantee pursuant to the award grant. Represents the second of 16 quarterly vesting dates.
- 2. Shares reported represent the amount forfeited to cover the tax liabilities of the grantee pursuant to the award grant.

/s/Gary B. Smith by Anita 05/01/2006 Weiskerger per POA

** 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.