| SEC Form 4 | |
|------------|--|
|------------|--|

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

| OMB APPROVAL | | | | | | | |
|----------------------|-----------|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | |
| Estimated average bu | urden | | | | | | |
| | 0.5 | | | | | | |

| - 11 | Estimated average burden hours per response: | 0.5 |
|------|---|-----|
| Ľ | | |

| | | | 3 | | | |
|---|---------------|----------------|--|------------------------|--|--|
| 1. Name and Address of Reporting Person [*] Aquino Michael Gerald | | | 2. Issuer Name and Ticker or Trading Symbol <u>CIENA CORP</u> [CIEN] | | tionship of Reporting Perso all applicable) Director | 10% Owner |
| (Last) (First) (Middle) C/O CIENA CORPORATION 1201 WINTERSON ROAD | | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 09/21/2009 | | Officer (give title below) SR VP. Global Field (| Other (specify below) Operations |
| (Street) LINTHICUM, (City) | MD (State) | 21090 (Zip) | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indiv Line) X | ridual or Joint/Group Filing Form filed by One Repor Form filed by More than Person | ting Person |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | Transaction Code (Instr. | | 4. Securities Disposed Of | | | 5. Amount of Securities Beneficially Owned Following Reported | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|---------------------------------|--|---|-----------------------------|---|------------------------------|---------------|-----------|---|---|---|--|
| | | | Code | v | Amount | (A) or (D) | Price | Transaction(s) (Instr. 3 and 4) | | (inst. 4) | |
| Common Stock | 09/21/2009 | | S | | 296(1) | D | \$15.473 | 194,956 | D | | |
| Common Stock | 09/21/2009 | | S | | 3,650 ⁽²⁾ | D | \$15.4737 | 191,306 ⁽³⁾ | 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. Deemed Execution Date, if any (Month/Day/Year) | 4. Transa Code (8) | | of Deriv Secu Acqu (A) or Dispo of (D) (Instr | of Expiration Date Derivative (Month/Day/Year) Securities Acquired (A) or | | le and 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|---|---|--|---|------------------------------|---|--|---|---------------------|---|-------|--|--|--|--|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

1. Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/18/2007. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/20/2007.

2. Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/16/2008. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/18/2008.

3. Shares reported include unvested Restricted Stock Units (RSUs).

By: Erik J. Lichter For: Michael G. Aquino

09/23/2009

** 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.