FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| wasnington, | D.C. | 2054 |
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| l | OMB APPRO | DVAL | | | | | |
|---|--------------------------|-----------|--|--|--|--|--|
| | OMB Number: | 3235-0287 | | | | | |
| l | Estimated average burden | | | | | | |
| l | hours per response: | 0.5 | | | | | |

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* SMITH GARY B | | | | 2. Issuer Name and Ticker or Trading Symbol CIENA CORP [CIEN] | | | | | | | | | | | all app | olicable) ctor | g Person(s) to I | Owner | |
|--|-------|--|---|---|---|-------------------------|--------|--|---|---------|---------------------|-------|--|--|---|--|----------------------------------|--|------------|
| (Last) (First) (Middle) C/O CIENA CORPORATION 7035 RIDGE RD. | | | 3. Date of Earliest Transaction (Month/Day/Year) 12/21/2016 | | | | | | | | | | X | belov | , | other below ENT, CEO | (specify) | | |
| (Street) HANOV (City) | | | 21076-14 (Zip) | 126 | 4. If | Ame | ndmen | t, Date o | f Origina | l Filed | l (Month/Da | ay/Ye | ear) | | Indiv ne) X | Form | n filed by One n filed by Mor | Filing (Check A Reporting Pers re than One Rep | son |
| | | Tab | le I - No | n-Deriva | ative | Sec | curiti | es Acc | uired. | Dis | posed o | f. o | or Ben | eficia | llv (| Owne | ed | | |
| 1. Title of Security (Instr. 3) | | 2. Transaction Date (Month/Day/Year) | | 2A. Deemed Execution Date, | | 3. | | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 | | (A) or | or ! 4 and 5) ! | | ount of ities icially d Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership | | | | |
| | | | | | | | | | Code | v | Amount | | (A) or (D) | Price | | Repor Transa (Instr. | action(s) 3 and 4) | | (Instr. 4) |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 3,841(1 | .) | D | \$24. | 67 | 90 | 4,056 ⁽²⁾ | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 5,431 ⁽³ | 3) | D | \$24. | 67 | 89 | 8,625(2) | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 16,246 ⁽ | 3) | D | \$24. | 67 | 88 | 2,379 ⁽²⁾ | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 2,887(4 | 1) | D | \$24. | 67 | 87 | 9,492(2) | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 41,149 | 5) | D | \$24. | 67 | 83 | 8,343(2) | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 12,972 ⁽ | 5) | D | \$24. | 67 | 82 | 5,371 ⁽²⁾ | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 3,839(6 | 5) | D | \$24. | 67 | 82 | 1,532 ⁽²⁾ | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 9,441 ⁽⁷ | " | D | \$24. | 67 | 81 | 2,091 ⁽²⁾ | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 15,696 ⁰ | 7) | D | \$24. | 67 | 79 | 6,395 ⁽²⁾ | D | |
| Common | Stock | | | 12/21/ | 2016 | | | | S | | 2,816(8 |) | D | \$24. | 67 | 79 | 3,579 ⁽²⁾ | D | |
| | | T | | | | | | | | | sed of, onvertib | | | | / Ov | vned | | | |
| 1. Title of Derivative Security (Instr. 3) 2. Conversion or Exercise Price of Derivative Security (Instr. 3) 3. Transaction Date Execution Date, if any (Month/Day/Year) (Month/Day/Year) 4. Transaction Date (Month/Day/Year) (Month/Day/Year) 6. Code | | Transa Code (I | nstr. | of Deri Secu Acq (A) o Disp of (E | urities uired or osed o) r. 3, 4 | Expiration (Month/Da | | е | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) Amoun or Numbe of Title Shares | | ount | | | 9. Number o derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |

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 12/18/2012. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/20/2012.
- 2. Shares reported include unvested Restricted Stock Units (RSUs) and Performance Stock Units (PSUs).
- 3. 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 performance stock unit (PSU) award agreement dated 12/17/2013. The earning of the PSU was previously reported on Table I of reporting person's Form 4 on 12/19/2014.
- 4. 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 12/17/2013. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/19/2013.
- 5. 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 performance stock unit (PSU) award agreement dated 12/17/2014. The earning of the PSU was previously reported on Table I of reporting person's Form 4 on 12/17/2015.
- 6. 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 12/17/2014. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/19/2014.
- 7. 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 performance stock unit (PSU) award agreement dated 12/15/2015. The earning of the PSU was previously reported on Table I of reporting person's Form 4 on 12/16/2016.
- 8. 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 12/15/2015. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/17/2015.

By: Michelle Griswold For: Gary B. Smith

12/22/2016

** 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.