FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB APPROVAL

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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).

(Print or Type Responses)

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

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* BOND ROBERT T | | | | 2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC] | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) _X_Director | | | | | |
|--------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------|-------------|----------|---------------------------|-------------------------------------------|----------------------------------------------------------------|--------------------------------------------|------|--------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|
| (Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, 160 RIO ROBLES | | | | 3. Date of Earliest Transaction (Month/Day/Year) 05/11/2005 | | | | | | | | Officer (give | title below) | Othe | r (specify below | N) | |
| (Street) | | | | 4. If Amendment, Date Original Filed(Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing(Check Applicable Line) | | | | | |
| SAN JOSE, CA 95130 | | | | | | | | | | | | X_Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| (City |) | (State) | (Zip) | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | |
| (Instr. 3) Date | | 2. Transaction Date (Month/Day/Year | 2A. Deem Execution any (Month/D | | Date, if Co | | ransaction e tr. 8) | (A | 4. Securities Acq (A) or Disposed of (Instr. 3, 4 and 5) | | | | ving Reported | | Ownership Form: Direct (D) | Beneficial Ownership | |
| | | | | | | | | ode V | Amount (A) or (D) | | | Price | | | | or Indirect (I) (Instr. 4) | (IIIStr. 4) |
| Common Stock | | | | | | | | oue v | 2 11 | nount (D) | 1110 | 2,00 | 0 | | | D | |
| Reminder: F | Report on a se | eparate line for each | class of securities b | eneficial | ly ov | wned dir | ectly | Perso in this | ns fo | who respor rm are not r a currently | equi | red to r | espond (| unless the | | ed SEC | 1474 (9-02) |
| | | | | | | | | | | ed of, or Beno vertible secur | | lly Own | ed | | | | |
| 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 | 4. Transac Code | tion | 5. Num | tive ies ed | 6. Date Exe Expiration I (Month/Day | ercis Dat | isable and 7. Title of Undo Year) Securiti | | Title and Amount FUnderlying ecurities nstr. 3 and 4) | | Derivative Security (Instr. 5) | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | Ownersh Form of Derivati Security Direct (I or Indire | Ownershi (Instr. 4) |
| | | | | Code | V | (A) | (D) | Date Exercisable | ; | Expiration Date | Titl | le | Amount or Number of Shares | | | | |
| Non- Qualified Stock Option (right to buy) | \$ 40.24 | 05/11/2005 | | A | | 2,500 | | 05/11/200 | 05 | 05/11/2015 |) | mmon Stock | 2,500 | \$ 0 | 2,500 | D | |
| Non- Qualified Stock Option (right to buy) | \$ 37.05 | | | | | | | 11/08/200 | 02 | 11/08/2012 | 2 Co | mmon Stock | 10,000 | | 10,000 | D | |
| Non- Qualified Stock Option (right to buy) | \$ 40.68 | | | | | | | 10/18/200 | 04 | 10/18/2014 | 1 | mmon Stock | 2,500 | | 2,500 | D | |
| Non- Qualified Stock Option (right to buy) | \$ 44.76 | | | | | | | 01/25/200 | 05 | 01/25/2015 | - | mmon Stock | 2,500 | | 2,500 | D | |

| Non- Qualified Stock Option (right to buy) | \$ 47.23 | | | 11/09/2001 | 11/09/2011 | Common Stock | 10,000 | 10,000 | D | |
|-----------------------------------------------------------|----------|--|--|------------|------------|-----------------|--------|--------|---|--|
| Non- Qualified Stock Option (right to buy) | \$ 52.75 | | | 08/15/2000 | 08/15/2010 | Common Stock | 20,000 | 20,000 | D | |
| Non- Qualified Stock Option (right to buy) | \$ 59.44 | | | 11/05/2003 | 11/05/2013 | Common Stock | 10,000 | 10,000 | D | |

Reporting Owners

| | Relationships | | | | | | |
|-------------------------------------------------------------------------------------|---------------|--------------|---------|-------|--|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | | |
| BOND ROBERT T C/O KLA-TENCOR CORPORATION 160 RIO ROBLES SAN JOSE, CA 95130 | X | | | | | | |

Signatures

| By: Stuart J. Nichols For: Robert T. Bond | 05/11/2005 | | |
|-------------------------------------------|------------|--|--|
| **Signature of Reporting Person | Date | | |

Explanation of Responses:

- \star 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.

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