FORM 4

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

OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
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).

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 IIII OI I y | pe Kesponse | 8) | | | | | | | | | | | | | | |
|--|---|--|--------------------------------------|--|---|---------------------|----------------------------------|-----------------------|--|--|--|--|---|-------------------------------------|--|--|
| 1. Name and Address of Reporting Person * Higgins Bren D. | | | | 2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC] | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director10% Owner | | | | | | |
| (Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE | | | | 3. Date of Earliest Transaction (Month/Day/Year) 11/11/2018 | | | | | | X Officer (give title below) Other (specify below) EVP & Chief Financial Officer | | | | | | |
| (Street) MILPITAS, CA 95035 | | | | 4. If Amendment, Date Original Filed(Month/Day/Year) | | | | | | 6. Individual or Joint/Group Filing(Check Applicable Line) X_ Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | | |
| (City) (State) (Zip) | | | | Table I - Non-Derivative Securities Acqu | | | | | | nired, Disposed of, or Beneficially Owned | | | | | | |
| (Instr. 3) | | 2. Transaction Date (Month/Day/Year) | | (Instr. 8 | (A) or Disposed | | d of (D) | Beneficia Reported | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) | | | 7. Nature of Indirect Beneficial | | | | |
| | | | (Month/Day/Year | Code | V | Amour | (A) or (D) | Price | (Instr. 3 a | ind 4) | | Direct (D) or Indirect (I) (Instr. 4) | Ownership (Instr. 4) | | | |
| Common Stock - Restricted Stock Units (1) | | 11/11/2018 | | М | | 7,527 (2) | D | \$ 0 | 56,868 (3) | | D | | | | | |
| Common Stock | | 11/11/2018 | | M | | 7,527 (2) | A | \$ 0 | 9,196 | | | D | | | | |
| Common Stock | | 11/11/2018 | | F | | 3,732 (4) | D | \$ 95.28 | 5,464 | | | D | | | | |
| Reminder: | Report on a s | separate line fo | r each class of secur | ities beneficially o | | Pers cont the | sons wi tained i form di | no resp n this fo | orm are a curre | not requesting ntly valid | ction of inf uired to res OMB conf | spond unle | ess | 1474 (9-02) | | |
| | 1 | 1 | (| e.g., puts, calls, w | arrants, o | ptions | , conver | tible sec | urities) | | | 1 | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | ercise (Month/Day/Yof of vative | Date Execution Date (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | and (Mo | ate Exer Expirati onth/Day | on Date | Ame Und Seco | itle and ount of lerlying urities tr. 3 and | | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | Owners Form o y Derivat Security Direct (or Indir | Beneficia Ownershi (Instr. 4) | | |
| | | | | Code V | (A) (D | | e rcisable | Expirati Date | on Title | Amount or Number of Shares | | | | | | |

Reporting Owners

| | Relationships | | | | | | | | |
|---|---------------|--------------|-------------------------------|-------|--|--|--|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | | | | |
| Higgins Bren D. C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035 | | | EVP & Chief Financial Officer | | | | | | |

Signatures

| /s/ Teri A. Little as Attorney-in-Fact for Bren D. Higgins | | 11/12/2018 | 3 | | | | |
|--|--|------------|---|--|--|--|--|
| **Signature of Reporting Person | | Date | _ | | | | |

Explanation of Responses:

- * 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).
- (1) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.
- (2) On November 11, 2016 the reporting person was granted RSUs for an aggregate of 30,109 shares. On November 11, 2018, 25% of the RSUs vested.
- Does not include performance-based RSUs, if any, held by the Reporting Person for which an assessment has not yet been made regarding the achievement of the applicable performance goals. Any such holdings will be reported on a Form 4 within two business days of the date such assessment is made.
 - Pursuant to the terms of the grant, shares of KLA-Tencor common stock were automatically withheld at vesting to cover required tax withholding. The fair market value of
- (4) KLA-Tencor common stock used for purposes of calculating the number of shares to be withheld was the closing price of KLA-Tencor common stock as reported on November 9, 2018.

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.