| FORM 4 | 4 |
|--------|---|
|--------|---|

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

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

OMB APPROVAL OMB Number: 3235-0287 Estimated average burden hours per response... 0.5

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

| (Print or Type Responses) | | | | | | | | | | |
|--|--|------------------|--------------------|------------|---|------------------|---|--|--------------------|-------------------------|
| 1. Name and Address of Reporting P Higgins Bren D. | 2. Issuer Name a KLA TENCOF | | | <i>.</i> . | nbol | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner | | | |
| (Last) (First) C/O KLA-TENCOR CORPO TECHNOLOGY DRIVE | 3. Date of Earliest Transaction (Month/Day/Year) 08/03/2018 | | | | | | XOfficer (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) | Table I - Non-Derivative Securities Acqui | | | | | | ired, Disposed of, or Beneficially Owned | | | |
| 1.Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | | Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) | Ownership Form: | Beneficial |
| | | (Month/Day/Year) | Code | v | Amount | (A) or (D) | Price | (Instr. 3 and 4) | | Ownership (Instr. 4) |
| Common Stock - Restricted Stock Units (1) | 08/03/2018 | | М | | 2,814 (2) | D | \$ 0 | 88,737 ⁽³⁾ | D | |
| Common Stock | 08/03/2018 | | М | | 2,814 (2) | А | \$0 | 2,814 | D | |
| Common Stock | 08/03/2018 | | F | | 1,396 (<u>4</u>) | D | \$ 119.59 | 1,418 | D | |
| Common Stock - Restricted Stock Units ⁽¹⁾ | 08/04/2018 | | М | | 5,175 (5) | D | \$ 0 | 83,562 (3) | D | |
| Common Stock | 08/04/2018 | | М | | 5,175 (5) | А | \$ 0 | 6,593 | D | |
| Common Stock | 08/04/2018 | | F | | 2,566 (<u>4</u>) | D | \$ 119.59 | 4,027 | D | |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1474 (9-02)

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 control number.

 Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

| | (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | |
|-------------|--|------------------|--------------------|------------|-----|--------|------------------------------|---------------------|------------|---------------|------------|----------------|--------------|-------------|------------|
| 1. Title of | 2. | 3. Transaction | 3A. Deemed | 4. | | 5. | | 6. Date Exer | cisable | 7. Tit | le and | 8. Price of | 9. Number of | 10. | 11. Nature |
| Derivative | Conversion | Date | Execution Date, if | Transacti | ion | Num | Jumber and Expiration Date A | | Amount of | | Derivative | Derivative | Ownership | of Indirect | |
| Security | or Exercise | (Month/Day/Year) | any | Code | | of | <u>^</u> | | Underlying | | Security | Securities | Form of | Beneficial | |
| (Instr. 3) | Price of | | (Month/Day/Year) | (Instr. 8) | | Deriv | vative | ive | | Securities | | (Instr. 5) | Beneficially | Derivative | Ownership |
| | Derivative | | | | | Secur | rities | s | | (Instr. 3 and | | | Owned | Security: | (Instr. 4) |
| | Security | | | | | Acqu | ired | ed | | 4) | | | 0 | Direct (D) | |
| | | | | | | (A) o | A) or | | | | | 1 | or Indirect | | |
| | | | | | | | Disposed | | | | | Transaction(s) | (I) | | |
| | | | | | | of (D | · | | | | | | (Instr. 4) | (Instr. 4) | |
| | | | | | | (Instr | · · · | | | | | | | | |
| | | | | | | 4, and | d 5) | | | | | | | | |
| | | | | | | | | | | | Amount | | | | |
| | | | | | | | | Data | Emination | | or | | | | |
| | | | | | | | | Date Exercisable | Expiration | Title | Number | | | | |
| | | | | | | | | Exercisable | Date | | of | | | | |
| | | | | Code | V | (A) | (D) | | | | Shares | | | | |

Reporting Owners

| | Relationships | | | | | | |
|--------------------------------|---------------|--------------|---------|-------|--|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | | |
| | | Owner | | | | | |

Signatures

| /s/ Teri A. Little as Attorney-in-Fact for Bren D. Higgins | 08/07/2018 |
|--|------------|
| **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 August 3, 2017, the Reporting Person was granted an RSU for 11,256 shares of KLA-Tencor Common Stock. On August 3, 2018, 25% of those shares vested.
- (3) 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 August 3, 2018.
- (5) On August 4, 2016, the Reporting Person was granted an RSU for 20,700 shares of KLA-Tencor Common Stock. On August 4, 2018, 25% of those shares vested.

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.