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

| Check this box if no  |
|-----------------------|
| 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

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SEC 1474 (9-02)

### 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)                                   |  | r  |                    |            |                        |   |        |  |  |                        |
|---|--|--|--------------------|------------|------------------------|---|--------|--|--|------------------------|
| 1. Name and Address of Reporting Po<br>Higgins Bren D.      | 2. Issuer Name ar<br>KLA TENCOR            |  |                    | 0,         | ool                    | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br>Director 10% Owner<br>X Officer (give title below) Other (specify below)<br>EVP & Chief Financial Officer |        |  |  |                        |
| (Last) (First)<br>C/O KLA-TENCOR CORPOI<br>TECHNOLOGY DRIVE | 3. Date of Earliest 7<br>08/02/2018        | Transactior  | n (Mo              | onth/Day/Y | 'ear)                  |   |        |  |  |                        |
| (Street)<br>MILPITAS, CA 95035                              | 4. If Amendment, I                         | Date Origin  | al Fil             | ed(Month/D | ay/Year)               | 6. Individual or Joint/Group Filing(Check Applicable Line)<br>_X_Form filed by One Reporting Person<br>Form filed by More than One Reporting Person                                     |        |  |  |                        |
| (City) (State)  | (Zip)                                      | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned |                    |            |                        |   |        |  |  |                        |
| 1.Title of Security<br>(Instr. 3)                           | 2. Transaction<br>Date<br>(Month/Day/Year) |  | Code<br>(Instr. 8) |            |                        |   | of (D) | 5. Amount of Securities<br>Beneficially Owned Following<br>Reported Transaction(s) | Ownership<br>Form: of India<br>Benefic         | Beneficia              |
|   |  | (Month/Day/Year)   | Code               | V          | Amount                 | (A)<br>or<br>(D)  | Price  | (Instr. 3 and 4)   | Direct (D)<br>or Indirect<br>(I)<br>(Instr. 4) | Ownershi<br>(Instr. 4) |
| Common Stock - Restricted<br>Stock Units (1)                | 08/02/2018                                 |  | А                  |            | 11,495<br>(2)          | А   | \$ 0   | 75,121 ( <u>3)</u>   | D  |                        |
| Common Stock - Restricted<br>Stock Units (1)                | 08/02/2018                                 |  | А                  |            | 16,430<br>( <u>4</u> ) | А   | \$ 0   | 91,551 ( <u>3)</u>   | D  |                        |

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

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### 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   | 5.     |                         | 6. Date Exer | cisable    | 7. Tit | le and     | 8. Price of | 9. Number of   | 10.         | 11. Nature |
| Derivative   | Conversion  | Date             | Execution Date, if | Transactio | n N | Numb   | ber and Expiration Date |              | Amount of  |        | Derivative | Derivative  | Ownership      | of Indirect |            |
| Security   | or Exercise | (Month/Day/Year) | any                | Code       | 0   | of     |                         | (Month/Day   | /Year)     | Unde   | rlying     | Security    | Securities     | Form of     | Beneficial |
| (Instr. 3)   | Price of    |                  | (Month/Day/Year)   | (Instr. 8) | Γ   | Deriva | ative                   |              |            | Secur  | rities     | (Instr. 5)  | Beneficially   | Derivative  | Ownership  |
|  | Derivative  |                  |                    |            |     | Securi |                         |              |            | (Instr | . 3 and    |             | Owned          | Security:   | (Instr. 4) |
|  | Security    |                  |                    |            | P   | 4cqui  | red                     |              |            | 4)     |            |             | Following      | Direct (D)  |            |
|  |             |                  |                    |            | (.  | A) or  |                         |              |            |        |            |             | Reported       | or Indirect |            |
|  |             |                  |                    |            | Γ   | Dispo  | sed                     |              |            |        |            |             | Transaction(s) | (I)         |            |
|  |             |                  |                    |            | 0   | of (D) | )                       |              |            |        |            |             | (Instr. 4)     | (Instr. 4)  |            |
|  |             |                  |                    |            |     |        | str. 3,                 |              |            |        |            |             |                |             |            |
|  |             |                  |                    |            | 4   | l, and | 5)                      |              |            |        |            |             |                |             |            |
|  |             |                  |                    |            |     |        |                         |              |            |        | Amount     |             |                |             |            |
|  |             |                  |                    |            |     |        |                         | Date         | Expiration |        | or         |             |                |             |            |
|  |             |                  |                    |            |     |        |                         | Exercisable  |            | Title  | Number     |             |                |             |            |
|  |             |                  |                    |            |     |        |                         | Exercisable  | Date       |        | of         |             |                |             |            |
|  |             |                  |                    | Code V     | V ( | (A)    | (D)                     |              |            |        | Shares     |             |                |             |            |

## **Reporting Owners**

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

## Signatures

| /s/ Teri A. Little as Attorney-in-Fact for Bren D. Higgins | 08/06/2018 |
|--|------------|
| **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 2, 2018, the Compensation Committee granted the reporting person an RSU that vests 25% each year from the date of grant, subject to the reporting person being a service provider on each vesting date.
- (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.

On August 6, 2015, in addition to the RSUs granted on that date that were subject only to service-vesting requirements (which RSUs were previously reported on Form 4), the Reporting Person was also granted RSUs covering up to a maximum of 16,562 shares (based on 125% of the target shares of 13,250) of KLA-Tencor common stock,

(4) the Reporting Person was also granted RSOs covering up to a maximum of 16,502 shares (based on 125% of the target shares of 15,250) of RLA-Tencor Common stock, subject to both performance-vesting and service-vesting requirements. On August 2, 2018 the Compensation Committee of the KLA-Tencor Board of Directors determined the level at which the corporate performance goals were attained and, based on the assessment, determined that the number of shares subject to the RSUs is 16,430.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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