

**KLA TENCOR CORP**  
Reported by  
**TRAFAS BRIAN M.**

**FORM 4**  
(Statement of Changes in Beneficial Ownership)

Filed 11/14/16 for the Period Ending 11/11/16

|             |                                            |
|-------------|--------------------------------------------|
| Address     | ONE TECHNOLOGY DRIVE<br>MILPITAS, CA 95035 |
| Telephone   | 4088756000                                 |
| CIK         | 0000319201                                 |
| Symbol      | KLAC                                       |
| SIC Code    | 3827 - Optical Instruments and Lenses      |
| Industry    | Semiconductor Equipment & Testing          |
| Sector      | Technology                                 |
| Fiscal Year | 06/30                                      |

# 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. Name and Address of Reporting Person *        |  |  | 2. Issuer Name and Ticker or Trading Symbol       |  |  | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)                                                                                                                                                   |  |  |
| Trafas Brian M.                                  |  |  | KLA TENCOR CORP [ KLAC ]                          |  |  | <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)<br><b>SVP, Global Customer Org.</b> |  |  |
| (Last) (First) (Middle)                          |  |  | 3. Date of Earliest Transaction (MM/DD/YYYY)      |  |  |                                                                                                                                                                                                                           |  |  |
| C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE |  |  | 11/11/2016                                        |  |  |                                                                                                                                                                                                                           |  |  |
| (Street)                                         |  |  | 4. If Amendment, Date Original Filed (MM/DD/YYYY) |  |  | 6. Individual or Joint/Group Filing (Check Applicable Line)                                                                                                                                                               |  |  |
| MILPITAS, CA 95035                               |  |  |                                                   |  |  | <input checked="" type="checkbox"/> Form filed by One Reporting Person<br><input type="checkbox"/> 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 (Instr. 3)           | 2. Trans. Date | 2A. Deemed Execution Date, if any | 3. Trans. 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) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|-------------------------------------------|----------------|-----------------------------------|---------------------------|---|-------------------------------------------------------------------|------------|-------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|
|                                           |                |                                   | Code                      | V | Amount                                                            | (A) or (D) | Price |                                                                                               |                                                          |                                                       |
| Common Stock - Restricted Stock Units (1) | 11/11/2016     |                                   | A                         |   | 5353 (2)                                                          | A          | \$0   | 40683 (3)                                                                                     | D                                                        |                                                       |
| Common Stock                              |                |                                   |                           |   |                                                                   |            |       | 137                                                                                           | D                                                        |                                                       |

**Table II - Derivative Securities Beneficially Owned ( e.g. , puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivate Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Trans. Date | 3A. Deemed Execution Date, if any | 4. Trans. Code (Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |     | 6. Date Exercisable and Expiration Date |                 | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) |                            | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|------------------------------------------|--------------------------------------------------------|----------------|-----------------------------------|---------------------------|---|----------------------------------------------------------------------------------------|-----|-----------------------------------------|-----------------|-----------------------------------------------------------------------------------|----------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------|
|                                          |                                                        |                |                                   | Code                      | V | (A)                                                                                    | (D) | Date Exercisable                        | Expiration Date | Title                                                                             | Amount or Number of Shares |                                            |                                                                                                    |                                                                                  |                                                        |

### Explanation of Responses:

- (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 5,353 shares of KLA-Tencor common stock which vest 25% annually beginning November 11, 2017, subject to continued service on each vesting date.
- (3) Does not include performance-based RSUs 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.

### Reporting Owners

| Reporting Owner Name / Address                                                              | Relationships |           |                           |       |
|---------------------------------------------------------------------------------------------|---------------|-----------|---------------------------|-------|
|                                                                                             | Director      | 10% Owner | Officer                   | Other |
| Trafas Brian M.<br>C/O KLA-TENCOR CORPORATION<br>ONE TECHNOLOGY DRIVE<br>MILPITAS, CA 95035 |               |           | SVP, Global Customer Org. |       |

### Signatures

Teri Little as Attorney-in-Fact for Brian M. Trafas

11/11/2016

\*\* 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.

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