

# 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).

**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 Person * <b>KENNEDY KEVIN</b>	2. Issuer Name and Ticker or Trading Symbol <b>KLA TENCOR CORP [KLAC]</b>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)
(Last) (First) (Middle) <b>C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE</b>	3. Date of Earliest Transaction (Month/Day/Year) <b>05/02/2017</b>	
(Street) <b>MILPITAS, CA 95035</b>	4. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
(City) (State) (Zip)	<b>Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned</b>	

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction 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	05/02/2017		S		2,400 (1)	D	\$ 99.116 (2)	16,425	I	By Trust (3)
Common Stock	05/02/2017		S		100 (4)	D	\$ 98.49	16,325	I	By Trust (3)
Common Stock								6,219 (5)	D	
Common Stock - Restricted Stock Units (6)								2,141	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 Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction 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 (Month/Day/Year)		7. Title and Amount of Underlying Securities (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)
						Date Exercisable	Expiration Date					

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
KENNEDY KEVIN C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	X			

# Signatures

Teri A. Little as Attorney-in-Fact for Kevin J. Kennedy		05/03/2017
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) Sold under a Rule 10b5-1 sales plan adopted on March 8, 2017.
- (2) Represents the weighted average sales price for the shares. The sales prices ranged from \$98.50 to \$99.50. The reporting person will provide upon request full information regarding the number of shares sold at each separate price.
- (3) By the Kennedy Family Trust U/A/D 11/19/98, of which the Reporting Person is a trustee and beneficiary.
- (4) Sold under a Rule 10b5-1 sales plan adopted on March 8, 2017
- (5) Includes 2,394 shares of common stock issued upon the vesting of RSUs on November 4, 2016
- (6) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.

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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