## 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

sponses)															
1. Name and Address of Reporting Person* Little Teri A.				2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]						5	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner				
(Last) (First) (Middle) ONE TECHNOLOGY DRIVE				3. Date of Earliest Transaction (Month/Day/Year) 10/31/2017						X Officer (give title below) Other (specify below)  EVP, CLO and Secretary					
(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				
	(State)	(Zip)			Ta	ble I -	Non-I	erivative	Securit	ties Acquir	red, Dispo	osed of, or l	Beneficially (	Owned	
(Instr. 3) Dat		Date	Execut any	Execution Date, if any	, if	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 of Form:	7. Nature of Indirect Beneficial		
			(Month	1/Day/Ye	ear)	Code	v	Amount	(A) or (D)	Price	(Instr. 3 and 4)			or Indirect (I)	Ownership (Instr. 4)
ck		10/31/2017				S		1,678		\$ 109.441 (1)	8,452			D	
ck - Res	stricted										29,828	(3)		D	
t on a sep	parate line fo	or each class of sec	urities be	eneficiall	y ow	vned di	Pe	ersons wi entained i	no resp in this	form are	not requ	ired to res	pond unles	S	1474 (9-02)
		Table II									y Owned				
Conversion Date		Year) Execution I	l ate, if	4. 5. Transaction N Code of (Instr. 8) D Sc A (A Of Code of (Instr. 8) D Code of (Instr. 8)		5. 6. I Number and		Date Exercisable 7 d Expiration Date A Ionth/Day/Year) U S		7. Tit Amo Unde Secur	unt of erlying rities r. 3 and		Derivative Securities Beneficially Owned Following Reported	Ownersh Form of Derivati Security Direct (I or Indirects)	Beneficial Ownersh (Instr. 4)
							_	ate xercisable	Expira Date	tion Title	Amount or Number				
c c c	OLOG  A 9503  y  k  k - Res  t on a sep  ersion [ () () () () () () () () () () () () ()	(Street)  (Street)  (Street)  (Street)  (State)  (State)  (State)  (State)  (State)  (Manth/Day)  (Month/Day)	(First) (Middle)  OLOGY DRIVE  (Street)  2A 95035  (State) (Zip)  2. Transaction Date (Month/Day/Year)  2k - Restricted  t on a separate line for each class of sectors of ative  (Month/Day/Year)  3A. Deemec Execution Date (Month/Day/Year)  (Month/Day/Year)  3A. Deemec Execution Date (Month/Day/Year)  (Month/Day/Year)	CA 95035  (State)  (Zip)  (State)  (Zip)  (State)  (Zip)  (State)  (Zip)  (Month/Day/Year)  (A 10/31/2017  (A 2017  (A 2017  (A 3. Da 10/3  (A 4. If A 2017  (A 4. If A 2017  (A 4. If A 2017  (A 5. Date (Month/Day/Year)  (A 6. Restricted)  (A 10/31/2017  (A 7. Date (A 2017)  (A 8. Date (Month/Day/Year)  (A 95035  (State)  (Zip)  (A 10/31/2017  (A 10/31/2017  (A 2017)  (A 3. Date (A 2017)  (A 2017)  (A 3. Date (A 2017)  (A 4. If A 2017)  (A 5. Date (A 2017)  (A 6. Date (A 2017)  (A 7. Date (A 2017)  (A 10/31/2017)  (A	KLA TENC  (First) (Middle) 3. Date of Ear 10/31/2017  (Street) 4. If Amendm  (A 95035 (State) (Zip) 2A. Deemed Execution Date (Month/Day/Year) (Month/Day/Year)  (Month/Day/Year) 2A. Deemed Execution Date any (Month/Day/Year)  (Month/Day/Year) 3. Transaction Date (e.g., puts, calls errors of ative (Month/Day/Year) (Month/Day/Year) 3A. Deemed Execution Date, if any (Month/Day/Year) (Instr. 8)	KLA TENCOR  (First) (Middle) 3. Date of Earliest 10/31/2017  (Street) 4. If Amendment,  (A 95035 (State) (Zip) Ta  (Month/Day/Year) 2A. Deemed Execution Date, if any (Month/Day/Year)  (Month/Day/Year) 2A. Deemed Execution Date, if any (Month/Day/Year)  (Month/Day/Year) 3. Transaction Date (e.g., puts, calls, water of ative of ative of ative ity)  (Month/Day/Year) 3A. Deemed Execution Date, if any (Month/Day/Year) (Instr. 8)	Street   Color   Col	KLA TENCOR CORP [K  (First) (Middle) 3. Date of Earliest Transaction ( 10/31/2017  4. If Amendment, Date Original  (Street) 2. Transaction Date (Month/Day/Year) 2A. Deemed Execution Date, if any (Month/Day/Year)  (Month/Day/Year) 2A. Deemed Execution Date, if any (Month/Day/Year)  (Street) 2. Transaction Date (Instr. 8)  (Code V  (Instr. 8) 2A. Deemed Execution Date, if any (Month/Day/Year)  (Instr. 8) 2A. Deemed Execution Date, if any (Month/Day/Year)  (Instr. 8) 2A. Deemed Execution Date, if any (Month/Day/Year)  (Instr. 8) 2A. Deemed (Instr. 8)  (Instr. 8) 2A. Deemed Execution Date, if any (Month/Day/Year)  (Instr. 8) 2A. Deemed (Instr. 8)  (Instr. 8) 3A. Deemed (Instr. 8)	KLA TENCOR CORP [KLAC]  (First) (Middle) 3. Date of Earliest Transaction (Month/Da 10/31/2017  (Street) 4. If Amendment, Date Original Filed(Month/Day/State) 2. Transaction Date (Month/Day/Year) 2. Transaction Date (Month/Day/Year) 3. Transaction Date (Month/Day/Year) 4. If Amendment, Date Original Filed(Month/Day/Year) 3. Transaction Date (Instr. 8) (Instr. 3. Code V Amount Date (Instr. 8) (Instr. 3. Code V Amount Date (Instr. 8) (Instr. 3. Code V Amount Date (Instr. 8) (Instr. 3. Code V Date (Instr. 8) (Instr. 8) (Instr. 8) (Instr. 3. Code V Date (Instr. 8) (Instr. 3. Code V Date (Instr. 8) (Instr. 3. Code V Date (Instr. 8) (Ins	KLA TENCOR CORP [KLAC]	KLA TENCOR CORP [KLAC]	Street   Cap   C	KLA TENCOR CORP [KLAC]   Director   Che	Check all applications   Check all all all all all all all all all al	KLA TENCOR CORP [KLAC]  (First) (Middle) 3, Date of Earliest Transaction (Month/Day/Year) (10/31/2017  4. If Amendment, Date Original Filed(Month/Day/Year) (Month/Day/Year)  (Street) 4. If Amendment, Date Original Filed(Month/Day/Year) (Month/Day/Year)  (Stank) (Zip) Table 1 - Non-Derivative Securities Acquired, Disposed of, Or Beneficially Owned Han One Reporting Person Form filed by More than One Person for form

#### **Reporting Owners**

	Relationships					
Reporting Owner Name / Address	Director	10% Owner	Officer	Other		
Little Teri A. ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			EVP, CLO and Secretary			

### **Signatures**

/s/ Teri A. Little	11/01/2017
**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) Represents the weighted average sales price for the shares. The sales prices ranged from \$109.44 to \$109.45. The reporting person will provide upon request full information regarding the number of shares sold at each separate price.
- (2) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.
- (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.

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.