FORM 4	4
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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).

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

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#### 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 <sup>*</sup> Little Teri A.			2. Issuer Name <b>an</b> KLA TENCOR			0,	ool	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director10% Owner				
ONE TECHNOL	(First) OGY DRIVE	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 08/17/2017						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 PersonForm filed by More than One Reporting Person			
(City)	(State)	(Zip)	Table I - Non-Derivative Securities Acquired, Dispos						ired, Disposed of, or Beneficially	sposed of, or Beneficially Owned		
1.Title of Security     2. Transaction       (Instr. 3)     Date       (Month/Day/Yet)			2A. Deemed Execution Date, if any (Month/Day/Year)		de (A) or Disposed of		of	Beneficially Owned Following Reported Transaction(s)Ownership Form:(Instr. 3 and 4)Direct (D)		Beneficial Ownership		
				Code	V	Amount	(A) or (D)	Price		or Indirect (I) (Instr. 4)	(Instr. 4)	
Common Stock		08/17/2017		S		1,000 (1)	D	\$ 91.5	9,634	D		
Common Stock - Stock Unit <sup>(2)</sup>	Restricted								30,623 ( <u>3)</u>	D		

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

Persons who respond to the collection of information

SEC 1474 (9-02)

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

( <i>e.g.</i> , 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	Transact	ion	Num	ber	and Expirati	on Date	Amou	unt of	Derivative	Derivative	Ownership	of Indirect
Security	or Exercise	(Month/Day/Year)	any	Code		of		(Month/Day/Year)		Underlying Security		Securities	Form of	Beneficial	
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)	)	Deriv	ative	e		Securities (Instr. 5)		Beneficially	Derivative	Ownership	
	Derivative					Secur	rities	S		(Instr. 3 and			Owned	Security:	(Instr. 4)
	Security					Acqu	ired			4)			Following	Direct (D)	
						(A) o	r						Reported	or Indirect	
						Dispo	osed						Transaction(s)	(I)	
						of (D	)						(Instr. 4)	(Instr. 4)	
						(Instr	. 3,								
						4, and	15)								
											Amount				
								Dete	E		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				
Little Teri A. ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	,		EVP, CLO and Secretary					

## **Signatures**

/s/ Teri A. Little	08/18/2017
**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) This sale was effected pursuant to the terms of a Rule 10b5-1 trading plan adopted by the Reporting Person on June 9, 2017.
- (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.