FORM	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).

(Print or Type Perponses)

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 Little Teri A.	2. Issuer Name an KLA TENCOR				nbol		5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner					
ONE TECHNOLOG	GY DRIVE	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 09/03/2017						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			
(City)	(State)	(Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned									
1.Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)	Execution Date, if		v	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) (A) or Amount (D) Price		of (D)	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)	
Common Stock		09/03/2017		М		795 <mark>(1)</mark>	А	\$0	10,429	D		
Common Stock		09/03/2017		F		299 <mark>(2)</mark>	D	\$ 94.08	10,130	D		
Common Stock - Re Stock Unit ⁽³⁾	estricted								29,828 ⁽⁴⁾	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.		6. Date Exer	cisable	7. Tit	le and	8. Price of	9. Number of	10.	11. Nature
Derivative	Conversion	Date	Execution Date, if	Transacti	ion	Numl	ber	and Expiration	on Date	Amou	unt of	Derivative	Derivative	Ownership	of Indirect
Security	or Exercise	(Month/Day/Year)	any	Code		of		(Month/Day	/Year)	Unde	rlying	Security	Securities	Form of	Beneficial
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)		Deriv	ative			Secur	rities	(Instr. 5)	Beneficially	Derivative	Ownership
	Derivative					Secur	rities			(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									
						4, and	15)								
											Amount				
								Dete	E		or				
									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	09/05/2017
**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) On September 3, 2015, the Reporting Person received a grant of restricted stock units ("RSUs") covering 3,178 shares of KLA-Tencor common stock. On September 3, 2017, the Reporting Person vested in twenty-five percent (25%) of such RSUs.
- Pursuant to the terms of the grant, shares of KLA-Tencor common stock were automatically withheld at vesting to cover required tax withholding. The fair market value of (2) KLA-Tencor common stock used for purposes of calculating the number of shares to be withheld was the closing price of KLA-Tencor common stock as reported on September 1, 2017.
- (3) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.
- (4) 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.

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