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 Ty	pe Response	s)															
1. Name and Address of Reporting Person * Higgins Bren D.					2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) Other (specify below) EVP & Chief Financial Officer					
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE					3. Date of Earliest Transaction (Month/Day/Year) 02/01/2017												
(Street)				4. If A	4. If Amendment, Date Original Filed(Month/Day/Year)						_X_ Form	6. Individual or Joint/Group Filing(Check Applicable Line) Form filed by One Reporting Person Form filed by More than One Reporting Person					
MILPITAS, CA 95035 (City) (State) (Zip)					Table I - Non-Derivative Securities Acqu						uired, Dis	ired, Disposed of, or Beneficially Owned					
1.Title of Security (Instr. 3)			2. Transaction Date (Month/Day/Year)	Execution any		Code (Instr. 8)			4. Securities Acquired (A) or Disposed of (Instr. 3, 4 and 5)			D) Beneficially Owned Following Reported Transaction(s)			Form:	ip of Be	7. Nature of Indirect Beneficial
				(Month/Day/Year)		Coo	de	V	Amount	(A) or (D)	Price	Ì	(Instr. 3 and 4)		Direct (I or Indire (I) (Instr. 4)	lirect (Instr. 4)	
Common Stock		02/01/2017			S			4,610	D	\$ 85.46	9 0	0		D			
Common Stock Un	Stock - R	estricted										76,57	6		D		
Reminder:	Report on a s	separate line f	or each class of secu		neficially o		F c t	Pers cont the f	sons wh tained in form dis	no resp n this t splays	form a a curr	re not red ently vali	ection of in quired to re d OMB con	spond unle	ess	EC 14	74 (9-02)
				· · · ·	ts, calls, w								loni a		2 42		
Security	2. Conversion or Exercise Price of Derivative Security	3. Transactio Date (Month/Day/	Year) Execution Da			5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		and Expiration Date (Month/Day/Year)			e Ai Ui Se	Title and mount of nderlying curities sstr. 3 and	Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4)	Owner Form Deriv Secur Direct or Ind	of rative rity: t (D) direct	(Instr. 4)
					Code V	(A)		Date Exe	e rcisable	Expirat Date	tion Ti	Amour or Number of Shares					
Repor	ting O	wners															

٠		Relationships							
	Reporting Owner Name / Address	Director	10% Owner	Officer	Other				
	Higgins Bren D. C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			EVP & Chief Financial Officer					

Signatures

Teri A. Little as Attorney-in-Fact for Bren D. Higgins

02/02/2017

**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 \$85.45 to \$85.47. The reporting person will provide upon request full information regarding the number of shares sold at each separate price.
- Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock. Does not include performance-based RSUs, if any, held (2) 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.