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

Name and Address of Reporting Person * Higashi Emiko					2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]						5. Relationship of Reporting Person(s) to Issuer (Check all applicable) _X_ Director 10% Owner						
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE					3. Date of Earliest Transaction (Month/Day/Year) 12/01/2017						Office	r (give title belo	w)	Other (specify	pelow)		
(Street) MILPITAS, CA 95035				4. If	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)			Tal	ble I -	- Non	ı-De	rivative S	Securiti	es Acqu	ired, Disp	osed of, or I	Beneficially	Owned	
(Instr. 3) Date		2. Transaction Date (Month/Day/Year)	Execu any	Deemed cution Date, if	e, if	Code (Instr. 8)		tion 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:	Beneficial			
			(Month/Day/Year)		ear)	Coo	de	V	Amount	(A) (Instr. 3 and 4) or Amount (D) Price		and 4)		\ /	Ownership (Instr. 4)		
Common	Stock		12/01/2017				S			500 (1)	D	\$ 101.20	15,229			D	
Common Stock Un	Stock - R	estricted											1,902			D	
Reminder:	Report on a s	separate line f	or each class of secu	rities b	eneficiall	ly ow	ned d	lirect	ly or	indirectl	y						
									con	tained i	n this f	orm ar	e not requ	ction of inf uired to res OMB cont	spond unle	ss	1474 (9-02)
					ative Secu								lly Owned				
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security		Execution I any	4. Transaction Code (Instr. 8)		() () ()	Number		6. Date Exercisable and Expiration Date (Month/Day/Year)		Am Und Sec	Title and ount of derlying urities tr. 3 and	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4)	Owners Form o Derivat Security Direct (or Indir	Beneficia Ownersh (Instr. 4)	
					Code	V	(A)	(D)	Dat Exe	te ercisable	Expirati Date	ion Titl	Amount or Number of Shares				

Reporting Owners

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

Signatures

Teri A. Little as Attorney-in-Fact for Emiko Higashi	12/04/2017

**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 August 1, 2017.
- (2) 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.

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.