FORM 4

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

OMB APPROVAL
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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

(Print or Type Respon	ses)									1				
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					
	(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE ECHNOLOGY DRIVE			3. Date of Earliest Transaction (Month/Day/Year) 08/06/2018					X Officer (give title below) Other (specify below) EVP & Chief Financial Officer					
(Street)			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					
MILPITAS, CA 95035 (City) (State) (Zip)			7	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned										
(Instr. 3)		2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, i	3. Transactio Code (Instr. 8)			4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		equired l of (D)	5. Amount of Securities		ies Following	6. Ownership Form: Direct (D)	Beneficial Ownership
				Co	ode	V	Amount	(A) or (D)	Price				or Indirect (I) (Instr. 4)	(Instr. 4)
Common Stock - Stock Units (1)	Restricted	08/06/2018		N	Л		8,215 (<u>2</u>)	D	\$ 0	75,347	(3)		D	
Common Stock		08/06/2018		N	Л		8,215 (2)	A	\$ 0	12,242			D	
Common Stock		08/06/2018]	7		4,073 (4)	D	\$ 118.27	8,169			D	
Common Stock - Stock Units (1)	Restricted	08/06/2018		N	Л		3,312 (<u>5</u>)	D	\$ 0	72,035	(3)		D	
Common Stock		08/06/2018		N	Л		3,312 (<u>5</u>)	A	\$ 0	11,481			D	
Common Stock		08/06/2018		1	7		1,643 (4)	D	\$ 118.27	9,838			D	
Reminder: Report on	a separate line	for each class of secu	rities beneficially (owned (Pers	sons wh	o resp	orm are	e not requ		ormation spond unle	ss	1474 (9-02)
			Derivative Securi (e.g., puts, calls, v					-		lly Owned				
1. Title of Derivative Security (Instr. 3) Conversion or Exerci Price of Derivative Security	se (Month/Day	3A. Deemed Execution Day/Year)	4. Transaction Nicode of (Instr. 8) Do Sc Art (A		eative rative rities ired r	and Expiration Date (Month/Day/Year) An Un Sec		7. T Am Und Sec (Ins	Title and ount of derlying urities tr. 3 and	Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Owners Form of Derivati Security Direct (or Indire	Ownershi (Instr. 4) D) ect	
			Code V	(A)	(D)	Date Exe	e rcisable	Expirat Date	ion Title	Amount or Number of Shares				

Reporting Owners

	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	
MILPITAS, CA 95035			

Signatures

/s/ Teri A. Little as Attorney-in-Fact for Bren D. Higgins	08/08/2018	
**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) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.
 - On August 6, 2015, in addition to the RSUs granted on that date that were subject only to service-vesting requirements (which RSUs were previously reported on Form 4), the Reporting Person was also granted RSUs covering up to a maximum of 16,562 shares (based on 125% of the target shares of 13,250) of KLA-Tencor common stock,
- (2) subject to both performance-vesting and service-vesting requirements. On August 2, 2018 the Compensation Committee of the KLA-Tencor Board of Directors determined the level at which the corporate performance goals were attained and, based on the assessment, determined that the number of shares subject to the RSUs is 16,430. On August 6, 2018, 50% of the RSUs vested.
- (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.
- 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
- (4) 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 August 6, 2018.
- (5) On August 6, 2015, the Reporting Person was granted an RSU for 13,250 shares of KLA-Tencor Common Stock. On August 6, 2018, 25% of those shares vested.

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.