## FORM 4

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

OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
hours per response... 0.5

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 Responses	s)		_															
1. Name and Address of Reporting Person * Trafas Brian M.					2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]							5	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)Director10% Owner						
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE					3. Date of Earliest Transaction (Month/Day/Year) 08/08/2018								X Officer (give title below) Other (specify below)  Executive Vice President						
(Street) MILPITAS, CA 95035				4. If A1	4. If Amendment, Date Original Filed(Month/Day/Year)								6. Individual or Joint/Group Filing(Check Applicable Line)  Form filed by One Reporting Person Form filed by More than One Reporting Person						
(City		(State)	(Zip)			T	able I	- Noi	ı-De	rivative	Securi	ities Ac	cquir	ed, Dispo	sed of, or I	Beneficially	Owned		
1.Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, any (Month/Day/Ye			if Code (Instr. 8)		tion	(A) or Disposed of (Instr. 3, 4 and 5)		ed of (E	(D) Beneficia		unt of Securities ially Owned Following d Transaction(s) and 4)		6. Ownership Form: Direct (D)	of In Bene	7. Nature of Indirect Beneficial Ownership	
							Со	de	V	Amount	(A) or (D)	Prio	ce	(ansar 5 and 1)		or Indirect (I) (Instr. 4)			
Common	Stock		08/08/2018				S	\$		600 <sup>(1)</sup>	D	\$ 116.0 (2)	003	3,143			D		
Common	Stock		08/08/2018				S	3		326 (1)	D	\$ 117.3 (3)	897	2,817			D		
Common	Stock		08/08/2018				S	3		1,500 (1)	D	\$ 115.9 (4)	917	1,317			D		
Common Stock		08/08/2018				S	3		500 (1) D \$ 117.2		202	817			D				
Common	Stock		08/08/2018				S	3		168 (1)	D	\$ 118.	13	649			D		
Common Stock Un	Stock - Renits (6)	estricted												43,872	(7)		D		
Reminder:	Report on a s	eparate line t	for each class of secu	urities ben	neficial	lly o	wned		Pers	sons wh tained i	no res	form	are	not requ		ormation spond unle	ss	C 1474	(9-02)
			Table II -						,		,		•	y Owned					
1. Title of Derivative (Instr. 3)  2. Conversion or Exercise (Price of Derivative Security  3. Transaction Date (Month/Day/Ye		Execution D any	ate, if C	te, if Transaction Code (Instr. 8)		5.		6. I and (Mo	ions, convertible secu 6. Date Exercisable and Expiration Date (Month/Day/Year)		e 7	7. Title and Amount of Underlying Securities (Instr. 3 and 4)			9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Owner Form of Deriva Securit Direct or Indi	ship of B tive Cy: (ID) rect	1. Nature f Indirec Beneficial Ownershij Instr. 4)	
					Code	V	(A)	(D)	Dat Exe	e ercisable	Expir Date	ation	Title	Amount or Number of Shares					

		Relationships							
	Reporting Owner Name / Address	Director	10% Owner	Officer	Other				
(	Trafas Brian M. C/O KLA-TENCOR CORPORATION DNE TECHNOLOGY DRIVE MILPITAS, CA 95035			Executive Vice President					

### **Signatures**

/s/ Teri Little as Attorney-in-Fact for Brian M. Trafas	08/10/2018		
**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) This sale was effected pursuant to the terms of a Rule 10b5-1 trading plan adopted by the Reporting Person on November 9, 2017.
- Represents the weighted average sales price for the shares. The sales prices ranged from \$116.00 to \$116.02. The reporting person will provide upon request full information regarding the number of shares sold at each separate price.
- (3) Represents the weighted average sales price for the shares. The sales prices ranged from \$117.75 to \$118.13. The reporting person will provide upon request full information regarding the number of shares sold at each separate price.
- (4) Represents the weighted average sales price for the shares. The sales prices ranged from \$115.69 to \$116.01. The reporting person will provide upon request full information regarding the number of shares sold at each separate price.
- (5) Represents the weighted average sales price for the shares. The sales prices ranged from \$117.00 to \$117.45. The reporting person will provide upon request full information regarding the number of shares sold at each separate price.
- (6) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.
- (7) 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.