## 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 Type Responses)										
1. Name and Address of Reporting Pers SCHROEDER KENNETH L		2. Issuer Name <b>and</b> KLA TENCOR C					5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner			
(Last) (First) C/O KLA-TENCOR CORPORA ROBLES		3. Date of Earliest Tra 09/26/2005	nsaction (M	Ionth/	Day/Year)	)	X Officer (give title below) Other (specify below)  Chief Executive Officer			
(Street) SAN JOSE, CA 95130	4	1. If Amendment, Dat	e Original F	iled(M	Ionth/Day/Ye	ear)	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		(Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s)	Ownership Form:	Beneficial
		(Month/Day/Year)	Code	V	Amount	(A) or (D)	Price	(Instr. 3 and 4)	Direct (D) or Indirect (I) (Instr. 4)	Ownership (Instr. 4)
Common Stock								162,658	D	
Common Stock-Restricted Stock Units (1)	ζ							100,000	D	
Reminder: Report on a separate line for	each class of securities ber	neficially owned direc	F	erso his fo	orm are n	ot requ	ired to	e collection of information contain o respond unless the form displays number.		1474 (9-02

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

Derivative Security	Conversion		Execution Date, if	Code	tion )	5. Number Derivative Securities Acquired ( or Dispose (D) (Instr. 3, 4 and 5)	(A) ed of			of Underlying Securities		8. Price of Derivative Security (Instr. 5)	Securities Beneficially Owned Following Reported Transaction(s)	Ownership Form of Derivative Security: Direct (D) or Indirect (I)	Beneficial
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		(Instr. 4)	(Instr. 4)	
Non- Qualified Stock Option (right to buy)	\$ 47.95	09/26/2005		A		75,000		09/26/2006	09/26/2012	Common Stock	75,000	\$ 0	75,000	D	
Non- Qualified Stock Option (right to buy)	\$ 47.95	09/26/2005		A		175,000		09/26/2007	09/26/2012	Common Stock	175,000	\$ 0	250,000	D	
Non- Qualified Stock Option (right to buy)	\$ 47.95	09/26/2005		A		75,800		09/26/2009	09/26/2015	Common Stock	75,800	\$ 0	75,800	D	
Non- Qualified Stock Option (right to buy)	\$ 16.97							10/23/1999	10/23/2008	Common Stock	156,032		156,032	D	

Non- Qualified Stock Option (right to buy)	\$ 26.25			11/10/2001	11/10/2010	Common Stock	37,900	37,900	D	
Non- Qualified Stock Option (right to buy)	\$ 29.31			10/02/2002	10/02/2011	Common Stock	341,100	341,100	D	
Non- Qualified Stock Option (right to buy)	\$ 32.75			04/04/2002	04/04/2011	Common Stock	37,900	37,900	D	
Non- Qualified Stock Option (right to buy)	\$ 33.75			10/27/2000	10/27/2009	Common Stock	150,000	150,000	D	
Non- Qualified Stock Option (right to buy)	\$ 34.67			11/08/2003	01/28/2013	Common Stock	62,900	62,900	D	
Non- Qualified Stock Option (right to buy)	\$ 37.05			11/08/2003	11/08/2012	Common Stock	31,450	31,450	D	
Non- Qualified Stock Option (right to buy)	\$ 40.66			10/27/2006	08/02/2014	Common Stock	22,500	22,500	D	
Non- Qualified Stock Option (right to buy)	\$ 41.79			09/21/2005	09/21/2014	Common Stock	325,800	325,800	D	
Non- Qualified Stock Option (right to buy)	\$ 44.6875			08/13/2000	08/13/2010	Common Stock	75,800	75,800	D	
Non- Qualified Stock Option (right to buy)	\$ 45.16			10/27/2004	04/26/2014	Common Stock	37,500	37,500	D	
Non- Qualified Stock Option (right to buy)	\$ 51.229			11/08/2003	07/30/2013	Common Stock	31,450	31,450	D	

Non- Qualified Stock Option (right to buy)	\$ 53.86			10/27/2004	10/27/2013	Common Stock	60,000	60,000	D	
Non- Qualified Stock Option (right to buy)	\$ 58.10			10/27/2006	01/27/2014	Common Stock	30,000	30,000	D	

### **Reporting Owners**

	Relationships								
Reporting Owner Name / Address	Director	10% Owner	Officer	Other					
SCHROEDER KENNETH L C/O KLA-TENCOR CORPORATION 160 RIO ROBLES SAN JOSE, CA 95130	X		Chief Executive Officer						

# **Signatures**

By: Stuart J. Nichols For: Kenneth L. Schroeder	09/27/2005
**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).
- $\textbf{(1)} \ \ \text{Each restricted stock unit represents a contingent right to receive one share of KLAC common stock.}$

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.