

SCHROEDER KENNETH L
 Form 4
 February 28, 2005

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

OMB APPROVAL
 OMB Number: 3235-0287
 Expires: January 31, 2005
 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, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 SCHROEDER KENNETH L

(Last) (First) (Middle)

C/O KLA-TENCOR CORPORATION, 160 RIO ROBLES

(Street)

SAN JOSE, CA 95130

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 KLA TENCOR CORP [KLAC]

3. Date of Earliest Transaction
 (Month/Day/Year)
 02/28/2005

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director 10% Owner
 Officer (give title below) Other (specify below)
 Chief Executive Officer

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (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) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
Common Stock	02/28/2005		M	V Amount (A) \$ 10.63	43,968 A	D	206,075
Common Stock	02/28/2005		S	V Amount (D) \$ 50.4927	43,968 D	D	162,107
Common Stock-Restricted Stock Units ⁽¹⁾						D	100,000

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form

SEC 1474 (9-02)

displays a currently valid OMB control number.

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

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Security (Instr. 3 and 4)		
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Am Nur Sha
Non-Qualified Stock Option (right to buy)	\$ 10.63	02/28/2005		M	43,968	08/31/1999	08/31/2008	Common Stock	43
Non-Qualified Stock Option (right to buy)	\$ 16.97					10/23/1999	10/23/2008	Common Stock	17
Non-Qualified Stock Option (right to buy)	\$ 26.25					11/10/2001	11/10/2010	Common Stock	3
Non-Qualified Stock Option (right to buy)	\$ 29.31					10/02/2002	10/02/2011	Common Stock	34
Non-Qualified Stock Option (right to buy)	\$ 32.75					04/04/2002	04/04/2011	Common Stock	3
Non-Qualified Stock Option (right to buy)	\$ 33.75					10/27/2000	10/27/2009	Common Stock	15
Non-Qualified Stock Option (right to buy)	\$ 34.67					11/08/2003	01/28/2013	Common Stock	62
Non-Qualified Stock Option (right to buy)	\$ 37.05					11/08/2003	11/08/2012	Common Stock	3
Non-Qualified Stock Option (right to buy)	\$ 40.66					10/27/2006	08/02/2014	Common Stock	22
Non-Qualified Stock Option (right to buy)	\$ 41.79					09/21/2005	09/21/2014	Common Stock	32

Non-Qualified Stock Option (right to buy)	\$ 44.6875	08/13/2000	08/13/2010	Common Stock	75
Non-Qualified Stock Option (right to buy)	\$ 45.16	10/27/2004	04/26/2014	Common Stock	33
Non-Qualified Stock Option (right to buy)	\$ 51.229	11/08/2003	07/30/2013	Common Stock	33
Non-Qualified Stock Option (right to buy)	\$ 53.86	10/27/2004	10/27/2013	Common Stock	60
Non-Qualified Stock Option (right to buy)	\$ 58.1	10/27/2006	01/27/2014	Common Stock	30

Reporting Owners

Reporting Owner Name / Address	Relationships			
	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

02/28/2005

__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).

(1) 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.