

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

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

OMB Number: 3235-0287

Expires: January 31, 2005

Estimated average burden hours per response... 0.5

1. Name and Address of Reporting Person *
LEVY KENNETH

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

5. Relationship of Reporting Person(s) to Issuer

(Last) (First) (Middle)

3. Date of Earliest Transaction
(Month/Day/Year)
08/17/2005

(Check all applicable)

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

Chairman of the Board

160 RIO ROBLES

(Street)

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

6. Individual or Joint/Group Filing(Check
Applicable Line)

SAN JOSE, CA 95134

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)	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)
			Code	V	Amount	(A) or (D) Price			
Common Stock	08/17/2005	08/17/2005	S		40,000	D \$ 49.2586	298,000	I	KGMW,LP
Common Stock							1,141	D	
Common Stock							40,000	I	Levy Fam. Foundation
Common Stock							1,644,375	I	Levy Fam. Trust

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

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SEC 1474
(9-02)

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 Securities (Instr. 3 and 4)
				Code	V (A) (D)	Date Exercisable Expiration Date	Title Amount Number Shares
Non-Qualified Stock Option (right to buy)	\$ 10.63					08/31/1999 08/31/2008	Common Stock 204,27
Non-Qualified Stock Option (right to buy)	\$ 16.97					10/23/1999 10/23/2008	Common Stock 220,72
Non-Qualified Stock Option (right to buy)	\$ 26.25					11/10/2001 11/10/2010	Common Stock 18,951
Non-Qualified Stock Option (right to buy)	\$ 29.31					10/02/2002 10/02/2011	Common Stock 28,425
Non-Qualified Stock Option (right to buy)	\$ 32.75					04/04/2002 04/04/2011	Common Stock 18,951
Non-Qualified Stock Option (right to buy)	\$ 33.75					10/27/2000 10/27/2009	Common Stock 90,000
Non-Qualified Stock Option (right to buy)	\$ 34.67					11/08/2003 01/28/2013	Common Stock 15,724
Non-Qualified Stock Option (right to buy)	\$ 37.05					11/08/2003 11/08/2012	Common Stock 7,863
Non-Qualified Stock Option	\$ 40.66					10/27/2004 08/02/2014	Common Stock 4,500

(right to buy)

Non-Qualified Stock Option (right to buy)	\$ 41.79	09/21/2005	09/21/2014	Common Stock	50,000
Non-Qualified Stock Option (right to buy)	\$ 44.6875	08/13/2000	08/13/2010	Common Stock	37,901
Non-Qualified Stock Option (right to buy)	\$ 45.16	10/27/2004	04/26/2014	Common Stock	7,500
Non-Qualified Stock Option (right to buy)	\$ 51.229	11/08/2003	07/30/2013	Common Stock	7,863
Non-Qualified Stock Option (right to buy)	\$ 53.86	10/27/2004	10/27/2013	Common Stock	12,000
Non-Qualified Stock Option (right to buy)	\$ 58.1	10/27/2004	01/27/2014	Common Stock	6,000

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
LEVY KENNETH 160 RIO ROBLES SAN JOSE, CA 95134	X		Chairman of the Board	

Signatures

By: Stuart J. Nichols For: Kenneth
Levy 08/19/2005

__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).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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