

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20594

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. )\*

KLA Tencor

(Name of Issuer)

Common Stock

(Title of Class of Securities)

482480100

(CUSIP Number)

Check the following box if a fee is being paid with this statement [ ].  
(A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1: and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7).

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

- 1 NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Capital Guardian Trust Company  
95-2553868
- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*  
The persons making this filing are affiliated entities; (a)  
however, they disclaim membership in a group for all (b)  
purposes other than making this joint filing.
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

California

5 SOLE VOTING POWER  
4,718,000

6 SHARED VOTING POWER  
NONE

7 SOLE DISPOSITIVE POWER  
5,772,100

8 SHARED DISPOSITIVE POWER  
NONE

NUMBER OF  
SHARES

BENEFICIAL  
Y OWNED BY

EACH  
REPORTING

PERSON WITH

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
5,772,100 Beneficial ownership disclaimed pursuant to Rule 13d-4

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
6.8%

12 TYPE OF REPORTING PERSON\*  
BK

\* SEE INSTRUCTION BEFORE FILLING OUT!

1 NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Capital International Limited

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*  
The persons making this filing are affiliated entities; (a)  
however, they disclaim membership in a group for all (b)  
purposes other than making this joint filing.

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION  
United Kingdom

5 SOLE VOTING POWER  
1,037,100

6 SHARED VOTING POWER

NUMBER OF  
SHARES  
NONE  
BENEFICIAL  
LY OWNED BY  
7 SOLE DISPOSITIVE POWER  
EACH  
REPORTING  
1,037,100  
PERSON WITH  
8 SHARED DISPOSITIVE POWER  
NONE

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
1,037,100 Beneficial ownership disclaimed pursuant to Rule 13d-4

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
1.2%

12 TYPE OF REPORTING PERSON\*  
IA

\* SEE INSTRUCTION BEFORE FILLING OUT!

1 NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Capital International S.A.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*  
The persons making this filing are affiliated entities; (a)  
however, they disclaim membership in a group for all  
purposes other than making this joint filing. (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION  
Geneva, Switzerland

5 SOLE VOTING POWER  
805,400

NUMBER OF  
SHARES  
NONE  
BENEFICIAL  
LY OWNED BY  
7 SOLE DISPOSITIVE POWER  
EACH  
REPORTING  
805,400  
PERSON WITH

8 SHARED DISPOSITIVE POWER

NONE

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

805,400 Beneficial ownership disclaimed pursuant to Rule 13d-4

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

1.0%

12 TYPE OF REPORTING PERSON\*

IA

\* SEE INSTRUCTION BEFORE FILLING OUT!

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Capital International, Inc.  
95-4154361

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

The persons making this filing are affiliated entities; (a)  
however, they disclaim membership in a group for all  
purposes other than making this joint filing. (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

California

5 SOLE VOTING POWER

112,100

6 SHARED VOTING POWER

NONE

NUMBER OF  
SHARES  
BENEFICIA  
L  
Y OWNED BY

7 SOLE DISPOSITIVE POWER

112,100

EACH  
REPORTING  
PERSON WITH

8 SHARED DISPOSITIVE POWER

NONE

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

112,100 Beneficial ownership disclaimed pursuant to Rule 13d-4

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

0.1%

12 TYPE OF REPORTING PERSON\*

IA

\* SEE INSTRUCTION BEFORE FILLING OUT!

SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549

Schedule 13G  
Under the Securities Exchange Act of 1934

Amendment No.

Item 1(a) Name of Issuer:  
KLA Tencor

Item 1(b) Address of Issuer's Principal Executive Offices:  
160 Rio Robles  
San Jose, CA 95134

Item 2(a) Name of Person(s) Filing:  
Capital Guardian Trust Company, Capital International Limited,  
Capital International S.A. and Capital International, Inc.

Item 2(b) Address of Principal Business Office:  
333 South Hope Street  
Los Angeles, CA 90071

Item 2(c) Citizenship: N/A

Item 2(d) Title of Class of Securities:  
Common Stock

Item 2(e) CUSIP Number:  
482480100

Item 3 The person(s) filing is(are):

- (b)  Bank as defined in Section 3(a)(6) of the Act.  
(e)  Investment Adviser registered under Section 203 of  
the Investment Advisers Act of 1940.

Item 4 Ownership

The persons making this filing are affiliated entities; however,  
they disclaim membership in a group for all purposes other than  
making this joint filing.

Capital Guardian Trust Company, a bank as defined in Section  
3(a)(6) of the Act is deemed to be the beneficial owner of  
5,772,100 shares or 6.8% of the 84,616,000 shares of Common Stock  
believed to be outstanding as a result of its serving as the  
investment manager of various institutional accounts.

Capital International Limited is deemed to be the beneficial  
owner of 1,037,100 shares or 1.2% of the 84,616,000 shares of  
Common Stock believed to be outstanding as a result of its  
serving as the investment manager of various institutional  
accounts.

Capital International S.A. is deemed to be the beneficial owner of 805,400 shares or 1.0% of the 84,616,000 shares of Common Stock believed to be outstanding as a result of its serving as the investment manager of various institutional accounts.

Capital International, Inc., an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 is deemed to be the beneficial owner of 112,100 shares or 0.1% of the 84,616,000 shares of Common Stock believed to be outstanding as a result of acting as investment adviser to various investment companies and institutional accounts.

Item 5 Ownership of 5% or Less of a Class: [ ]

Item 6 Ownership of More than 5% on Behalf of Another Person: N/A

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company: N/A

Item 8 Identification and Classification of Members of the Group:

1.

Capital Guardian Trust Company is a bank as defined in Section 3(a)(6) of the Act and a wholly owned subsidiary of The Capital Group Companies, Inc.

2.

Capital International Limited (CIL) does not fall within any of the categories described in Rule 13d-1-(b)(ii)(A-F) but its holdings of any reported securities come within the five percent limitation as set forth in a December 15, 1986 no-action letter from the Staff of the Securities and Exchange Commission to The Capital Group Companies, Inc. CIL is a wholly owned subsidiary of Capital Group International, Inc. which is a wholly owned subsidiary of The Capital Group Companies, Inc.

3.

Capital International S.A. (CISA) does not fall within any of the categories described in Rule 13d-1-(b)(ii)(A-F) but its holdings of any reported securities come within the five percent limitation as set forth in a December 15, 1986 no-action letter from the Staff of the Securities and Exchange Commission to The Capital Group Companies, Inc. CISA is a wholly owned subsidiary of Capital Group International, Inc. which is a wholly owned subsidiary of The Capital Group Companies, Inc.

4.

Capital International Research and Management, Inc. dba Capital International, Inc. is an Investment Adviser registered under Section 203 of the Investment Adviser Act of 1940 and is a wholly owned subsidiary of Capital Group International, Inc. which is a wholly owned subsidiary of The Capital Group Companies, Inc.

Item 9 Notice of Dissolution of the Group: N/A

Item 10 Certification

By signing below, I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purpose or effect.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: July 9, 1998 (For the period ended  
December 31, 1997)

Signature: \*David I. Fisher

Name/Title: David I. Fisher, Chairman  
Capital Guardian Trust Company

Date: July 9, 1998 (For the period ended  
December 31, 1997)

Signature: \*David I. Fisher

Name/Title: David I. Fisher, Vice Chairman  
Capital International Limited

Date: July 9, 1998 (For the period ended  
December 31, 1997)

Signature: \*David I. Fisher

Name/Title: David I. Fisher, President du Conseil  
Capital International S.A.

Date: July 9, 1998 (For the period ended  
December 31, 1997)

Signature: \*David I. Fisher

Name/Title: David I. Fisher, Vice Chairman  
Capital International, Inc.

\*By

Michael J. Downer  
Attorney-in-fact

Signed pursuant to a Power of Attorney dated June 16, 1998 included as an Exhibit to Schedule 13G filed with the Securities and Exchange Commission by Capital Guardian Trust Company on July 9, 1998 with respect to Acclaim Entertainment, Inc.

AGREEMENT

Los Angeles, CA  
July 9, 1998

Capital Guardian Trust Company ("CGTC"), Capital International Limited ("CIL"), Capital International S.A. ("CISA"), Capital International, Inc. ("CII") hereby agree to file a joint statement on Schedule 13G under the Securities Exchange Act of 1934 (the "Act") in connection with their beneficial ownership of Common Stock issued by KLA Tencor.

CGTC, CIL, CISA, CII state that they are each entitled to individually use Schedule 13G pursuant to Rule 13d-1(c) of the Act.

CGTC, CIL, CISA, CII are each responsible for the timely filing of the statement and any amendments thereto, and for the completeness and accuracy of the information concerning each of them contained therein but are not responsible for the completeness or accuracy of the information concerning the others.

CAPITAL GUARDIAN TRUST COMPANY

BY: \*David I. Fisher  
David I. Fisher, Chairman  
Capital Guardian Trust Company

CAPITAL INTERNATIONAL LIMITED

BY: \*David I. Fisher  
David I. Fisher, Vice Chairman  
Capital International Limited

CAPITAL INTERNATIONAL S.A.

BY: \*David I. Fisher  
David I. Fisher, President du  
Conseil  
Capital International S.A.

CAPITAL INTERNATIONAL, INC.

BY: \*David I. Fisher  
David I. Fisher, Vice Chairman  
Capital International, Inc.

\*By

Michael J. Downer  
Attorney-in-fact

Signed pursuant to a Power of Attorney dated June 16, 1998 included as an Exhibit to Schedule 13G filed with the Securities and Exchange Commission by Capital Guardian Trust Company on July 9, 1998 with respect to Acclaim Entertainment, Inc.