

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

SCHEDULE 13G

Under the Securities exchange Act of 1934

KLA-TENCOR CORP

(NAME OF ISSUER)

COM

(TITLE OF CLASS OF SECURITIES)

482480100

(CUSIP NUMBER)

December 31, 2009

(Date of event which requires filing of this Statement)

NOTE: A MAJORITY OF THE SHARES REPORTED IN THIS SCHEDULE 13G ARE HELD BY UNAFFILIATED THIRD-PARTY CLIENT ACCOUNTS MANAGED BY ALLIANCEBERNSTEIN L.P., AS INVESTMENT ADVISER. (ALLIANCEBERNSTEIN L.P. IS A MAJORITY-OWNED SUBSIDIARY OF AXA FINANCIAL, INC.)

this Schedule is filed:

- X Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

* 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).

(CONTINUED ON FOLLOWING PAGE(S))

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1. NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

AXA Assurances I.A.R.D. Mutuelle

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A

GROUP * (A) [X]

(B) []

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

France

NUMBER OF SHARES	5. SOLE VOTING POWER	7,533,440
BENEFICIALLY	6. SHARED VOTING	0
December 31,	POWER	
BY EACH		10,140,496
REPORTING	7. SOLE DISPOSITIVE	
PERSON WITH:	POWER	0

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH 10,140,496
(Not to be construed as an admission of beneficial ownership)

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

11. PERCENT OF CLASS REPRESENTED BY 5.9%

12. TYPE OF REPORTING PERSON * IC
* SEE INSTRUCTIONS BEFORE FILLING OUT!

<PAGE

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

AXA Assurances Vie Mutuelle

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP * (A) [X] (B) []

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

France
NUMBER OF SHARES BENEFICIALLY OWNED AS OF December 31, BY EACH REPORTING PERSON WITH:
5. SOLE VOTING POWER 7,533,440
6. SHARED VOTING POWER 0
7. SOLE DISPOSITIVE POWER 0

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH 10,140,496
(Not to be construed as an admission of beneficial ownership)

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

11. PERCENT OF CLASS REPRESENTED BY 5.9%

12. TYPE OF REPORTING PERSON * IC
* SEE INSTRUCTIONS BEFORE FILLING OUT!

<PAGE

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

AXA

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP * (A) [] (B) []

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

France
NUMBER OF SHARES BENEFICIALLY OWNED AS OF December 31, BY EACH REPORTING PERSON WITH:
5. SOLE VOTING POWER 7,533,440
6. SHARED VOTING POWER 0
7. SOLE DISPOSITIVE POWER 0

9. AGGREGATE AMOUNT BENEFICIALLY 10,140,496

OWNED BY EACH
(Not to be construed as an admission of beneficial ownership)

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

11. PERCENT OF CLASS REPRESENTED BY 5.9%

12. TYPE OF REPORTING PERSON *
IC

* SEE INSTRUCTIONS BEFORE FILLING OUT!

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1. NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
AXA Financial, Inc. 13-3623351

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A
GROUP * (A) [] (B) []

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION
State of Delaware
NUMBER OF 5. SOLE VOTING POWER 7,415,242
SHARES
BENEFICIALLY 6. SHARED VOTING 0
December 31, POWER
BY EACH 9,950,798
REPORTING 7. SOLE DISPOSITIVE
PERSON WITH: POWER 0

9. AGGREGATE AMOUNT BENEFICIALLY 9,950,798
OWNED BY EACH
(Not to be construed as an admission of beneficial ownership)

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

11. PERCENT OF CLASS REPRESENTED BY 5.8%

12. TYPE OF REPORTING PERSON *
HC

* SEE INSTRUCTIONS BEFORE FILLING OUT!

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Item 1(a) Name of
KLA-TENCOR CORP

Item 1(b) Address of Issuer's Principal Executive Offices:
One Technology Drive
Milpitas, CA 95035

Item 2(a) and (b)
Name of Person Filing and Address of Principal Business Office:

AXA Assurances I.A.R.D Mutuelle, and
AXA Assurances Vie Mutuelle,
26, rue Drouot
75009 Paris, France

as a group (collectively, the 'Mutuelles AXA').

AXA
25, avenue Matignon
75008 Paris, France

AXA Financial, Inc.
1290 Avenue of the Americas
New York, New York 10104

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Item 2(c) Citizenship:
Mutuelles AXA and AXA - France
AXA Financial, Inc. - Delaware

Item 2(d) Title of Class of Securities:

COM

Item 2(e) Cusip Number:
482480100

Item 3. Type of Reporting Person:
AXA Financial, Inc. as a parent holding company,
in accordance with 240.13d-1(b) (ii) (G) .

The Mutuelles AXA, as a group, acting as a parent holding
company.

AXA as a parent holding company.

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<TABL

Item 4. Ownership as December 31,
(a) Amount Beneficially Owned:
10,140,496 shares of common stock beneficially owned including:
<CAPTION>

	No. of Shares Subtotals -----
The Mutuelles AXA, as a group	0
AXA	0
AXA Entity or Entities	
Common acquired solely for investment	
AXA Investment Managers Paris	4,500
AXA Investment Managers UK Ltd	39,000
AXA Konzern AG (Germany)	600
AXA Rosenberg Investment	145,598
AXA Financial, Inc.	0
Subsidiaries:	
AllianceBernstein L.P. acquired solely for investment purposes on behalf of client discretionary investment advisory accounts:	
Common Stock	9,815,868
	9,815,868
AXA Equitable Life Insurance Company acquired solely for investment purposes:	
Common Stock	134,930
	134,930
Total	----- 10,140,496 =====

Each of the Mutuelles AXA, as a group, and AXA expressly declares that the

filing of this Schedule 13G shall not be construed as an admission that it is, for purposes of Section 13(d) of the Exchange Act, the beneficial owner of any securities covered by this Schedule 13G.

Each of the above subsidiaries of AXA Financial, Inc. operates under independent management and makes independent decisions.

(b) Percent of Class: 5.9%
=====

<TABLE> ITEM 4. Ownership as of
(CONT.)

(c) Deemed Voting Power and Disposition Power:
<CAPTION>

	(i) Deemed to have Sole Power	(ii) Deemed to have Shared Power	(iii) Deemed to have Sole Power	(iv) Deemed to have Shared
Power	to Vote or to Direct the Vote	to Vote or to Direct the Vote	to Dispose or to Direct the Disposition	to Dispose or to Direct the Disposition
<S>	<C>	<C>	<C>	<C>
The Mutuelles AXA, AXA	0	0	0	0
AXA Entity or Entities:				
AXA Investment Managers Paris (France)	4,500	0	4,500	0
AXA Investment Managers UK Ltd	39,000	0	39,000	0
AXA Konzern AG (Germany)	600	0	600	0
AXA Rosenberg Investment Management LLC	74,098	0	145,598	0
AXA Financial, Inc.	0	0	0	0
Subsidiaries:				
AllianceBernstein	7,288,412	0	9,815,868	0
AXA Equitable Life Insurance	126,830	0	134,930	0
	7,533,44	0	10,140,496	0

Each of the above subsidiaries of AXA Financial, Inc. operates under independent management and makes independent voting and investment decisions.

</TABLE>

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Item 5. Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of

more than five percent of the class of securities, ()

Item 6. Ownership of More than Five Percent on behalf of Another Person. N/A

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reporting on by the Parent Holding Company:

This Schedule 13G is being filed by AXA Financial, Inc.; AXA, which owns AXA Financial, Inc.; and the Mutuelles AXA, which as a group control AXA:

(X) in the Mutuelles AXAs' capacity, as a group, acting as a parent holding company with respect to the holdings of the following AXA entity or entities:

(X) in AXA's capacity as a parent holding company with respect to the holdings of the following AXA entity or entities:

AXA Investment Managers Paris (France)

AXA Investment Managers UK Ltd
AXA Konzern AG (Germany)
AXA Rosenberg Investment Management LLC

(X) in AXA Financial, Inc.'s capacity as a parent holding company

with respect to the holdings of the following subsidiaries:

(X) AllianceBernstein L.P.
(13-3434400), an investment adviser registered under Section 203 of the Investment Advisers Act of 1940.

(X) AXA Equitable Life Insurance Company
(13-5570651), an insurance company and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940.

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Item 8. Identification and Classification of Members of the Group.
N/A

Item 9. Notice of Dissolution of 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 purposes 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
Date: ,February 12, 2010 AXA FINANCIAL, INC.*

/s/ Alvin H. Fenichel

Alvin H. Fenichel
Senior Vice President
and Controller

*Pursuant to the Joint Filing Agreement with respect to Schedule 13G attached hereto as Exhibit I, among AXA Financial, Inc., AXA Assurances I.A.R.D Mutuelle, AXA Assurances Vie Mutuelle, and AXA, this statement Schedule 13G is filed on behalf of each of them.

JOINT FILING AGREEMENT

Each of the undersigned hereby agrees that the Schedule 13G filed herewith is filed jointly, pursuant to Rule 13d-1(f) (1) of the Securities Exchange Act of 1934, as amended on behalf of each of them.

Dated: February 12, 2010

AXA Financial, Inc.

BY: /s/ Alvin H. Fenichel

Alvin H. Fenichel
Senior Vice President and Controller

AXA Assurances I.A.R.D. Mutuelle; AXA Assurances Vie Mutuelle; as a group, and AXA

Signed on behalf of each of the above entities

BY: /s/ Alvin H. Fenichel

Alvin H. Fenichel
Attorney-in-Fact
(Executed pursuant to Powers of Attorney)