UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant ⊠		Registrant ⊠	Filed by a Party other than the Registrant □		
Checl	k the ap	ppropriate box:			
	Preliminary Proxy Statement				
	Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))				
X	Definitive Proxy Statement				
	Definitive Additional Materials				
	Soliciting Material Pursuant to §240.14a-12				
			KLA-Tencor Corporation		
			(Name of Registrant as Specified In Its Charter)		
			(Name of Person(s) Filing Proxy Statement, if other than the Registrant)		
Paym	ent of	Filing Fee (Check the approp	riate box):		
X	No fee required.				
	Fee c	computed on table below per	Exchange Act Rules 14a-6(i)(1) and 0-11.		
	(1)	Title of each class of securi	ties to which the transaction applies:		
	(2)	Aggregate number of secur	ities to which the transaction applies:		
	(3)	Per unit price or other unde and state how it was determ	rlying value of the transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated nined):		
	(4)	Proposed maximum aggreg	ate value of the transaction:		
	(5)	Total fee paid:			
	Fee p	paid previously with prelimina	ary materials.		
			offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the ement number, or the Form or Schedule and the date of its filing.		
	(1)	Amount Previously Paid:			
	(2)	Form, Schedule or Registra	tion Statement No.:		
	(3)	Filing Party:			
	(4)	Date Filed:			



NOTICE OF ANNUAL MEETING OF STOCKHOLDERS November 2, 2016

To the Stockholders:

YOUR VOTE IS IMPORTANT

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of KLA-Tencor Corporation ("we" or the "Company"), a Delaware corporation, will be held on Wednesday, November 2, 2016 at 12:00 p.m., local time, in Building Three of our Milpitas facility, located at Three Technology Drive, Milpitas, California 95035, for the following purposes:

- 1. To elect the ten candidates nominated by our Board of Directors to serve as directors for one-year terms, each until his or her successor is duly elected.
- 2. To ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending June 30, 2017.
- 3. To approve on a non-binding, advisory basis our named executive officer compensation.
- 4. To transact such other business as may properly come before the Annual Meeting or any adjournment thereof.

The foregoing items of business are more fully described in the Proxy Statement accompanying this Notice.

Only stockholders of record at the close of business on September 14, 2016 are entitled to notice of, and to vote at, the Annual Meeting and any adjournment or postponement thereof.

Sincerely,

Richard P. Wallace

President and Chief Executive Officer

Wallene

Milpitas, California

This Notice of Annual Meeting of Stockholders, Proxy Statement and form of proxy are being distributed and made available on or about September 23, 2016.

All stockholders are cordially invited to attend the Annual Meeting in person; however, regardless of whether you expect to attend the Annual Meeting in person, we encourage you to vote as soon as possible. You may vote by proxy over the Internet or by telephone, or, if you received paper copies of the proxy materials by mail, you can also vote by mail by following the instructions on the proxy card or voting instruction card. Voting over the Internet, by telephone or by written proxy or voting instruction card will ensure your representation at the Annual Meeting regardless of whether you attend in person.

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ANNUAL MEETING OF STOCKHOLDERS OF KLA-TENCOR CORPORATION

To be held on November 2, 2016

PROXY STATEMENT

QUESTIONS AND ANSWERS REGARDING PROXY MATERIALS

1. Why am I receiving these materials?

The Board of Directors (the "Board") of KLA-Tencor Corporation ("KLA-Tencor," the "Company" or "we") is providing these proxy materials to you in connection with KLA-Tencor's Annual Meeting of Stockholders to be held on Wednesday, November 2, 2016 at 12:00 p.m., local time (the "Annual Meeting"). As a stockholder of record, you are invited to attend the Annual Meeting, which will be held in Building Three of our Milpitas facility, located at Three Technology Drive, Milpitas, California 95035. The purposes of the Annual Meeting are set forth in the accompanying Notice of Annual Meeting of Stockholders and this Proxy Statement

These proxy solicitation materials, together with our Annual Report for fiscal year 2016, were first made available on or about September 23, 2016 to all stockholders entitled to vote at the Annual Meeting. KLA-Tencor's principal executive offices are located at One Technology Drive, Milpitas, California 95035, and our telephone number is (408) 875-3000.

2. How may I obtain KLA-Tencor's Annual Report on Form 10-K?

A copy of our Annual Report on Form 10-K for fiscal year 2016 is available free of charge on the Internet from the website of the Securities and Exchange Commission (the "SEC") at http://www.sec.gov, as well as on our website at http://www.sec.gov, as well as on our website at http://ir.kla-tencor.com.

3. Why did I receive a notice in the mail regarding the Internet availability of the proxy materials instead of a paper copy of the proxy materials?

This year, relying on the SEC rule that allows companies to furnish their proxy materials over the Internet, we are again mailing to our stockholders a notice regarding the Internet availability of the proxy materials instead of a paper copy of the proxy materials. All stockholders will have the ability to access the proxy materials over the Internet and request to receive a paper copy of the proxy materials by mail. Instructions on how to access the proxy materials over the Internet or to request a paper copy may be found in the notice. In addition, the notice contains instructions on how you may request to access proxy materials in printed form by mail or electronically on an ongoing basis.

4. How can I access the proxy materials over the Internet?

Your notice regarding the Internet availability of the proxy materials, proxy card or voting instruction card will contain instructions on how to:

- Access and view our proxy materials for the Annual Meeting on the Internet; and
- Instruct us to send our future proxy materials to you electronically by e-mail.

Our proxy materials are also available on our website at the following address: http://www.kla-tencor.com/annualmeeting.

Your notice regarding the Internet availability of the proxy materials, proxy card or voting instruction card will contain instructions on how you may request access to proxy materials electronically on an ongoing basis. Choosing to access your future proxy materials electronically will help us conserve natural resources and reduce the costs of printing and distributing our proxy materials. If you choose to access future proxy materials electronically, you will receive an e-mail with instructions containing a link to the website where those materials are available and a link to the proxy voting website. Your election to access proxy materials by e-mail will remain in effect until you terminate it.

5. How may I obtain a paper copy of the proxy materials?

Stockholders receiving a notice regarding the Internet availability of the proxy materials will find instructions in that notice about how to obtain a paper copy of the proxy materials free of charge. Stockholders who have previously submitted a standing request to receive paper copies of our proxy materials will receive a paper copy of the proxy materials by mail.

6. What should I do if I receive more than one set of voting materials?

You may request delivery of a single copy of our future proxy statements and annual reports by writing to the address provided in the answer to Question 7 below or calling our Investor Relations department at the telephone number below. Stockholders may also request electronic delivery of future proxy statements by writing to the address below, by calling our Investor Relations department at (408) 875-3000 or via our website at http://ir.kla-tencor.com.

7. I received one copy of these materials. May I get additional copies?

Certain stockholders who share an address are being delivered only one copy of this Proxy Statement. You may receive additional copies of this Proxy Statement without charge by sending a written request to KLA-Tencor Corporation, Attention: Investor Relations, One Technology Drive, Milpitas, California 95035. Requests may also be made by calling our Investor Relations department at (408) 875-3000.

QUESTIONS AND ANSWERS REGARDING THE ANNUAL MEETING

8. Who may vote at the Annual Meeting?

You may vote at the Annual Meeting if our records showed that you owned shares of KLA-Tencor Common Stock as of the close of business on September 14, 2016 (the "Record Date"). At the close of business on that date, we had a total of 156,318,732 shares of Common Stock issued and outstanding, which were held of record by approximately 308 stockholders. As of the Record Date, we had no shares of Preferred Stock outstanding. You are entitled to one vote for each share that you own.

The Annual Meeting will be held if a majority of the outstanding Common Stock entitled to vote is represented at the Annual Meeting. If you have returned valid proxy instructions or attend the Annual Meeting in person, your Common Stock will be counted for the purpose of determining whether there is a quorum, even if you wish to abstain from voting on some or all matters at the Annual Meeting.

9. What proposals are being voted on at the Annual Meeting?

In addition to such other business as may properly come before the Annual Meeting or any adjournment thereof, the following three proposals will be presented at the Annual Meeting:

- A. Election of ten candidates nominated by our Board to serve as directors for one-year terms;
- B. Ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending June 30, 2017; and
- C. Non-binding, advisory approval of our named executive officer compensation.

10. Will the Annual Meeting still be held if the mergers contemplated by the Agreement and Plan of Merger and Reorganization with Lam Research Corporation close prior to the Annual Meeting?

If the mergers contemplated by the Agreement and Plan of Merger and Reorganization (the "Merger Agreement") with Lam Research Corporation ("Lam Research") close prior to the Annual Meeting, then the Annual Meeting will not be held.

QUESTIONS AND ANSWERS REGARDING PROXY SOLICITATION AND VOTING

11. How can I vote if I own shares registered directly in my name?

Most stockholders do not own shares registered directly in their name, but rather are "beneficial holders" of shares held in a stock brokerage account or by a bank or other nominee (that is, shares held "in street name"). Those stockholders should refer to Question 12 below for instructions regarding how to vote their shares.

If, however, your shares are registered directly in your name with our transfer agent, you are considered, with respect to those shares, the stockholder of record, and these proxy materials are being sent directly to you. You may vote in the following ways:

- A. **By Telephone**: Votes may be cast by telephone prior to 11:59 p.m. Eastern Time on November 1, 2016. To vote by telephone, you will need the control number that appears on your notice of the availability of the proxy materials (whether you received that notice by mail or e-mail) or your proxy card or voting instruction card;
- B. **By Internet:** Votes may be cast through the Internet voting site prior to 11:59 p.m. Eastern Time on November 1, 2016. To vote through the Internet, please follow the instructions for Internet voting contained in your notice of the availability of the proxy materials (whether you received that notice by mail or e-mail) or your proxy card or voting instruction card;
- C. **By Mail**: Stockholders who have received a paper copy of a proxy card or voting instruction card by mail may also vote by mail, as long as the proxy card or voting instruction card is timely delivered to the Company. To vote by mail, you must complete, sign and date your proxy card or voting instruction card and mail it in the accompanying pre-addressed envelope, and it must be delivered to the Company prior to 11:59 p.m. Eastern Time on November 1, 2016; or
- D. **In Person**: Attend the Annual Meeting and vote your shares in person.

Whichever of these methods you select to transmit your instructions, the proxy holders will vote your shares in accordance with those instructions.

If you vote by telephone, Internet or mail without giving specific voting instructions, your shares will be voted FOR Proposal One (the election of the ten nominees listed herein for the Board), FOR Proposal Two (the ratification of the appointment of our independent registered public accounting firm), and FOR Proposal Three (the non-binding, advisory approval of our named executive officer compensation).

When proxies are properly dated, executed and returned (whether by telephone, Internet or returned proxy card), the shares represented by such proxies will be voted at the Annual Meeting in accordance with the instructions of the stockholder. However, if no specific instructions are given, the shares will be voted in accordance with the recommendations of our Board and as the proxy holders may determine in their discretion with respect to any other matters that properly come before the meeting.

12. How may I vote if my shares are held in a stock brokerage account, or by a bank or other nominee?

If your shares are held in a stock brokerage account or by a bank or other nominee, you are considered the beneficial owner of shares held "in street name," and your broker or nominee is considered the *stockholder of record* with respect to those shares. Your broker or nominee should be forwarding these proxy materials to you. As the beneficial owner, you have the right to direct your broker how to vote, and you are also invited to attend the Annual Meeting. However, since you are not the stockholder of record, you may not vote these shares in person at the Annual Meeting. If a broker, bank or other nominee holds your shares, you will receive instructions from them that you must follow in order to have your shares voted.

13. Can I change my vote?

You may change your vote at any time prior to the vote at the Annual Meeting. To change your proxy instructions if you are a stockholder of record, you must:

- Advise our General Counsel in writing at our principal executive offices, before the proxy holders vote your shares, that you wish to revoke your proxy instructions; or
- Deliver proxy instructions dated after your earlier proxy instructions, in any of the voting methods described in the response to Question 11 above.

If you are the beneficial owner of shares held in street name, you should contact the broker, bank or other nominee that holds your shares for instructions regarding how to change your vote.

14. Who will bear the cost of this proxy solicitation?

KLA-Tencor is making this proxy solicitation, and we will pay the entire cost of this solicitation, including preparing, assembling, printing, mailing and distributing the notices and these proxy materials and soliciting votes. We have retained the services of D.F. King & Company to aid in the solicitation of proxies from brokers, bank nominees and other institutional owners. We estimate that we will pay D.F. King fees of approximately \$6,000 (plus reimbursement of out-of-pocket expenses) for this solicitation activity, forwarding solicitation material to beneficial and registered stockholders and processing the results. Certain of our Directors, officers and regular employees, without additional compensation, may solicit proxies personally or by telephone.

15. Can my broker vote my shares if I do not instruct him or her how I would like my shares voted?

Yes, but only on limited types of proposals. If your shares are held in a stock brokerage account or by a bank or other nominee, you are considered the "beneficial" owner of shares held "in street name," and these proxy materials are being forwarded to you by your broker or nominee (the "record holder") along with a voting card. As the beneficial owner, you have the right to direct your record holder how to vote your shares, and your record holder is required to vote your shares in accordance with your instructions. Record holders do not have discretion to vote your shares on Proposal One (the election of directors) or Proposal Three (the non-binding, advisory approval of our named executive officer compensation), in each case in the absence of specific instructions from you (the beneficial owner). Therefore, if you do not give instructions to your record holder, the record holder will only be entitled to vote your shares in its discretion on Proposal Two (the ratification of the appointment of our independent registered public accounting firm).

16. Are abstentions and broker non-votes counted?

Shares that are voted "FOR," "AGAINST," or "ABSTAIN" are treated as being present for purposes of determining the presence of a quorum and are also treated as shares entitled to vote at the Annual Meeting ("Votes Cast").

For each proposal, you are able to vote your shares as "FOR," "AGAINST" or "ABSTAIN." Shares that are voted without giving specific voting instructions will be voted as described in the answers to Questions 11 and 15. Abstentions will have no effect on the outcome of Proposal One (the election of directors). Abstentions with respect to Proposal Two (the ratification of the appointment of our independent registered public accounting firm) or Proposal Three (the non-binding, advisory approval of our named executive officer compensation) will have the same effect as a vote against that proposal.

Proposals Two and Three are non-binding advisory votes, for which our Board and its committees will give careful consideration to the voting results.

For all proposals, shares that are subject to a broker non-vote are counted for purposes of determining whether a quorum exists but not for purposes of determining whether a proposal has passed.

17. How does the Board recommend that I vote?

The Board recommends that stockholders vote as follows:

- A. "FOR" the election of the ten candidates nominated by the Board to serve as directors: Edward W. Barnholt, Robert M. Calderoni, John T. Dickson, Emiko Higashi, Kevin J. Kennedy, Gary B. Moore, Kiran M. Patel, Robert A. Rango, Richard P. Wallace and David C. Wang;
- B. "FOR" the ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending June 30, 2017; and
- C. "FOR" the approval of our named executive officer compensation on a non-binding, advisory basis.

18. Will any other business be transacted at the Annual Meeting?

We are not aware of any matters to be presented other than those described in this Proxy Statement. In the unlikely event that any matters not described in this Proxy Statement are properly presented at the Annual Meeting, the proxy holders will use their own judgment to determine how to vote.

19. What happens if the Annual Meeting is adjourned or postponed?

If the Annual Meeting is adjourned or postponed, the proxy holders can vote your shares on the new meeting date as well, unless you have properly revoked your proxy instructions.

20. Where can I find the voting results of the Annual Meeting?

We intend to announce preliminary voting results at the Annual Meeting and publish final results in a Current Report on Form 8-K to be filed with the SEC within four business days following the Annual Meeting.

$\underline{\textbf{QUESTIONS}} \ \textbf{AND} \ \textbf{ANSWERS} \ \textbf{REGARDING} \ \textbf{STOCKHOLDER} \ \textbf{PROPOSALS}, \ \textbf{DIRECTOR} \ \textbf{NOMINATIONS} \ \textbf{BY} \ \textbf{STOCKHOLDERS} \ \textbf{AND} \ \textbf{RELATED} \ \textbf{BYLAW} \\ \underline{\textbf{PROVISIONS}}$

21. Can I present other business to be transacted from the floor at the Annual Meeting?

A stockholder may only present a matter from the floor of a meeting of stockholders for consideration at that meeting if certain procedures set forth in our bylaws are followed, including delivery of advance notice by such stockholder to us. We have not received any timely notice with respect to the Annual Meeting regarding the presentation by a stockholder of business from the floor of the meeting. Accordingly, we do not expect to acknowledge any business presented from the floor at the Annual Meeting.

22. What is the deadline to propose actions for consideration at next year's annual meeting of stockholders?

You may submit proposals for consideration at future stockholder meetings. For a stockholder proposal to be considered for inclusion in our proxy statement for next year's annual meeting of stockholders, our Corporate Secretary must receive the written proposal at our principal executive offices no later than May 26, 2017. Such proposals also must comply with SEC regulations under Rule 14a-8 regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Proposals should be addressed to:

Corporate Secretary KLA-Tencor Corporation One Technology Drive Milpitas, California 95035 Fax: (408) 875-4266

For a stockholder proposal that is not intended to be included in our proxy statement under Rule 14a-8, the stockholder must provide the information required by our bylaws and give timely notice to our Corporate Secretary in accordance with our bylaws, which, in general, require that the notice be received by our Corporate Secretary:

- No earlier than the close of business on July 5, 2017, and
- No later than the close of business on August 4, 2017.

If the date of the stockholders' meeting is moved more than 30 days before or 60 days after November 2, 2017, then notice of a stockholder proposal that is not intended to be included in our proxy statement under Rule 14a-8 must be received no earlier than the close of business 120 days prior to the meeting and no later than the close of business on the later of the following two dates:

- 90 days prior to the meeting; and
- 10 days after public announcement of the meeting date.

23. How may I recommend or nominate individuals to serve as directors?

You may propose Director candidates for consideration by the Board's Nominating and Governance Committee. Any such recommendations should include the nominee's name and qualifications for Board membership and should be directed to our Corporate Secretary at the address of our principal executive offices set forth in Question 22 above.

In addition, our bylaws permit stockholders to nominate directors for election at an annual meeting of stockholders. To nominate a director, the stockholder must deliver the information required by our bylaws and a statement by the nominee acknowledging that he or she will owe a fiduciary obligation to KLA-Tencor and its stockholders.

24. What is the deadline to propose or nominate individuals to serve as directors?

A stockholder may send a proposed Director candidate's name and information to the Board at any time. Generally, such proposed candidates are considered at the first or second Board meeting prior to the annual meeting of stockholders.

To nominate an individual for election at an annual meeting of stockholders, the stockholder must give timely notice to our Corporate Secretary in accordance with our bylaws, which, for next year's annual meeting of stockholders, will generally require that the notice be received by our Corporate Secretary between the close of business on July 5, 2017 and the close of business on August 4, 2017, unless the annual meeting is moved by more than 30 days before or 60 days after November 2, 2017, in which case the deadline will be as described in the last paragraph of Question 22 above.

25. How may I obtain a copy of KLA-Tencor's bylaws?

For a free copy of our bylaws, please contact our Investor Relations department at (408) 875-3000. A copy of our bylaws is also available free of charge on the Internet on our website at http://ir.kla-tencor.com and on the SEC's website at http://www.sec.gov.

PROPOSAL ONE: ELECTION OF DIRECTORS

Nominees

Ten incumbent Directors are nominated for election at the Annual Meeting. The Nominating and Governance Committee, consisting solely of independent Directors as determined under the rules of the NASDAQ Stock Market, recommended the nominees listed in this Proposal One. Based on that recommendation, the members of the Board resolved to nominate such individuals for election.

Information regarding the business experience, qualifications, attributes and skills of each nominee is provided below under the section entitled "Information About the Nominees."

There are no family relationships among our executive officers and directors.

The ten candidates nominated by the Board for election as Directors by the stockholders are:

- Edward W. Barnholt;
- · Robert M. Calderoni;
- John T. Dickson;
- Emiko Higashi;
- Kevin J. Kennedy;
- Gary B. Moore;
- Kiran M. Patel;
- Robert A. Rango;
- · Richard P. Wallace; and
- David C. Wang.

If elected, each nominee will serve as a Director for a one-year term expiring at our 2017 annual meeting of stockholders. Each Director will hold office until his or her successor is duly elected and qualified, or until his or her death, resignation or removal. If any nominee declines to serve or becomes unavailable for any reason, or a vacancy occurs before the election, the proxies may be voted for such substitute nominees as the Board may designate. As of the date of this Proxy Statement, the Board is not aware of any nominee who is unable or who will decline to serve as a Director.

Vote Required and Recommendation

Under our bylaws, in any uncontested election of Directors (an election in which the number of nominees does not exceed the number of Directors to be elected), any nominee who receives a greater number of votes cast "FOR" his or her election than votes cast "AGAINST" his or her election will be elected. In accordance with our bylaws, the Nominating and Governance Committee has established procedures under which any Director who is not elected shall offer to tender his or her resignation to the Board following certification of the stockholder vote. The Nominating and Governance Committee, composed entirely of independent Directors, will consider the offer of resignation and recommend to the Board the action to be taken. The

Board will take action on the recommendation, and we will publicly disclose the Board's decision and the rationale behind it, within 90 days following certification of the stockholder vote. In making their respective decisions, the Nominating and Governance Committee and Board will take into consideration all factors they deem relevant. The Director who tenders his or her resignation will not participate in the decisions of the Nominating and Governance Committee or the Board regarding his or her resignation.

The Board unanimously recommends a vote "FOR" each of the Director nominees, with the Directors who are nominees abstaining with respect to their own nomination.

INFORMATION ABOUT THE BOARD OF DIRECTORS AND ITS COMMITTEES

The Board of Directors

Our Board held a total of 13 meetings during the fiscal year ended June 30, 2016. All Directors other than Mr. Wallace meet the definition of independence within the meaning of the NASDAQ Stock Market director independence standards.

The Board has three standing committees: the Audit Committee; the Compensation Committee; and the Nominating and Governance Committee. Each Committee is comprised entirely of independent directors, meets regularly and has a written charter approved by the Board, all of which are available on our website at http://ir.kla-tencor.com, along with our Standards of Business Conduct, Corporate Governance Standards and other governance-related information. The Board and each Committee regularly review the Committee charters. In addition, at each quarterly Board meeting, a member of each Committee reports on any significant matters addressed by the Committee.

During the fiscal year ended June 30, 2016, each of the incumbent Directors attended at least 75% of the aggregate of (a) the total number of meetings of the Board held during the period for which such person served as a Director and (b) the total number of meetings held by all Board committees on which such Director served (during the periods that such Director served).

Although we do not have a formal policy mandating attendance by members of the Board at our annual meetings of stockholders, we do have a formal policy encouraging their attendance at such meetings. All ten of the Directors then serving on our Board attended last year's annual meeting of stockholders.

Board Leadership Structure

KLA-Tencor currently separates the positions of Chief Executive Officer and Chairman of the Board. Since October 2006, Edward W. Barnholt, one of our independent Directors, has served as our Chairman of the Board. The responsibilities of the Chairman of the Board include: setting the agenda for each Board meeting, in consultation with the Chief Executive Officer; chairing the meetings of the Board; presiding at executive sessions; facilitating and conducting, with the Nominating and Governance Committee, the annual self-assessments by the Board and each standing committee of the Board; and conducting, with the Compensation Committee, a formal evaluation of the Chief Executive Officer in the context of the annual compensation review.

Separating the positions of Chief Executive Officer and Chairman of the Board allows our Chief Executive Officer to focus on our day-to-day business, while allowing the Chairman of the Board to lead the Board in its fundamental role of providing advice to and independent oversight of management. The Board believes that having an independent Director serve as Chairman of the Board is the appropriate leadership structure for the Company at this time.

However, our Corporate Governance Standards permit the roles of the Chairman of the Board and the Chief Executive Officer to be filled by the same or different individuals. This provides the Board with flexibility to determine whether the two roles should be combined in the future based on KLA-Tencor's needs and the Board's assessment of the Company's leadership from time to time. Our Corporate Governance Standards provide that, in the event that the Chairman of the Board is not an independent Director, the independent members of the Board will designate a "lead independent director."

The Board's Role in Oversight of Risk

Our Board, as a whole and through its committees, has responsibility for the oversight of risk management. In its oversight role, our Board has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed. The involvement of the Board in working with management to establish our business strategy at least annually is a key part of its oversight of risk management, its assessment of management's appetite for risk and its determination of what constitutes an appropriate level of risk for KLA-Tencor. In addition, the Board periodically conducts a comprehensive review of the Company's overall risk environment and its risk management efforts. The Board and its committees also regularly receive updates from management (including representatives of our legal and internal audit teams) regarding certain risks that we face, including industry, business, macroeconomic, litigation and other operating risks.

While our Board is ultimately responsible for risk oversight at KLA-Tencor, our Board has delegated to the Audit Committee the primary responsibility for the active oversight of our enterprise risk management activities. Our Audit Committee is not only responsible for overseeing risk management of financial matters, the adequacy of our risk-related internal controls, financial reporting and internal investigations, but its charter also provides that the Audit Committee will discuss at least annually KLA-Tencor's risk assessment, enterprise risk management processes and major financial exposures, as well as the steps our management has taken to monitor and control those exposures. Our Audit Committee reports its findings and activities to the Board at each quarterly Board meeting.

In addition, our other Board committees each oversee certain aspects of risk management. Our Compensation Committee oversees risks related to our compensation policies and practices, and our Nominating and Governance Committee oversees governance-related risks, such as Board independence and conflicts of interest, as well as management and director succession planning. The Committees report their findings and activities to the Board.

While the Board is responsible for risk oversight, management is responsible for risk management. KLA-Tencor maintains an effective internal controls environment and has processes to identify and manage risk, including an executive risk council comprised of representatives from our legal, human resources, finance, internal audit and procurement teams. This council reports to our Chief Executive Officer and has oversight of the various risk assessment, monitoring and controls processes across the Company.

As of June 30, 2016, our directors served on the committees of the Board indicated in the following table:

Director	Audit	Compensation	Nominating and Governance
Richard P. Wallace			_
Edward W. Barnholt		✓	Chair
Robert M. Calderoni	Chair		✓
John T. Dickson	✓		✓
Emiko Higashi	✓		
Kevin J. Kennedy		Chair	
Gary B. Moore		✓	
Kiran M. Patel	✓		✓
Robert A. Rango		✓	
David C. Wang	✓		
Emiko Higashi Kevin J. Kennedy Gary B. Moore Kiran M. Patel Robert A. Rango	· · · · · · · · · · · · · · · · · · ·	√	,

Audit Committee

Members During Fiscal Year 2016: Robert T. Bond, Robert M. Calderoni (Chairman), John T. Dickson, Emiko Higashi, Kiran M. Patel, and David C. Wang. On August 6, 2015, Robert T. Bond informed the Board of his decision not to stand for re-election at the 2015 Annual Meeting. Mr. Dickson was appointed by the Board to serve as a member of the Audit Committee, effective upon his re-election at the 2015 Annual Meeting.

Meetings Held During Fiscal Year 2016: 8

<u>Primary Responsibilities</u>: The Audit Committee is responsible for appointing and overseeing the work of our independent registered public accounting firm, approving the services performed by our independent registered public accounting firm, and reviewing and evaluating our accounting principles and system of internal accounting controls. In addition, the head of our Internal Audit function, who is supervised by our Chief Financial Officer, formally reports into the Audit Committee and provides updates at each quarterly meeting.

Independence: The Board has determined that each of the members of the Audit Committee meets the independence requirements (including the heightened requirements for Audit Committee members) of NASDAQ and under the rules and regulations of the SEC, and has no material relationship with KLA-Tencor (including any relationship that, in the opinion of the Board, would interfere with the exercise of independent judgment as a Director). The Board has determined that each of Mr. Calderoni, Mr. Dickson, Ms. Higashi and Mr. Patel is an "audit committee financial expert" within the meaning of the rules and regulations promulgated by the SEC.

Compensation Committee

Members During Fiscal Year 2016: Edward W. Barnholt, John T. Dickson, Kevin J. Kennedy (Chairman), Gary B. Moore and Robert A. Rango. As a result of Mr. Dickson's appointment by the Board to serve as a member of the Audit Committee, which was effective upon his re-election at the 2015 Annual Meeting, Mr. Dickson ceased serving as a member of the Compensation Committee upon such appointment.

Meetings Held During Fiscal Year 2016: 7

<u>Primary Responsibilities</u>: The Compensation Committee reviews and either approves or recommends to the full Board (depending upon the compensation plan and the executive involved) our executive compensation policy and administers our employee equity award plans. The Compensation Committee also reviews and, except with respect to our Chief Executive Officer and Chairman of the Board, has the authority to approve the cash and equity compensation for our executive officers and for members of the Board. See "Compensation Discussion and Analysis – Compensation Committee Decision Making-Approval Procedures Overview and Market Data" for more information concerning the procedures and processes the Compensation Committee follows in setting such compensation and implementing the various cash and equity compensation programs in effect for such individuals, including the retention of an independent compensation consultant to provide relevant market data and advice.

<u>Independence</u>: The Board has determined that each of the members of the Compensation Committee meets the independence requirements (including the heightened requirements for Compensation Committee members) of NASDAQ and under the rules and regulations of the SEC, and has no material relationship with KLA-Tencor (including any relationship that, in the opinion of the Board, would interfere with the exercise of independent judgment as a Director).

Risk Considerations in Our Compensation Programs

Our management conducted an extensive review and analysis of the design and operation of KLA-Tencor's compensation practices, policies and programs for all employees, including the Named Executive Officers (as that term is defined on page 40 of this Proxy Statement), to assess the risks associated with those practices, policies and programs. Our Compensation Committee has reviewed the results of that analysis, including underlying plan data and a risk assessment of significant elements of our compensation program. Based on this review and assessment, we and our Compensation Committee do not believe our compensation program encourages excessive or inappropriate risk-taking for the following reasons:

- Our use of different types of compensation provides a balance of short-term and long-term incentives with fixed and variable components;
- Our equity awards (including performance share awards, to the extent earned) typically vest over a four-year period, encouraging participants to look to long-term appreciation in equity values;
- The metrics used to determine the amount of a participant's bonus under our incentive bonus plans and the number of shares earnable under performance share awards focus on Company-wide measures such as operating margin dollars and relative free cash flow, metrics that the Compensation Committee believes encourage the generation of profitable revenue and drive long-term stockholder value;
- Our bonus plans impose caps on bonus awards to limit windfalls;
- Our system of internal control over financial reporting, Standards of Business Conduct and whistleblower processes, among other things, are intended to reduce the likelihood of manipulation of our financial performance to enhance payments under our performance-based compensation plans; and
- Our insider trading policy provides that our employees may not enter into hedging transactions involving our Common Stock, in an effort to prevent
 employees who receive equity awards from insulating themselves from the effects of changes in our stock price.

Nominating and Governance Committee

Members During Fiscal Year 2016: Edward W. Barnholt (Chairman), Robert T. Bond, Robert M. Calderoni, John T. Dickson and Kiran M. Patel. On August 6, 2015, Robert T. Bond informed the Board of his decision not to stand for re-election at the 2015 Annual Meeting. Kiran M. Patel was appointed by the Board to serve as a member of the Nominating and Governance Committee, effective upon his re-election at the 2015 Annual Meeting.

Meetings Held During Fiscal Year 2016: 2

<u>Primary Responsibilities</u>: The Nominating and Governance Committee is primarily responsible for identifying and evaluating the qualifications of all candidates for election to the Board, as well as reviewing corporate governance policies and procedures and assessing stockholder proposals related to governance matters. The Nominating and Governance Committee assesses the appropriate size and composition of the Board, the effectiveness of its leadership structure, and whether any vacancies on the Board are expected.

<u>Independence</u>: The Board has determined that each of the members of the Nominating and Governance Committee meets the independence requirements of NASDAQ, and has no

material relationship with KLA-Tencor (including any relationship that, in the opinion of the Board, would interfere with the exercise of independent judgment as a Director).

<u>Evaluation of Director Candidates</u>: In the event that vacancies are anticipated, or otherwise arise, the Nominating and Governance Committee considers potential candidates that may come to its attention through current members of the Board, professional search firms, management, stockholders or other persons. In evaluating properly submitted stockholder recommendations, the Nominating and Governance Committee uses the evaluation standards discussed in further detail below and seeks to achieve a balance of knowledge, experience and capability on the Board.

It is the Nominating and Governance Committee's policy to consider candidates for the Board recommended by, among other persons, stockholders who have owned at least one percent of our outstanding shares for at least one year and who state that they have an intent to continue as a substantial stockholder for the long term. Stockholders wishing to nominate candidates for the Board must notify our General Counsel in writing of their intent to do so and provide us with certain information set forth in Article II, Section 11 of our bylaws and all other information regarding nominees that is required to be provided pursuant to Regulation 14A of the Securities Exchange Act of 1934 (the "Exchange Act"), or as otherwise requested by the Nominating and Governance Committee.

Majority Vote Policy: We maintain a governance policy applicable to uncontested Director elections (elections in which the number of nominees does not exceed the number of Directors to be elected) requiring that Directors receive majority support in such elections. Under our bylaws, in any uncontested Director election, any nominee who receives a greater number of votes cast "FOR" his or her election than votes cast "AGAINST" his or her election will be elected. In accordance with our bylaws, the Nominating and Governance Committee has established procedures under which any Director who is not elected shall offer to tender his or her resignation to the Board following certification of the stockholder vote. The Nominating and Governance Committee, composed entirely of independent Directors, will consider the offer of resignation and recommend to the Board the action to be taken. The Board will take action on the recommendation, and we will publicly disclose the Board's decision and the rationale behind it, within 90 days following certification of the stockholder vote. In making their respective decisions, the Nominating and Governance Committee and Board will take into consideration all factors they deem relevant. The Director who tenders his or her resignation will not participate in the decisions of the Nominating and Governance Committee or the Board regarding his or her resignation.

Director Qualifications and Diversity

The Board believes that the skill set, backgrounds and qualifications of our Directors, considered as a group, should provide a significant composite mix of diversity in experience, knowledge and abilities that will allow the Board to fulfill its responsibilities. In addition, the Board believes that there are certain attributes that every Director should possess, such as demonstrated business or academic achievements, the highest ethical standards and a strong sense of professionalism. Accordingly, the Board and the Nominating and Governance Committee consider the qualifications of Directors and Director candidates individually and in the broader context of the Board's overall composition and KLA-Tencor's current and future needs.

In considering candidates for Director nomination, including evaluating any recommendations from stockholders as set forth above, the Nominating and Governance Committee only considers candidates who have demonstrated executive experience or significant high level experience in accounting, finance or a technical field or industry applicable to KLA-Tencor. In addition, as set forth in our Corporate Governance Standards, the Nominating and Governance Committee takes into account all factors it considers appropriate when evaluating Director candidates, which may include strength of character, mature judgment, career specialization, diversity and the extent to which the candidate would fill a present need on the Board. With respect to new Board members, it is the standard practice of the Nominating and Governance Committee to engage a third-party recruiting firm to identify a slate of individuals for consideration as Board candidates based on the above-mentioned criteria.

In addition, the Nominating and Governance Committee annually reviews with the Board the appropriate skills and characteristics required of Directors in the context of the current composition of the Board. In seeking a diversity of background, the Nominating and Governance Committee seeks a variety of occupational and personal backgrounds on the Board in order to obtain a range of viewpoints and perspectives. This annual assessment enables the Board to update the skills and experience it seeks in the Board as a whole, and in individual Directors, as KLA-Tencor's needs evolve and change over time.

In evaluating Director candidates, including incumbent Directors for renomination to the Board, the Nominating and Governance Committee has considered all of the criteria described above. When assessing an incumbent Director, the Nominating and Governance Committee also considers the Director's past performance on and contributions to the Board. Among other things, the Nominating and Governance Committee has determined that it is important to have individuals with the following skills and experiences on the Board:

- Current or former executives who demonstrate strong leadership qualities and possess significant operating experience that together enable them to
 contribute practical business advice to the Board and management, strategies regarding change and risk management, and valuable insight into developing,
 implementing and assessing our operating plan and business strategy;
- A deep understanding of the key issues relevant to technology companies, including specific knowledge regarding the semiconductor industry, which is vital
 in understanding and reviewing our business goals and challenges, as well as our product development and acquisition strategies;
- · Substantial international experience, which is particularly important given our global presence and the international nature of our customer base;
- An understanding of finance and related reporting processes. In the case of members of our Audit Committee, we seek individuals with demonstrated financial expertise with which to evaluate our financial statements and capital structure; and
- Corporate governance experience obtained from service as Board members and/or executives for other publicly traded companies, which we believe results in a greater sense of accountability for management and the Board and enhanced protection of stockholder interests.

INFORMATION ABOUT THE NOMINEES

Our Board and its Nominating and Governance Committee believe that all of the Directors and nominees listed below are highly qualified and have the skills and experience required for service on our Board. The following table sets forth certain information with respect to our Directors and nominees as of the date of this Proxy Statement, including, for each Director and nominee, a biography and a summary of his or her significant experiences, qualifications and skills that are most pertinent to that individual's service as a member of our Board:

Nominees for Election at the 2016 Annual Meeting

Edward W. Barnholt Director since: 1995

Age: 73

Board Committees: Compensation, Nominating and Governance (Chair)

Other U.S. Public Company Boards: Adobe Systems Incorporated (since 2005); eBay Inc. (since 2005)

Mr. Barnholt has served as Chairman of the Board of KLA-Tencor since October 2006. From March 1999 to March 2005, Mr. Barnholt was President and Chief Executive Officer of Agilent Technologies, Inc., and he was Chairman of the Board of Directors of Agilent from November 2002 to March 2005. In March 2005, Mr. Barnholt retired as the Chairman, President and Chief Executive Officer of Agilent. Before being named Agilent's Chief Executive Officer, Mr. Barnholt served as Executive Vice President and General Manager of Hewlett-Packard Company's Measurement Organization from 1998 to 1999. From 1990 to 1998, he served as General Manager of Hewlett-Packard's Test and Measurement Organization. He was elected Senior Vice President of Hewlett-Packard in 1993 and Executive Vice President in 1996. Mr. Barnholt also currently serves on the Board of Trustees of the Packard Foundation and on the Boards of Directors of eBay Inc. and Adobe Systems Incorporated.

As the former President, Chief Executive Officer and Chairman of Agilent, as well as a former senior executive with Hewlett-Packard, Mr. Barnholt possesses significant leadership experience, which includes matters particularly relevant to companies with complex technology and international issues. Mr. Barnholt's experience as a Board member of KLA-Tencor provides him with an extensive knowledge of our business and industry, and, as a Board member of two other public companies, Mr. Barnholt also has strong corporate governance expertise.

Nominees for Election at the 2016 Annual Meeting

Robert M. Calderoni Director since: 2007

Age: 56

Board Committees: Audit (Chair), Nominating and Governance

Other U.S. Public Company Boards: Juniper Networks (since 2003); Citrix Systems (since 2014)

Mr. Calderoni has more than 30 years of executive experience in the technology industry. He currently serves as Executive Chairman at Citrix Systems, Inc., and as a Senior Advisor to Silver Lake Partners, a large technology focused private equity firm. From October 2015 to January 2016, Mr. Calderoni served as the interim Chief Executive Officer and President of Citrix. Prior to that, he was President of SAP AG's cloud business following SAP's October 2012 acquisition of Ariba, Inc., a leading provider of cloud software solutions where he served as Chairman and Chief Executive Officer. Prior to the acquisition, Mr. Calderoni served as Chief Executive Officer and a member of the Board of Directors of Ariba from October 2001 until the company was acquired, and he also served as Ariba's Chairman of the Board of Directors from July 2003 until the acquisition date. Before becoming Chief Executive Officer of Ariba, Mr. Calderoni served as Ariba's Chief Financial Officer from January 2001 to October 2001. Prior to joining Ariba, Mr. Calderoni was Chief Financial Officer at Avery Dennison Corporation, a global manufacturing company. He also held numerous senior financial executive positions at major technology companies, including Senior Vice President Finance at Apple Inc., and Vice President Finance at IBM.

As a senior executive officer of Citrix and former senior executive with SAP and Ariba, Mr. Calderoni provides our Board with extensive and relevant leadership and international operations experience in the technology industry. In addition, Mr. Calderoni is well-qualified to serve as a Board member and as the Chairman of our Audit Committee as a result of his over 20 years of experience as a finance executive, including his past service as the Chief Financial Officer of two publicly traded technology companies. As a Board member of three public companies, Mr. Calderoni also has familiarity with a range of corporate governance issues.

John T. Dickson Director since: 2007

Age: 70

Board Committees: Audit, Nominating and Governance

Other U.S. Public Company Boards: Avago Technologies Limited (2012 to 2015); QLogic Corporation (2014 to 2016); Freescale Semiconductor, Ltd. (2012 to 2013)

Nominees for Election at the 2016 Annual Meeting

John T. Dickson (Continued) Most recently, from May 2010 to January 2012, Mr. Dickson served as Executive Vice President and head of operations of Alcatel-Lucent, a global telecommunications corporation, also serving as a member of Alcatel-Lucent's Management Committee. From July 2010 to December 2011, Mr. Dickson also served as a member of the Board of Directors and Audit Committee of Alcatel-Lucent Shanghai Bell, a joint venture between Alcatel-Lucent and the Chinese government's State-Owned Assets Supervision and Administration Commission. Mr. Dickson is the former President and Chief Executive Officer of Agere Systems, Inc., a leader in semiconductors and software solutions for storage, mobility and networking markets, a position he held from August 2000 until October 2005, and he also served as a member of the Board of Directors of Agere from March 2001 until October 2005. Prior to joining Agere, Mr. Dickson held positions as the Executive Vice President of Lucent's Microelectronics and Communications Technologies Group; Vice President of AT&T Corporation's integrated circuit business unit; and Chairman and Chief Executive Officer of SHOgraphics, Inc., a developer of three-dimensional graphics systems, as well as senior roles with ICL, Plc, a computer hardware, software and service company, in the United Kingdom and Texas Instruments, Inc. in Europe.

As a result of his former positions as a senior executive at global technology organizations such as Agere, Alcatel-Lucent, Lucent and AT&T, Mr. Dickson provides the Board with significant leadership, operations and technology experience, including extensive knowledge of the semiconductor industry and experience managing international business operations. Also, from his current and past service as a Board member with other companies, including several other semiconductor companies, Mr. Dickson offers a broad understanding of the role and responsibilities of the Board and valuable insight on a variety of significant industry issues.

Emiko Higashi

Director since: 2010

Age: 57

Board Committees: Audit

Other U.S. Public Company Boards: InvenSense, Inc. (since 2014)

Ms. Higashi is a founder of Tomon Partners, LLC, a strategy and M&A advisory firm based in San Francisco and primarily serving companies in technology- and healthcare-related fields since 2003. Ms. Higashi also serves on the boards of InvenSense (NYSE), Zeptor (private), MetLife Insurance K.K., a subsidiary of MetLife, Inc. (NYSE), Takeda Pharmaceutical Company Ltd. (TSE) and Tara Health Foundation (private). Ms. Higashi also serves as a senior advisor to several private consulting firms. Prior to Tomon Partners, she was a co-founder and Chief

Nominees for Election at the 2016 Annual Meeting

Emiko Higashi (Continued)

Executive Officer of Gilo Ventures, a technology-focused venture capital firm, from 2000 to 2002. Before that, Ms. Higashi spent 15 years in investment banking. After beginning her investment banking career at Lehman Brothers from 1985 to 1988, Ms. Higashi was a founding member of Wasserstein Parella and the head of that firm's technology M&A business from 1988 to 1994, and subsequently served as a managing director in charge of Merrill Lynch's global technology M&A practice from 1994 until 2000. Prior to her investment banking career, Ms. Higashi spent two years as a consultant at McKinsey & Co. in Tokyo, Japan.

As a result of her extensive career in technology-focused investment banking and finance, Ms. Higashi brings to the Board significant strategic, business development, mergers and acquisitions and financial experience related to the business and financial issues facing large global technology corporations, a comprehensive understanding of international business matters, particularly in Asia, and knowledge of the semiconductor industry. In addition, as a founder and partner of several consulting firms and a founding member of an investment banking firm, Ms. Higashi also possesses significant leadership and entrepreneurial experience.

Kevin J. Kennedy

Director since: 2007

Age: 60

Board Committees: Compensation (Chair)

Other U.S. Public Company Boards: Digital Realty Trust, Inc. (since March 2013), JDS Uniphase Corporation (2001 to 2012)

Mr. Kennedy currently serves as President, Chief Executive Officer and member of the Board of Directors of Avaya Inc., a leading global provider of business communications applications, systems and services, positions he has held since January 2009. Prior to joining Avaya, Mr. Kennedy was Chief Executive Officer of JDS Uniphase Corporation, a provider of optical products and test and measurement solutions for the communications industry, from September 2003 to December 2008, also serving as JDS Uniphase's President from March 2004 to December 2008. From 2001 to 2003, he served as Chief Operating Officer of Openwave Systems, Inc., a provider of software solutions for the communication and media industries. Previously, Mr. Kennedy spent nearly eight years at Cisco Systems, Inc. and 17 years at Bell Laboratories. In 1987, Mr. Kennedy was a Congressional Fellow to the U.S. House of Representatives on Science, Space and Technology. In January 2011, Mr. Kennedy was appointed to the President's National Security Telecommunications Advisory Committee by President Barack Obama.

Nominees for Election at the 2016 Annual Meeting

Kevin J. Kennedy (Continued) As the current President and Chief Executive Officer of Avaya and a former senior executive at JDS Uniphase and Openwave, Mr. Kennedy possesses a vast amount of leadership and operational experience with companies in high technology industries. Also as the holder of a Ph.D. degree in engineering from Rutgers University, a member of President Obama's National Security Telecommunications Advisory Committee, a former Congressional Fellow to the U.S. House of Representatives Committee on Science, Space and Technology, and the author of more than 30 papers on computational methods, data networking and technology management, Mr. Kennedy offers relevant expertise in a broad range of technology matters. In addition, as a result of his experience on the Boards of Directors of several public companies, Mr. Kennedy offers our Board a deep understanding of corporate governance matters.

Gary B. Moore

Director since: 2014

Age: 67

Board Committees: Compensation

Other U.S. Public Company Boards: None

Mr. Moore retired in July 2015 from his positions as President and Chief Operating Officer of Cisco Systems, Inc., a leading global provider of networking and other products and services related to the communications and information technology industry, positions he had held from October 2012 to July 2015. Mr. Moore first joined Cisco in October 2001 as Senior Vice President, Advanced Services, and, in August 2007, he also assumed responsibility as co-lead of Cisco Services. From May 2010 to February 2011, he served as Executive Vice President, Cisco Services, and he was Cisco's Executive Vice President and Chief Operating Officer from February 2011 until October 2012. Immediately before joining Cisco, Mr. Moore served for approximately two years as Chief Executive Officer of Netigy Corporation, a network consulting company. Prior to that, he was employed for 26 years by Electronic Data Systems ("EDS"), where he held a number of senior executive positions, including as the President and Chief Executive Officer of joint venture Hitachi Data Systems from 1989 to 1992.

As a former senior executive with Cisco and other global companies (including roles as Cisco's President and Chief Operating Officer, the head of Cisco Services, the creator and manager of EDS's e-solutions global business unit and the President and Chief Executive Officer of the EDS joint venture Hitachi Data Systems), Mr. Moore brings to the Board extensive leadership experience, as well as expertise in matters relating to international operations in the technology industry. Mr. Moore's experience managing large-scale operations and growing businesses enables him to provide the Board and the Company with valuable advice and guidance regarding operational and strategic issues faced by global technology companies.

Nominees for Election at the 2016 Annual Meeting

Kiran M. Patel Director since: 2008

Age: 68

Board Committees: Audit, Nominating and Governance

Other U.S. Public Company Boards: None

Mr. Patel retired in September 2013 from his position as Executive Vice President and General Manager, Small Business Group of Intuit Inc., a provider of personal finance and small business software, a position he had held since December 2008. Mr. Patel previously served as Intuit's Senior Vice President and General Manager, Consumer Tax Group and as its Senior Vice President and Chief Financial Officer. Before joining Intuit in September 2005, he was Executive Vice President and Chief Financial Officer of Solectron Corporation from August 2001 to September 2005. He previously worked for Cummins Inc. for 27 years in a variety of finance and business positions, most recently as Chief Financial Officer and Executive Vice President. Mr. Patel currently serves as a Trustee of the Charles Schwab Funds and as a member of the Boards of Directors of Avaya Inc., a leading global provider of business communications applications, systems and services, and Exact Software, a private Netherlands company.

As a former senior officer of Intuit, Solectron and Cummins, Mr. Patel possesses significant international operating and leadership skills, including extensive experience in global sourcing, sales and other business management aspects within manufacturing and technology industries, often involving living and managing businesses overseas. In addition, as a result of his past service as the Chief Financial Officer of several global organizations, Mr. Patel offers a vast understanding of critical finance matters, which enables him to make significant contributions as a member of our Board and its Audit Committee.

Robert A. Rango Director since: 2014

Age: 58

Board Committees: Compensation

Other U.S. Public Company Boards: Integrated Device Technology, Inc. (since 2015); Keysight Technologies, Inc. (since 2015)

Since May 2016 Mr. Rango has served as the President and Chief Executive Officer of Enevate Corporation, a company working on the development of next generation Lithium Ion (Li-ion) battery technology. Prior to that, Mr. Rango served for over 12 years, from March 2002 to July 2014, as an executive at Broadcom Corporation, a leading fabless semiconductor

Nominees for Election at the 2016 Annual Meeting

Robert A. Rango (Continued) company. He most recently served as Executive Vice President and General Manager of Broadcom's Mobile and Wireless Group, a role he had held since February 2011. During his tenure with Broadcom, Mr. Rango held a number of senior management positions in the company's Network Infrastructure Business Unit, Mobile and Wireless Group and Wireless Connectivity Group, including as Senior Vice President and General Manager, Wireless Connectivity Group from January 2006 to February 2010 and as Executive Vice President and General Manager, Wireless Connectivity Group from February 2010 to February 2011. From 1995 to 2002, Mr. Rango held several Vice President and General Manager positions at Lucent Microelectronics, a networking communications company, and Agere Systems, a leader in semiconductors and software solutions for storage, mobility and networking markets, in its Optical Access, New Business Initiatives and Modem/Multimedia Divisions.

Mr. Rango possesses significant operating and leadership skills, including extensive experience in global semiconductor product marketing, development and sales. As a result of his past service as an operational executive and general manager of several large global organizations, Mr. Rango offers a vast understanding of mobile, wireless, semiconductor, optical, software and technology management, which enables him to make significant contributions as a member of our Board.

Richard P. Wallace

Director since: 2006

Age: 56

Board Committees: None

Other U.S. Public Company Boards: NetApp, Inc. (since 2011), Beckman Coulter, Inc. (2009 to 2011)

Mr. Wallace currently serves as our President and Chief Executive Officer. He has been our Chief Executive Officer since January 2006 and has also served as our President since November 2008. He began at KLA Instruments in 1988 as an applications engineer and has held various general management positions throughout his 28 years with us, including positions as President and Chief Operating Officer from July 2005 to December 2005, Executive Vice President of the Customer Group from May 2004 to July 2005, and Executive Vice President of the Wafer Inspection Group from July 2000 to May 2004. Earlier in his career, he held positions with Ultratech Stepper and Cypress Semiconductor. Mr. Wallace previously served as a member of the Board of Directors of SEMI (Semiconductor Equipment and Materials International), a prominent industry association, including as SEMI's Chairman of the Board. He earned his bachelor's degree in electrical engineering from the University of Michigan and his master's degree in engineering management from Santa Clara University, where he also taught strategic marketing and global competitiveness courses after his graduation.

Nominees for Election at the 2016 Annual Meeting

Richard P. Wallace (Continued)

As our President and Chief Executive Officer and a KLA-Tencor employee for 28 years, Mr. Wallace brings to the Board extensive leadership and semiconductor industry experience, including a deep knowledge and understanding of our business, operations and employees, the opportunities and risks faced by KLA-Tencor, and management's strategy and plans for accomplishing our goals. In addition, Mr. Wallace's current service as a member of the Boards of Directors of KLA-Tencor and NetApp, as well as past service on the Boards of Beckman Coulter and a significant industry organization, give him a strong understanding of his role as a Director and a broad perspective on key industry issues and corporate governance matters.

David C. Wang

Director since: 2006

Age: 72

Board Committees: Audit

Other U.S. Public Company Boards: Terex Corporation (since 2008)

Mr. Wang retired in July 2011 from his position as Vice President of International Relations of The Boeing Company (a position he had held since November 2002), and he also served as the President of Boeing-China from November 2002 to March 2011. Prior to joining Boeing, he spent 22 years at General Electric Company ("GE"), where he worked in various capacities, including most recently as Chairman and Chief Executive Officer of GE China. In addition, Mr. Wang served in executive positions with GE in Singapore, Malaysia and Mexico. Prior to joining GE, Mr. Wang held various engineering positions at Emerson Electric Co. He has also served on a number of non-profit boards.

Due to his former positions as the Vice President of International Relations of The Boeing Company, the President of Boeing-China and an executive in several international locations for GE, Mr. Wang offers significant leadership experience, as well as an extensive knowledge of key business issues in the international locations of some of our most significant customers. With over 30 years of operational experience, primarily in Asia, Mr. Wang offers our Board a deep understanding of growth and competitive issues within changing markets, as well as the challenges involved in building competitive businesses in multi-cultural environments

DIRECTOR COMPENSATION

Our Fiscal Year 2016 Director Compensation Program

Non-employee members of the Board ("Outside Directors") receive a combination of equity and cash compensation as approved by the Compensation Committee (or, in the case of the compensation of the Chairman of the Board, as recommended by the Compensation Committee and approved by the Board). Equity compensation to Outside Directors is primarily provided under our 2004 Equity Incentive Plan, which has been approved by our stockholders.

The following table presents the key features of our fiscal year 2016 Outside Director compensation program:

COMPENSATION ELEMENT	FISCAL YEAR 2016 PROGRAM
Cash Compensation:	
Standard annual cash retainer	\$90,000, paid quarterly
Committee member additional annual cash retainers (including Committee	\$15,000 for Audit Committee; \$12,500 for Compensation Committee; \$7,500 for
Chair)	Nominating and Governance Committee
Committee Chair additional annual cash retainers	\$30,000 for Audit Committee; \$20,000 for Compensation Committee; \$10,000 for
	Nominating and Governance Committee
Annual cash retainer for non-executive Chairman (in lieu of standard retainer)	\$130,000
Reimbursement for reasonable meeting attendance expenses	Included
Equity Compensation:	
Market value of standard RSU award granted at annual meeting	\$160,000 (to be granted at the Annual Meeting); dividend equivalents payable upon
	vesting
Market value of non-executive Chairman RSU award granted at annual meeting	\$200,000 (to be granted at the Annual Meeting); dividend equivalents payable upon
	vesting
Vesting period of Outside Director RSUs	Awards vest one year from grant date; shares immediately issued upon vesting

Members of the Board who are employees of the Company do not receive any additional compensation for their services as Directors. The Board will separately determine the compensation payable to Outside Directors for service on special purpose committees of the Board, if such committees are created.

If a new Outside Director joins the Board after the date of an annual meeting of stockholders, his or her first restricted stock unit award ("RSU") will be granted promptly after he or she joins the Board and will be prorated to take into account the period of time from the last annual meeting of stockholders to the date the new Outside Director joined the Board.

Under the Outside Director compensation program, the RSU awards granted to our Outside Directors are issued with "dividend equivalent" rights pursuant to the Company's 2004 Equity Incentive Plan (the "2004 Equity Plan"). The plan administrator may issue dividend equivalent rights with respect to RSUs, performance shares, performance units and deferred stock units. These dividend equivalent rights entitle the recipient to receive credits, payable in cash or additional shares of our Common Stock, equal to the cash dividends that would have been

received on the shares of our Common Stock had the shares been issued and outstanding on the dividend record date. The dividend equivalents would only be paid to the recipient upon vesting or settlement of the underlying award.

Deferred Compensation

Each Outside Director is entitled to defer all or a portion of his or her cash retainers, pursuant to our Executive Deferred Savings Plan ("EDSP"), a nonqualified deferred compensation plan. Amounts credited to the EDSP may be allocated by the participant among a variety of investment funds. For further information regarding our EDSP, including the list of investment funds available under the EDSP during fiscal year 2016, please refer to the section of this Proxy Statement entitled "Nonqualified Deferred Compensation." Of the current Outside Directors, only Messrs. Barnholt, Patel and Wang participated in the EDSP during fiscal year 2016, though none of them made new contributions during the fiscal year.

Matching Program

Since August 7, 2014, Outside Directors have been able to participate in a gift matching program, under which the KLA-Tencor Foundation will generally match, dollar-for-dollar, gifts by Outside Directors to qualifying tax-exempt educational institutions up to \$10,000 per calendar year.

Stock Ownership Guidelines

We have adopted a policy, pursuant to which each Outside Director is expected to own a specified minimum number of shares of our Common Stock. Under our current policy, each Outside Director, once he or she has served as an Outside Director for at least four years, is expected to own shares of our Common Stock with a market value of at least four (4) times the standard annual cash retainer paid to the Outside Directors, as that retainer may be changed from time to time. Shares of Common Stock underlying outstanding RSUs held by the Directors count toward this ownership requirement. As of the Record Date, each of our current Outside Directors was in compliance with the stock ownership requirement then in effect.

Director Compensation Table

The following table sets forth certain information regarding the compensation earned by or awarded to each Outside Director during fiscal year 2016 who served on our Board during the fiscal year:

Name	Fees Earned or Paid in Cash (\$)(1)	Stock Awards (\$)(2)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)(3)	All Other Compensation (\$)(4)	Total (\$)
Edward W. Barnholt	160,000	200,022	_	45,578	405,600
Robert T. Bond(5)	96,640	_	_	36,466	133,106
Robert M. Calderoni	142,500	159,991	_	36,466	338,957
John T. Dickson	110,000	159,991	_	36,466	306,457
Emiko Higashi	105,000	159,991	_	36,466	301,457
Kevin J. Kennedy	122,500	159,991	_	36,466	318,957
Gary B. Moore	102,500	159,991	_	36,466	298,957
Kiran M. Patel	110,000	159,991	_	36,466	306,457
Robert A. Rango	102,500	159,991	_	36,466	298,957
David C. Wang	105,000	159,991	_	36,466	301,457

- (1) The amounts set forth in this column represent fees earned by each Outside Director during fiscal year 2016, regardless of whether the fees were actually paid during the fiscal year.
- (2) The amounts shown represent the aggregate grant date fair value of RSUs awarded to each Outside Director during fiscal year 2016, computed in accordance with the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 718, referred to in this Proxy Statement as ASC 718 (except that the fair values set forth above have not been reduced by the Company's estimated forfeiture rate). The ASC 718 grant date fair value of each RSU award was calculated based on the fair market value of our Common Stock on the award date. For further discussion regarding the assumptions used in calculating the grant date fair value for RSUs, please refer to Note 1 to the Company's consolidated financial statements in Item 8 of the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2016, filed with the SEC on August 5, 2016. On November 4, 2015, each Outside Director then in office was granted an RSU award covering 2,394 shares of our Common Stock (other than Mr. Barnholt who, as Chairman of the Board, received an RSU award covering 1.25 times that number of shares, or 2,993 shares, as described above under the heading "Our Fiscal year 2016 Director Compensation Program"). The following table shows, for each Outside Director, the aggregate number of unvested shares of our Common Stock underlying all outstanding RSUs held by that Outside Director then in office as of June 30, 2016:

Aggregate Number of Unvested

	Shares of Common Stock Underlying Director RSU
Name	Awards as of June 30, 2016 (#)
Edward W. Barnholt	2,993
Robert M. Calderoni	2,394
John T. Dickson	2,394
Emiko Higashi	2,394
Kevin J. Kennedy	2,394
Gary B. Moore	2,394
Kiran M. Patel	2,394
Robert A. Rango	2,394
David C. Wang	2,394

- (3) As noted above, of the current Outside Directors, only Messrs. Barnholt, Patel and Wang participated in our EDSP during fiscal year 2016. Mr. Bond also participated in our EDSP during our fiscal year 2016 prior to his resignation. We have concluded that, because the EDSP earnings correspond to the actual market earnings on a select group of investment funds available under the EDSP, no portion of the Outside Directors' earnings under the EDSP is "above market" or "preferential." Accordingly, we do not report any portion of the Outside Directors' earnings under the EDSP in the Director Compensation Table. The investment earnings (loss) under the EDSP during fiscal year 2016 for the Outside Directors who participated in the EDSP were as follows: (a) Mr. Barnholt: \$(16,232); (b) Mr. Patel: \$(11,024); (c) Mr. Bond: \$407; and (d) Mr. Wang: \$220.
- (4) Represents dividend equivalents paid upon the vesting of RSU awards during fiscal year 2016.
- (5) On August 6, 2015, Robert T. Bond informed the Board of his decision not to stand for re-election at the 2015 Annual Meeting.

OUR CORPORATE GOVERNANCE PRACTICES

At KLA-Tencor, we believe that strong and effective corporate governance procedures and practices are an extremely important part of our corporate culture. In that spirit, we have summarized several of our corporate governance practices below.

Adopting and Maintaining Governance Standards

The Board has adopted, and regularly reviews and updates as necessary, a set of Corporate Governance Standards to establish a framework within which it will conduct its business and to guide management in its running of the Company. The governance standards, portions of which are summarized below, can be found on our website at http://ir.kla-tencor.com. We have posted information regarding our corporate governance procedures to help ensure the transparency of our practices.

Monitoring Board Effectiveness

It is important that our Board and its Committees are performing effectively and in the best interests of KLA-Tencor and our stockholders. The Board is responsible for annually assessing its effectiveness and the effectiveness of each of its Committees in fulfilling their respective obligations, and each Committee is responsible for reviewing the Board's assessment of that Committee's effectiveness. In addition, our Nominating and Governance Committee is charged with overseeing an annual review of the Board and its membership. The standard practice of the Board is that Outside Directors will not stand for re-election after reaching the age 75, and while Board members are elected for one (1) year terms, there is currently no limitation on the number of terms a Director may serve.

Conducting Formal Independent Director Sessions

At the conclusion of each regularly scheduled Board meeting, the independent Directors meet in executive session without KLA-Tencor management or any non-independent Directors.

Hiring Outside Advisors

The Board and each of its Committees may retain outside advisors and consultants of their choosing at our expense, without management's consent.

Avoiding Conflicts of Interest

We expect our Directors, executives and employees to conduct themselves with the highest degree of integrity, ethics and honesty. Our credibility and reputation depend upon the good judgment, ethical standards and personal integrity of each Director, executive and employee. In order to provide assurances internally and to our stockholders, we have implemented Standards of Business Conduct that provide clear conflict of interest guidelines to our employees, as well as an explanation of reporting and investigatory procedures.

Communications with the Board

Stockholders may communicate with the Board by writing to us at KLA-Tencor Corporation, Attention: Investor Relations, One Technology Drive, Milpitas, California 95035.

Stockholders who would like their submission directed to a member of the Board may so specify, and the communication will be forwarded, as appropriate.

Standards of Business Conduct; Whistleblower Hotline and Website

The Board has adopted Standards of Business Conduct for all of our employees and Directors, including our principal executive and senior financial officers, and we have prepared and made available versions of our Standards of Business Conduct translated into Chinese (Simplified and Traditional), French, German, Hebrew, Japanese and Korean in an effort to maximize the accessibility and understandability of these important guidelines to our employees. You can obtain a copy of our Standards of Business Conduct via our website at http://ir.kla-tencor.com, or by making a written request to us at KLA-Tencor Corporation, Attention: Investor Relations, One Technology Drive, Milpitas, California 95035. We will disclose any amendment to the Standards of Business Conduct, or waiver of a provision thereof, on our website at the same address.

In addition, we have established a hotline and website for use by employees, as well as third parties such as vendors and customers, to report actual or suspected wrongdoing and to answer questions about business conduct. The hotline and website are both operated by an independent third party, which provides tools to enable individuals to submit reports in a number of different languages and, where permitted by law, on an anonymous basis.

Ensuring Auditor Independence

KLA-Tencor has taken a number of steps to ensure the continued independence of our outside auditors. Our independent auditors report directly to the Audit Committee, which also has the ability to pre-approve or reject any non-audit services proposed to be conducted by our outside auditors.

Compensation Committee Interlocks and Insider Participation

The Compensation Committee currently consists of Messrs. Kennedy (Chair), Barnholt, Moore and Rango. None of these individuals was an officer or employee of KLA-Tencor at any time during fiscal year 2016 or at any other time. During fiscal year 2016, there was no instance where an executive officer of KLA-Tencor served as a member of the Board or compensation committee of any entity and an executive officer of that same entity served on our Board or Compensation Committee.

Stockholder Nominations to the Board

Please see "INFORMATION ABOUT THE BOARD OF DIRECTORS AND ITS COMMITTEES—Nominating and Governance Committee."

Majority Vote Policy

Please see "INFORMATION ABOUT THE BOARD OF DIRECTORS AND ITS COMMITTEES—Nominating and Governance Committee—Majority Vote Policy."

PROPOSAL TWO:

RATIFICATION OF APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING JUNE 30, 2017

Audit Committee Recommendation

The Audit Committee has the sole authority to retain or dismiss our independent auditors. The Audit Committee has selected PricewaterhouseCoopers LLP, an independent registered public accounting firm, to audit our consolidated financial statements for our fiscal year ending June 30, 2017. Before making its determination, the Audit Committee carefully considered that firm's qualifications as independent auditors.

The Board, following the Audit Committee's determination, unanimously recommends that the stockholders vote for ratification of such appointment.

Although ratification by stockholders is not required by law, the Board has determined that it is desirable to request approval of this selection by the stockholders. If the stockholders do not ratify the appointment of PricewaterhouseCoopers LLP, the Audit Committee may reconsider its selection.

Attendance at the Annual Meeting

A representative of PricewaterhouseCoopers LLP is expected to be present at the Annual Meeting with the opportunity to make a statement if he or she desires to do so, and is expected to be available to respond to appropriate questions.

Fees

The aggregate fees billed by PricewaterhouseCoopers LLP, KLA-Tencor's independent registered public accounting firm, in fiscal years 2016 and 2015 were as follows:

Services Rendered/Fees	2016	2015
Audit Fees(1)	\$3,058,324	\$3,056,288
Audit-Related Fees(2)		214,400
Total Audit and Audit-Related Fees	\$ 3,058,324	\$ 3,270,688
Tax Compliance	481,025	494,003
Tax Planning and Consulting	192,822	314,710
Total Tax Fees(3)	\$ 673,847	\$ 808,713
All Other Fees ⁽⁴⁾	196,500	_

- (1) Represents professional services rendered for the audits of annual financial statements set forth in our Annual Reports on Form 10-K for fiscal years 2016 and 2015, the review of quarterly financial statements included in our Quarterly Reports on Form 10-Q for fiscal years 2016 and 2015, and fees for services related to statutory and regulatory filings or engagements.
- (2) For fiscal year 2015, represents assurance and related services pertaining to accounting consultations and services rendered in connection with the leveraged recapitalization transaction that was completed in the second quarter of fiscal year-ended December 31, 2014.
- (3) Represents tax services for U.S. and foreign tax compliance, planning and consulting.

(4) Represents services provided in connection with the review of proxy solicitation materials and issuance of a comfort letter for the proposed merger involving Lam Research Corporation.

Pre-Approval Policies and Procedures

The Audit Committee has adopted a policy regarding non-audit services provided by PricewaterhouseCoopers LLP. First, the policy ensures the independence of our auditors by expressly naming all services that the auditors may not perform and reinforcing the principle of independence regardless of the type of service. Second, certain non-audit services, such as tax-related services and acquisition advisory services, are permitted but limited in proportion to the audit fees paid. Third, the Audit Committee pre-approves non-audit services not specifically permitted under this policy (or subsequently approves such services in circumstances where a subsequent approval is necessary and permissible), and the Audit Committee reviews the annual plan and any subsequent engagements. All non-audit fees were approved by the Audit Committee pursuant to its pre-approval policies and procedures.

On a quarterly basis, management provides written updates to the Audit Committee with regard to audit and non-audit services, the amount of audit and non-audit service fees incurred to date, and the estimated cost to complete such services.

Independence Assessment by Audit Committee

Our Audit Committee considered and determined that the provision of the services provided by PricewaterhouseCoopers LLP as set forth herein is compatible with maintaining PricewaterhouseCoopers LLP's independence and approved all non-audit related fees and services.

Vote Required and Recommendation

If a quorum is present and voting, the affirmative vote of the majority of Votes Cast is needed to ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm, to audit our consolidated financial statements for our fiscal year ending June 30, 2017.

The Board unanimously recommends a vote "FOR" the ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending June 30, 2017.

PROPOSAL THREE:

NON-BINDING, ADVISORY APPROVAL OF OUR NAMED EXECUTIVE OFFICER COMPENSATION

Background

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, enables KLA-Tencor's stockholders to vote to approve, on a non-binding advisory basis, the compensation of our Named Executive Officers (as that term is defined on page 40 of this Proxy Statement) as disclosed in the "Compensation Discussion and Analysis" section, the Summary Compensation Table and the other related tables and disclosures in this Proxy Statement. This vote is required pursuant to Section 14A of the Exchange Act. The Board has determined, consistent with the feedback from our stockholders, that we will hold this vote every year, until the Board decides to hold the next advisory vote regarding the frequency of advisory votes on executive compensation.

As described in greater detail under the heading "Compensation Discussion and Analysis," we seek to closely align the interests of our Named Executive Officers with the interests of our stockholders by focusing on a philosophy of "pay-for-performance." Our compensation programs are designed to support our business goals and to promote both short-term and long-term financial and strategic achievement.

We urge stockholders to read the "Compensation Discussion and Analysis" section of this Proxy Statement, which describes in more detail how our executive compensation policies and procedures operate and are designed to achieve our compensation objectives, and the Summary Compensation Table and other related compensation tables and disclosure in this Proxy Statement, which provide detailed information on the compensation of our Named Executive Officers. The Compensation Committee and the Board believe that the policies and procedures articulated in the "Compensation Discussion and Analysis" are effective in achieving our goals and that the compensation of our Named Executive Officers as reported in this Proxy Statement has supported and contributed to our recent and long-term success.

Nature of Vote; Recommendation

This vote is advisory and therefore not binding on KLA-Tencor, our Board of Directors or the Compensation Committee. The vote on this resolution is not intended to address any specific element of compensation, but rather relates to the overall compensation of our Named Executive Officers, as described in this Proxy Statement in accordance with the compensation disclosure rules of the SEC.

Accordingly, we ask our stockholders to approve the following resolution at the Annual Meeting:

"RESOLVED, that KLA-Tencor Corporation's stockholders approve, on an advisory basis, the compensation of the Named Executive Officers, as disclosed pursuant to Item 402 of Regulation S-K in the Company's Proxy Statement for the 2016 annual meeting of Stockholders, pursuant to the compensation disclosure rules of the SEC, including the Compensation Discussion and Analysis, the Summary Compensation Table and the other related tables and disclosure."

While this advisory vote on executive compensation is non-binding, the Board and the Compensation Committee value the opinion of KLA-Tencor's stockholders and will carefully assess the voting results and consider the impact of such voting results on our compensation policies and decisions, as described in greater detail in the "Compensation Discussion and Analysis" section of this Proxy Statement.

Vote Required

If a quorum is present and voting, the affirmative vote of the majority of Votes Cast is required for advisory approval of this proposal.

The Board unanimously recommends a vote "FOR" the approval, on a non-binding, advisory basis, of the compensation of our Named Executive Officers, as disclosed in this Proxy Statement.

INFORMATION ABOUT EXECUTIVE OFFICERS

Set forth below are the names, ages and positions of the executive officers of KLA-Tencor as of the date of this Proxy Statement.

Name and Position	Principal Occupation of the Executive Officers	Age
Richard P. Wallace President & Chief Executive Officer	Please see "INFORMATION ABOUT THE NOMINEES – Nominees for Election at the 2017 Annual Meeting."	56
Bren D. Higgins Executive Vice President & Chief Financial Officer	Bren D. Higgins has served as KLA-Tencor's Executive Vice President and Chief Financial Officer since August 2013. In this role, Mr. Higgins oversees and manages the Company's finance operations and control processes, as well as corporate procurement, strategic marketing, business development and investor relations functions. Prior to his promotion to Chief Financial Officer, Mr. Higgins oversaw the Company's treasury and investor relations functions and supported its business development efforts in his role as Vice President of Corporate Finance from January 2012 to August 2013, and as Senior Director of Corporate Finance from August 2011 to January 2012. Before that, he served as the Company's Senior Director of Financial Planning and Analysis from August 2008 to August 2011. Mr. Higgins has also held various financial and investor relations positions since he began his tenure at the Company in 1999, including multiple product division controller assignments and serving as Group Controller of the Company's Wafer Inspection Group from 2006 to 2008. Mr. Higgins received his bachelor's degree in political science with an emphasis in public service from the University of California at Santa Barbara and his master's degree in business administration with a concentration in finance from the University of California at Davis.	46
Bobby R. Bell Executive Vice President	Bobby R. Bell has served as KLA-Tencor's Executive Vice President in charge of strategic projects since March 2016 and as Executive Vice President, Wafer Inspection Division from January 2013 to February 2016, in which role he oversaw several key areas of the Company's business, including its Surfscan series of tools and KLA-Tencor's electron-beam inspection and Wafer Inspection (WIN) Division. Mr. Bell joined KLA Instruments in 1994 as a Senior Engineer in applications development, and has held a number of strategic management positions throughout his more than 20 years with the Company. Prior to his current position, Mr. Bell served as Executive Vice President, Global Customer Organization, from September 2008 to January 2013. In that role, Mr. Bell managed the Company's global field operations, corporate sales, corporate marketing and service business. Before that, he	54

Name and Position **Principal Occupation of the Executive Officers** Age served as a Vice President in the Company's Wafer Inspection Group from 2000 to 2004, and in various marketing roles from 1995 to 2000. His experience with the Company also includes roles leading Asia and worldwide sales and field operations. Prior to joining the Company, Mr. Bell spent ten years with AT&T Technology Systems and AT&T Microelectronics (including 18 months as AT&T's assignee at SEMATECH, a prominent semiconductor industry consortium) in the area of yield, defect reduction, process integration, product engineering and management. Mr. Bell earned his bachelor's degree in electrical engineering from the University of Arkansas and his master's degree in electrical engineering from the University of Missouri. Ahmad A. Khan has served as KLA-Tencor's Executive Vice President, Patterning Division since August 2015. In 42 Ahmad A. Khan **Executive Vice President,** this role, Mr. Khan is responsible for the development and execution of technology roadmaps and customer **Patterning Division** collaboration strategies for all of KLA-Tencor's patterning products, including the 5D patterning control solution, as well as the Metrology, Reticle Inspection and Registration product lines. Mr. Khan joined KLA-Tencor's Films & Surface Technology Division in 2003 as Senior Director of Business Development, and has since held numerous strategic management positions throughout his 13-year tenure with the Company. In 2007, Mr. Khan served as Vice President and General Manager of KLA-Tencor's Optical Films Metrology Division. From 2008 to his current position, his executive management responsibilities expanded to include the Resistivity, Optical CD, Implant, Thermawave, Overlay, and SensArray Divisions, all ultimately comprising KLA-Tencor's Metrology Division. Prior to joining KLA-Tencor, Mr. Khan spent nine years at Applied Materials, holding various product engineering, support, operations, and senior management positions. Mr. Khan earned his bachelor's degree in electronics engineering technology from DeVry University. Michael D. Kirk, Ph.D. Michael D. Kirk has served as KLA-Tencor's Executive Vice President, Wafer Inspection Division since March 53 **Executive Vice President,** 2016. In this role, Mr. Kirk oversees several key areas of the Company's business, including its Surfscan series of Wafer Inspection tools and KLA-Tencor's electron-beam inspection and Wafer Inspection (WIN) Division. Prior to that Mr. Kirk Division served as Executive Vice President, Global Service and Support Division from April 2015 to February 2016, in which he was responsible for providing service and support solutions for KLA-Tencor's global installed base as well as the development of our product portfolio and service solutions for the Advanced Legacy market. From January 2013 to April 2015, Mr. Kirk served as

Name and Position **Principal Occupation of the Executive Officers** Age Executive Vice President, Global Customer Organization and Global Manufacturing Operations, overseeing the Company's global field operations, corporate sales and service business, as well as its worldwide manufacturing organizations. From September 2005 to January 2013, Mr. Kirk was Group Vice President of KLA-Tencor's Wafer Inspection Group, leading several key areas of the Company's business, including its Surfscan and electron-beam inspection products and its Wafer Inspection (WIN) Division, while also overseeing the Company's manufacturing operations. Mr. Kirk joined KLA-Tencor in 1997 and has served in various technical marketing and operational roles of increasing responsibility during his tenure with the Company. Before joining KLA-Tencor, Mr. Kirk was a founding executive responsible for the technical operations of Park Scientific Instruments, a scanning probe microscope manufacturer, from 1989 to 1997. Mr. Kirk earned his bachelor's degrees in physics and applied mathematics from the University of California at Berkeley and his master's degree and Ph.D. in applied physics from Stanford University. Virendra A. Kirloskar Virendra A. Kirloskar has served as the Company's Senior Vice President and Chief Accounting Officer since 52 March 2008. Mr. Kirloskar rejoined the Company as Vice President and Corporate Controller in May 2003 and Senior Vice President & **Chief Accounting Officer** served in that role until March 2008, other than the period from August 2006 to August 2007, during which time he held management responsibilities within KLA-Tencor India. Prior to that, from June 2002 to April 2003, Mr. Kirloskar served as Corporate Controller of Atmel Corporation, a designer and manufacturer of semiconductor integrated circuits. Mr. Kirloskar also held various finance positions within KLA-Tencor from 1993 to 1999. Mr. Kirloskar received his bachelor's degree in commerce from the University of Pune, India and his master's degree in business administration from the University of Massachusetts Amherst. Teri A. Little has served as the Company's Senior Vice President, General Counsel and Corporate Secretary since Teri A. Little 52 Senior Vice President, October 2015, and served as the Company's interim General Counsel from September 2015 to October 2015. General Counsel & Prior to that, since 2007, Ms. Little served as an Associate General Counsel for the Company, leading the Corporate Secretary Commercial legal team in connection with various customer and supplier-related matters, including the negotiation of the Company's worldwide commercial sales, procurement, and technology development agreements, working with the Company's largest and most strategic customers and suppliers. Most recently, in 2014 she assumed responsibility for the Corporate legal function,

Name and Position

Principal Occupation of the Executive Officers

Age

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managing the legal requirements associated with the Company's corporate securities, mergers and acquisitions, strategic alliances, corporate governance and Sarbanes-Oxley compliance. Ms. Little joined the Company in 2002 as Senior Counsel. Prior to joining the Company, she was a senior associate at Wilson Sonsini Goodrich & Rosati. Ms. Little received her J.D. from Stanford University and her bachelor's degree in finance from San Jose State University.

Brian M. Trafas Senior Vice President, Global Customer Organization Brian M. Trafas has served as KLA-Tencor's Senior Vice President, Global Customer Organization since April 2015. In this role, Mr. Trafas is responsible for all field-based sales and field-based service teams, and works in close collaboration with customers to address their needs with leading edge technology and services, while growing KLA-Tencor's business. Mr. Trafas served most recently as Chief Marketing Officer, from January 2007 to April 2015, where he was responsible for overseeing marketing initiatives, product development, marketing communications, market research, and the development of marketing talent. Prior to that, from June 2000 to January 2007, he was Vice President and General Manager of the Critical Dimension ("CD") Metrology Division and Group Vice President of Marketing for the Wafer Inspection Group. During his tenure with KLA-Tencor, Mr. Trafas has led the Company's introduction of Laser Scattering Patterned Wafer Inspection products, Scatterometry-based CD products, and developed a company-wide program of marketing best practices and talent forums. Having two decades of experience in the semiconductor capital equipment industry, with an emphasis on process control, he has written extensively about CD process control, advanced patterned wafer inspection methodologies and the application of scanning probe microscopes. A former chairman of the SEMI North America Advisory Board, Mr. Trafas continues to serve as a board member, and is also a member of the SEMI ISS committee. Mr. Trafas holds a bachelor's degree in physics from St. John's University and a doctorate in materials science from the University of Minnesota.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Principal Stockholders

As of September 14, 2016, based solely on our review of filings made with the SEC, we are aware of the following entities being beneficial owners of more than 5% of our Common Stock:

Name and Address	Number of Shares Beneficially Owned	Percent of Shares Beneficially Owned(1)
The Vanguard Group, Inc. ⁽²⁾ 100 Vanguard Boulevard Malvern, PA 19355	13,686,140	8.8%
PRIMECAP Management Company ⁽³⁾ 225 South Lake Avenue #400 Pasadena, CA 91101	12,235,143	7.8%
JPMorgan Chase & Co. ⁽⁴⁾ 270 Park Avenue New York, NY 10017	10,318,194	6.6%
BlackRock, Inc. ⁽⁵⁾ 40 East 52 nd Street New York, NY 10022	9,401,200	6.0%

- (1) Based on 156,318,732 outstanding shares of our Common Stock as of September 14, 2016.
- (2) All information regarding The Vanguard Group, Inc. ("Vanguard") is based solely on information disclosed in an Amendment to Schedule 13G filed by Vanguard with the SEC on February 10, 2016. According to the Schedule 13G/A filing, of the 13,686,140 shares of our Common Stock reported as beneficially owned by Vanguard as of December 31, 2015, Vanguard had sole voting power with respect to 295,347 shares, had shared voting power with respect to 15,500 shares, had sole dispositive power with respect to 13,374,828 shares, and had shared dispositive power with respect to 311,312 shares of our Common Stock reported as beneficially owned by Vanguard as of that date.
- (3) All information regarding PRIMECAP Management Company ("PRIMECAP") is based solely on information disclosed in an Amendment to Schedule 13G filed by PRIMECAP with the SEC on February 12, 2016. According to the Schedule 13G/A filing, of the 12,235,143 shares of our Common Stock reported as beneficially owned by PRIMECAP as of December 31, 2015, PRIMECAP had sole voting power with respect to 2,911,438 shares, did not have shared voting power with respect to any other shares, and had sole dispositive power with respect to all 12,235,143 shares of our Common Stock reported as beneficially owned by PRIMECAP as of that date.
- (4) All information regarding JPMorgan Chase & Co. ("JPMorgan") is based solely on information disclosed in an Amendment to Schedule 13G filed by JPMorgan with the SEC on January 19, 2016. According to the Schedule 13G/A filing, of the 10,318,194 shares of our Common Stock reported as beneficially owned by JPMorgan as of December 31, 2015, JPMorgan had sole voting power with respect to 9,477,970 shares, had shared voting power with respect to 208,661 shares, had sole dispositive power with respect to 10,109,576 shares, and had shared dispositive power with respect to 208,528 shares of our Common Stock reported as beneficially owned by JPMorgan as of that date.
- (5) All information regarding BlackRock, Inc. ("BlackRock") is based solely on information disclosed in an Amendment to Schedule 13G filed by BlackRock with the SEC on February 10, 2016. According to the Schedule 13G/A filing, of the 9,401,200 shares of our Common Stock reported as beneficially owned by BlackRock as of December 31, 2015, BlackRock had sole voting power with respect to all 9,401,200 shares, did not have shared voting power with respect to any other shares, and had sole dispositive power with respect to all 9,401,200 shares of our Common Stock reported as beneficially owned by BlackRock as of that date.

Directors, Nominees and Management

The following table sets forth the beneficial ownership of our Common Stock as of September 14, 2016 by all current Directors, each of the Named Executive Officers set forth in the Summary Compensation Table, and all current Directors and executive officers as a group. Except for shares held in brokerage accounts which may, from time to time, together with other securities held in those accounts, serve as collateral for margin loans made from those accounts, none of the shares reported as beneficially owned are currently pledged as security for any outstanding loan or indebtedness. Shares that, as of September 14, 2016, have not yet been issued under outstanding RSUs (and that are not scheduled to vest within 60 days after September 14, 2016) due to applicable performance or service-vesting requirements that have not yet been satisfied are not included in the table below:

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percent of Outstanding Class ⁽¹⁾
Richard P. Wallace ⁽²⁾	119,765	*
Edward W. Barnhol((3)	55,050	*
Robert M. Calderoni ⁽⁴⁾	11,793	*
John T. Dickson ⁽⁵⁾	26,194	*
Emiko Higashi ⁽⁶⁾	14,088	*
Kevin J. Kennedy ⁽⁷⁾	25,044	*
Gary B. Moore ⁽⁸⁾	4,363	*
Robert A. Rango ⁽⁹⁾	4,363	*
Kiran M. Patel ⁽¹⁰⁾	18,711	*
David C. Wang(11)	26,036	*
Bren D. Higgins	9,422	*
Bobby R. Bell	20,461	*
Michael D. Kirk	21,029	*
Ahmad A. Khan	27,948	*
All current Directors and executive officers as a group (17 persons) ¹²⁾	410,796	*

- * Less than 1%
- (1) Based on 156,318,732 outstanding shares of our Common Stock as of September 14, 2016. In addition, shares of our Common Stock subject to options that are presently exercisable or will become exercisable within 60 days after September 14, 2016 and shares of our Common Stock subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016 are deemed to be outstanding for the purpose of computing the percentage ownership of the applicable person or entity in this table, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person or entity.
- (2) Includes 9,182 outstanding shares of our Common Stock that are held by the Wallace Living Trust u/a/d dated 3/27/01, as amended, of which Mr. Wallace is a trustee and beneficiary.
- (3) Includes (a) 2,993 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016, and (b) 39,167 outstanding shares of our Common Stock that are held by The Barnholt Family Trust dated January 8, 1987, of which Mr. Barnholt is a trustee and beneficiary.
- (4) Includes 2,394 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016.
- (5) Includes (a) 2,394 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016, and (b) 21,831 outstanding shares of our Common Stock that are held under The Dickson Family Trust Agreement dated October 24, 2006, of which Mr. Dickson is a trustee and beneficiary.

- (6) Includes 2,394 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016.
- (7) Includes (a) 2,394 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016, and (b) 18,825 outstanding shares of our Common Stock that are held by the Kennedy Family Trust U/A/D 11/19/98, of which Mr. Kennedy is a trustee and beneficiary.
- (8) Includes 2,394 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016.
- (9) Includes 2,394 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016.
- (10) Includes (a) 2,394 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016, and (b) 14,348 outstanding shares of our Common Stock that are held by The Kiran and Jocimara Patel Trust dated October 23, 2008, of which Mr. Patel is a trustee and beneficiary.
- Includes (a) 2,394 shares subject to RSUs that will vest and become deliverable within 60 days after September 14, 2016, and (b) 19,817 outstanding shares of our Common Stock that are held by the Darlene Wang Revocable Living Trust dated 2/4/2000, of which (i) Mr. Wang is a trustee and (ii) a member of Mr. Wang's immediate family is the current beneficiary.
- (12) Includes 20,182 shares subject to RSUs held by Directors and 2,500 shares subject to RSUs held by executive officers that will vest and become deliverable within 60 days after September 14, 2016.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our executive officers, Board members, and persons who own more than ten percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC, and such persons are also required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based solely on our review of the copies of such forms received by us, we believe that during fiscal year 2016 all of our executive officers, Board members and greater than ten percent stockholders complied with all applicable Section 16(a) filing requirements.

EXECUTIVE COMPENSATION AND OTHER MATTERS COMPENSATION DISCUSSION AND ANALYSIS

KLA-TENCOR'S EXECUTIVE COMPENSATION PROGRAM AT A GLANCE

Introduction

This "Compensation Discussion and Analysis" section describes KLA-Tencor's fiscal year 2016 executive compensation program, including the decisions made by the Board and its Compensation Committee during the year, the processes and tools that they used to reach those decisions, and a discussion of the compensation earned by KLA-Tencor's "Named Executive Officers" (the CEO, the CFO and the three other most highly-compensated executive officers in fiscal year 2016), as presented in the section entitled "Executive Compensation Tables" below.

Named Executive Officers

Our "Named Executive Officers" for fiscal year 2016 were:

- Richard P. Wallace, President and CEO
- Bren D. Higgins, Executive Vice President and CFO
- Bobby R. Bell, Executive Vice President
- Michael D. Kirk, Executive Vice President, Wafer Inspection Division
- Ahmad A. Khan, Executive Vice President, Patterning Division

Compensation Philosophy and Design Principles

Compensation Philosophy

Executive compensation should be designed to:

Attract, retain and reward executives who contribute to the overall success of the Company by offering compensation packages that are competitive with those offered by other employers with which we compete for talent.

Achieve a balance and alignment between (i) performance-based compensation that rewards corporate and individual achievement and stockholder value creation, and (ii) compensation that supports our long-term employee retention efforts.

Design Principles

This philosophy is reflected in the following design principles:

In addition to a competitive base salary, a substantial portion of the executives' potential cash compensation is tied to a short-term incentive bonus plan that rewards corporate and individual achievement of challenging performance goals.

The program typically provides two types of long-term compensation: (i) performance-based awards, which provide additional compensation as a reward for achievement of corporate goals and which, if earned, include service-vesting requirements, and (ii) service-based awards with vesting conditioned only upon continued service, supporting our employee retention efforts.

Key Pay Practices in Our Executive Compensation Program and Last Year's "Say on Pay" Vote

Our executive compensation program is designed to incorporate the following key pay practices:

- A significant percentage of our Named Executive Officers' cumulative annual target compensation is in the form of performance-based annual bonuses and
 performance share awards, tied to challenging metrics that are key to the growth and profitability of the Company's business and promote alignment between executive
 and stockholder economic interests;
- We use different metrics for our cash bonus program (Operating Margin Dollar achievement and corporate balanced scorecard assessment) and our performance shares (free cash flow margin relative to our compensation peer group);
- · All equity awards vest over four years and, in addition, performance shares are tied to a three-year performance period;
- We prohibit officers, directors and employees from hedging against our stock; only offer "double trigger" change of control benefits; impose stock ownership
 guidelines on all executive officers and directors; and maintain a "claw-back" policy that enables us to recover performance-based compensation in the event of a
 significant restatement of our financial results;
- The Compensation Committee retains and regularly consults with an independent compensation consultant to advise on our executive compensation program and practices;
- Executive compensation decisions for Mr. Wallace are made by independent Board members and for all other executive officers by the Compensation Committee, which is comprised of independent Board members; and
- We hold an annual "say on pay" advisory vote, with approximately 97% of the votes cast at our 2015 Annual Meeting voting "FOR" approval of our Named Executive Officer compensation.

¹ For our fiscal year 2016 short-term incentive bonus plan, "Operating Margin Dollar achievement" represents our total revenues less total costs of revenues and operating expenses, including stock-based compensation charges, but excluding expenses related to acquisitions, restructuring, severance and merger related items.

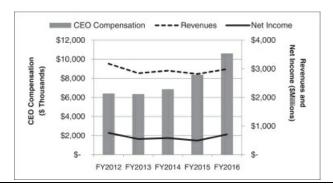
KLA-TENCOR'S EXECUTIVE COMPENSATION PROGRAM AT A GLANCE (CONTINUED)

Elements of Compensation

F1	V1-1-114	Oktovitor	Hom Fetablished	FY16 Terms/Outcomes for Named Executive Officers
Element	Variability	Objective	How Established	
Base salary	Fixed	Provide a competitive fixed component of	Reviewed against executive officer's skill, experience	Our CEO received no salary increase. Two of the
(Pages 45 to 46)		compensation that, as part of a total cash compensation	and responsibilities, and for competitiveness against	other NEOs received increases to maintain market
		package, enables us to attract and retain top talent.	our compensation peer group.	alignment.
Short-term	Performance-	Offer a variable cash compensation opportunity based	Target payouts set by measuring total cash	Bonus funding from balanced scorecard and
incentive plan	based	upon the level of achievement of challenging corporate	compensation against our compensation peer group.	Operating Margin Dollar achievement versus goal
(cash bonus)		goals, with adjustments based on individual	Corporate performance targets based on challenging	was 254.3% of target. Individual performance
(Pages 46 to 49)		performance.	operational goals.	multipliers ranged from 100% to 118%.
Performance	Performance-	Align long-term management and stockholder interests	Target total value of annual awards set using market	Fiscal year 2016 performance share awards tied to
shares	based and	and strengthen retention with four-year vesting	data (reviewed against our compensation peer group	three-year Relative Free Cash Flow Margin. Earned
(Pages 50 to 53)	value tied to	provisions. Performance-based awards provide	for competitiveness) and the executive officer's	shares vest 50% at three years and 50% at four
	stock price	opportunity based upon the level of achievement of	responsibilities, contributions and criticality to	years after grant date.
Restricted Stock	Value tied to	challenging corporate goals. Service-based awards offer		Fiscal year 2016 service-based awards vest 25%
Units (RSUs)	stock price	some certainty and create long-term retention.	when necessary to remain competitive with the	per year over four years, with the first vesting date
(Pages 50 to 53)			marketplace.	occurring on the one year anniversary of the grant
				date.
Benefit plans	Primarily	Provide competitive employee benefits. We do not view	Reviewed for competitiveness against our	No significant changes to fiscal year 2016 program.
(Pages 54 to 56)	fixed	this as a significant component of our executive	compensation peer group.	
		compensation program.		

Pay-for-Performance

KLA-Tencor's executive compensation program is structured so that a meaningful percentage of compensation is tied to the achievement of challenging levels of Company performance. The following chart illustrates the relationship between KLA-Tencor's CEO compensation (as reported in our Summary Compensation Table) and our revenues and net income results, calculated in accordance with U.S. GAAP, over the past five years (See pages 42 to 44 for further information regarding our pay-for-performance commitment, structure and results)²:



² For purposes of the chart above, the dollar value of the dividend equivalents associated with the special cash dividend of \$16.50 per share with respect to the outstanding awards held by our CEO that have been accrued for at the end of June 30, 2016 is not included in our CEO's compensation. The special cash dividend was declared in November 2014 and was accrued for pursuant to an equitable and proportionate adjustment approved by the Board and Compensation Committee for all awards (RSUs and stock options) that were then-outstanding under the 2004 Equity Plan, as required by the 2004 Equity Plan, which will be paid subject to the vesting requirements of the underlying awards.

Overview: Our Commitment to Pay-for-Performance

The Compensation Committee has structured our executive compensation program to compensate our executive officers for performance and, over the long term, to provide compensation that is market competitive and supports our retention efforts.³

Fiscal Year 2016 Performance

Fiscal year 2016 was an exceptional year of performance for KLA-Tencor, fueled by close collaborations with customers and market leadership resulting from our significant investment in next-generation technology development and strong returns to stockholders.

Our fiscal year 2016 performance is highlighted by the following achievements:

- The Company's total revenues in fiscal year 2016 were \$3.0 billion (representing a 6% increase over fiscal year 2015), with net income of \$704 million (representing a 92% increase over fiscal year 2015) and diluted earnings per share of \$4.49. The Company generated \$760 million in operating cash flow (representing a 25% increase over fiscal year 2015), and ended fiscal year 2016 with \$2.5 billion in cash, cash equivalents and marketable securities;
- We continued our substantial investment in next-generation research and development, ensuring our continued ability to create advanced technology and products that meet our customers' needs. Nonetheless, the Company maintained the operational discipline to generate a non-GAAP operating margin percentage4 ("Operating Margin Percentage") equal to 33% for fiscal year 2016. This result was higher than the non-GAAP operating margin results of KLA-Tencor's closest industry peers (such as Applied Materials, Inc. and Lam Research Corporation) for the equivalent period;
- The Company returned \$346 million to stockholders in the form of cash dividends and stock repurchases of approximately \$182 million; and
- The Company continued the steady growth of its service business, generating \$734 million in revenues in fiscal year 2016. Our service revenues increased by 7% year-over-year and represent a consistent, less cyclical source of revenues.

Pay-for-Performance

We structure our executive compensation program each year so that a meaningful percentage of compensation is tied to the achievement of objectives that, at the time they are established, are considered challenging in light of anticipated market conditions.

Short-Term Incentive Bonus Plan:

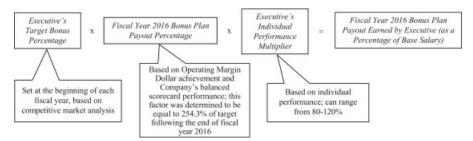
We use Operating Margin Dollar achievement as a key performance metric in our cash bonus plan, because we believe that it reflects a number of important competitive and business

³ For purposes of this Compensation Discussion and Analysis section, references to the "Compensation Committee" include the Independent Board Members when discussing determinations of Chief Executive Officer ("CEO") compensation. The term "Independent Board Members" refers to all of the members of our Board other than our CEO and is the group that, after receiving recommendations regarding our CEO's compensation from the Compensation Committee, approves all aspects of our CEO's compensation.

⁴ Non-GAAP operating margin percentage equals Operating Margin Dollars divided by total revenues.

elements such as product acceptance, market share and cost discipline, and is therefore a very good barometer of our overall performance. Payouts under our cash bonus plan are also determined in part by a "balanced scorecard" rating awarded by the Compensation Committee, which is designed to measure our progress based on financial and non-financial metrics related to operational excellence, customer focus, growth and talent management, as well as individual performance multipliers assigned to each executive based on his or her contributions.

The payout formula under our fiscal year 2016 cash bonus plan was structured as follows:



Our fiscal year 2016 annual short-term incentive bonus plan was structured to pay out 100% of each executive's target bonus amount if the Company successfully achieved its target level of performance. The Compensation Committee set the target Operating Margin Dollar achievement at \$780 million, which was comparable to the target for fiscal year 2015 (\$786 million), and a level that it believed was challenging to achieve based on the Company's performance in fiscal year 2015 (\$713 million) and our outlook for fiscal year 2016 at the time the program was established. The performance metric was changed to Operating Margin Dollar achievement in fiscal year 2016 from Operating Margin Percentage in fiscal year 2015 due to a renewed emphasis on growth in profitability. Our fiscal year 2016 Operating Margin Dollar achievement was \$995 million, a level that was significantly above the target and representing a 40% increase over fiscal year 2015. With respect to the balanced scorecard assessment, a scale of 1 to 5 is used, with "1" corresponding to "opportunity for improvement," and "5" corresponding to "exceptional." The Compensation Committee awarded the Company a balanced scorecard rating of "4+" ("outstanding"), based on its assessment of the Company's overall performance against its strategic goals during the fiscal year. That combination resulted in a funding, before individual multipliers, of 254.3% of target bonuses under the fiscal year 2016 annual short-term incentive bonus plan.

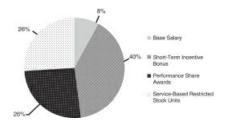
Long-Term Incentives - Performance Shares:

The Named Executive Officers' fiscal year 2016 performance share awards are tied to the Company's three-year free cash flow margin relative to its 24 compensation peer group companies. The Company's free cash flow margin for fiscal years 2016, 2017 and 2018 will be calculated as the Company's cumulative free cash flow (cash flow provided by operations, less capital expenditures), divided by cumulative revenues ("Relative Free Cash Flow Margin"), and that number will be compared against each company in the Company's compensation peer group for the 12-quarter period ending on or before June 30, 2018. A determination will be made after the end of fiscal year 2018, based on the Company's percentile performance against its compensation peer group, regarding the percentage of the fiscal year 2016 performance shares that have been earned.

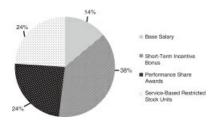
Performance-Focused Structure and Results:

To illustrate our pay-for-performance philosophy, the following charts reflect the portion of our Named Executive Officers' actual fiscal year 2016 compensation represented by each of the major elements of our compensation program⁵:

CEO Pay Mix - Fiscal Year 2016 (Actual)



All Other NEOs Pay Mix - Fiscal Year 2016 (Actual)



Executive Compensation Program

Investor feedback is very important to us as we annually review and update our executive compensation program. We also consider the results of our stockholder "say on pay" advisory vote when structuring our executive compensation program. At our 2015 annual meeting of stockholders, approximately 97% of the votes cast in the "say on pay" advisory vote were "FOR" approval of our named executive officer compensation on a non-binding, advisory basis.

As noted above, we continually review all elements of our executive compensation program. After considering investor feedback, as well as commentary issued by various institutional advisors and trends in the marketplace, we retained all of our long-term incentive features in our fiscal year 2016 program, including:

- The use of a cash-based (instead of equity-based) long-term incentive program for many employees. Our Named Executive Officers do not participate in this program, but it has had the effect of significantly reducing our overall share usage. During fiscal year 2016, we issued RSUs and performance shares covering up to 704,000 shares of our Common Stock, compared to 2,300,000 shares during fiscal 2012 (the year before we first adopted the cash-based program described above);
- The adoption of a compensation peer group consisting of 24 compensation peer group companies in the semiconductor sector whose compensation practices are reviewed in developing and evaluating our executive compensation program, to better reflect the compensation levels, practices and programs offered by the broad range of companies with which we compete for talent;

⁵ For purposes of the charts above: (a) the fiscal year 2016 short-term incentive bonus amounts are included at the actual amount earned for the year, (b) the fiscal year 2016 performance share awards are included at their target grant date fair value (i.e., not their maximum earnable amount), assuming that such awards will be earned at target, (c) the fiscal year 2016 service-based RSUs are included at their grant date fair value, and (d) the dollar value of the dividend equivalents associated with the special cash dividend of \$16.50 per share with respect to the outstanding awards held by our Named Executive Officers that have been accrued for at the end of June 30, 2016 or paid during fiscal year 2016 is not included in our Named Executive Officers' compensation. For additional details related to the special cash dividend, refer to footnote 2 above.

- For our performance shares, we retained a three-year performance period tied to our Relative Free Cash Flow Margin that is compared to our compensation peer group. Any earned performance shares that become eligible to vest, based on the Company's achievement of the applicable performance goals, will vest in two equal installments on the third and fourth anniversaries of the award grant date (subject to the executive's continued employment through the applicable vesting date); and
- The use of service-based RSUs that will vest 25% per year over four years, with the first vesting date occurring on the one year anniversary of
 the grant date (subject to the executive's continued employment through the applicable vesting date).

We believe this program design strengthens the important connection between pay and performance that has been a feature of KLA-Tencor's historical compensation structure, while also being responsive to investor feedback.

Elements of Executive Compensation

The primary elements of our executive compensation program are base salary, an annual short-term incentive bonus plan and long-term incentives.

Base Salary:

				FY16 Terms/
				Outcomes for Named
Element	Variability	Objective	How Established	Executive Officers
Base salary	Fixed	Provides a competitive fixed component of	Reviewed against executive officer's skill, experience	Our CEO received no salary
		compensation that, as part of a total cash	and responsibilities, and for competitiveness against	increase. Two other NEOs
		compensation package, enables us to attract and retain	our compensation peer group.	received increases to maintain
		top talent.		market alignment.

The Compensation Committee annually reviews the base salaries of the executive officers as part of its overall compensation review, and considers the competitive market analysis of the Company's compensation peer group companies each year in determining whether to make an adjustment to the base salary for each Named Executive Officer.

For fiscal year 2016, the Compensation Committee approved the base salaries set forth in the table below. In the case of Mr. Wallace, his base salary remained unchanged from fiscal year 2015, and in the case of two other Named Executive Officers, their base salaries were increased from fiscal year 2015 in order to ensure that their total cash compensation opportunities remained competitive with similarly situated officers of the Company's compensation peer group companies.

Name and Principal Position	Annual Base Salary Rate Approved for Fiscal Year 2016 (\$)	Year-Over-Year Percentage Increase Represented by the Fiscal Year 2016 Base Salary
Richard P. Wallace President & Chief Executive Officer	900,000	0%
Bren D. Higgins Executive Vice President & Chief Financial Officer	450,000	12.5%
Bobby R. Bell Executive Vice President	500,000	0%
Michael D. Kirk Executive Vice President, Wafer Inspection Division	500,000	0%
Ahmad A. Khan Executive Vice President, Patterning Division	475,000	18.8%

Short-Term Incentive Bonus Plan:

Element	Variability	Objective	How Established	FY16 Terms/Outcomes for Named Executive Officers
Short-term	Performance-	Offer a variable cash compensation	Target payouts set by measuring total	Bonus funding from balanced scorecard and Operating
incentive plan (cash	based	opportunity based upon the level of achievement of challenging corporate	cash compensation against our compensation peer group. Corporate	Margin Dollar achievement versus goal was 254.3% of target. Individual performance multipliers ranged
bonus)		goals, with adjustments based on	performance targets based on	from 100% to 118%.
		individual performance.	challenging operational goals.	

Fiscal Year 2016 Executive Incentive Plan:

Our Executive Incentive Plan (adopted pursuant to our Performance Bonus Plan) (the "Bonus Plan") provides the Named Executive Officers with an opportunity to earn annual performance-based cash compensation based on the Company's achievement of key financial and strategic Company goals as well as individual performance.

Under the fiscal year 2016 Bonus Plan, the Company was required to achieve a threshold level of Operating Margin Dollar achievement in order for the Bonus Plan to be funded. Upon achievement of that threshold level, a participant's actual bonus amount is then determined based upon a bonus payout grid, with Operating Margin Dollar achievement as the variable along one axis and, on the other axis, the score awarded to the Company by the Compensation Committee based upon its assessment of the Company's performance as measured against a defined "balanced scorecard."

⁶ The satisfaction of this pre-determined threshold level of Operating Margin Dollars achievement would trigger full funding of the Bonus Plan, and of each participant's maximum potential bonus opportunity, for purposes of Section 162(m) of the Internal Revenue Code.

The balanced scorecard takes into account the Company's strategic objectives of operational excellence, customer focus, growth and talent management (each of which is addressed in more detail below), and applies scores for the Company's performance against a variety of specific goals within each of those variables. The use of the balanced scorecard is designed to ensure that the quality of the Company's operating results is high and that those results support the sustainability of the Company's business model. The scorecard is tracked throughout the year by the Compensation Committee, and then formally reviewed by the Compensation Committee and the Board following the conclusion of the fiscal year for assessment of the Company's success in achieving its annual strategic goals.

For fiscal year 2016, the goals and objectives were set at levels that the Compensation Committee believed would be challenging to achieve based on historical and anticipated performance and the then-prevailing macroeconomic conditions. While many of the metrics are quantitative in nature, some are qualitative and, therefore, introduce a degree of judgment into the bonus determination process. We believe that the balanced scorecard's use of broad measures of financial and strategic success closely aligns the interests of our executive officers with those of our stockholders. This structure of using both Operating Margin Dollar achievement and the balanced scorecard is intended to ensure that bonus payouts not only reflect the Company's achievement of specific levels of Operating Margin Dollars, but also the level of management performance necessary to continue to achieve those results over the long term.

The fiscal year 2016 Bonus Plan was structured so that, for each level of Operating Margin Dollar performance, the maximum payout would be reasonable relative to the Company's financial results. The following examples highlight the possible funding levels at different levels of Company performance, before applying individual multipliers:

Level of Operating Margin Dollars	Funding Level Details
Less than \$200M	 No payouts would be made under the fiscal year 2016 Bonus Plan if the Company achieved Operating Margin Dollars of less than \$200 million
\$200M (Threshold)	Maximum bonus funding level equal to 38% of the executive officers' target bonuses, only achievable if the Compensation Committee awarded the Company a balanced scorecard score of 5 ("exceptional")
\$780M (Target)	 Target level of Operating Margin Dollars of \$780 million would have considerably exceeded the operating margin performance for each of the Company's closest industry peers for the 12-month period preceding the time when the Compensation Committee established the target
	 Maximum bonus funding level equal to 150% of the executive officers' target bonuses, only achievable if the Compensation Committee awarded the Company a balanced scorecard score of 5
	The fiscal year 2016 Bonus Plan would have funded at 100% of the executive officers' target bonuses if the Compensation Committee awarded the Company a balanced scorecard score of 3+
\$1.4B (Maximum)	 Operating Margin Dollars of \$1.4 billion would have surpassed the Company's single fiscal year record
	 Maximum bonus funding level equal to 300% of the executive officers' target bonuses if the Compensation Committee awarded the Company a balanced scorecard score of 2+ ("primarily meets expectations") or above
	 Minimum bonus funding level equal to 160% of the executive officers' target bonuses if the Compensation Committee awarded the Company a balanced scorecard score of 1 ("opportunity for improvement")

In addition, the Compensation Committee retained the discretion to adjust the actual bonus amount to between 80% and 120% of the amount otherwise payable to an executive pursuant to the payout grid described above, with reference to the CEO's recommendation regarding the executive's individual performance for fiscal year 2016. In no event, however, can a participant in the Bonus Plan receive a bonus under the Bonus Plan equal to more than 300% of the participant's target bonus.

Following the completion of fiscal year 2016, the Compensation Committee reviewed the Company's performance against the primary strategic objectives set forth in the fiscal year 2016 balanced scorecard – Operational Excellence, Customer Focus, Growth and Talent Management – which were assessed as follows:

Operational Excellence

The Compensation Committee considered the Company's performance against its operational plan of record, management of fixed costs, business model performance, management of assets and key product distribution metrics. In doing so, the Compensation Committee reviewed the Company's order levels, new product introductions, expense fluctuations across different operations, inventory levels, and strong improvement in cycle times and on-time delivery.

Customer Focus

The Compensation Committee assessed the Company's success in terms of market share, customer satisfaction, product differentiation and customer collaboration. This process included a review of the Company's market position across multiple divisions, competitive environment, feedback and recognition from customers, and next-generation product and technology collaboration efforts.

Growth

The Compensation Committee reviewed the Company's absolute and relative growth, its rate of product adoption, its inorganic growth efforts and alliance projects, and its positioning for future growth.

Talent Management

The Compensation Committee assessed the Company's success in acquiring, developing and retaining top talent, as well as demonstrating solid employee engagement. This assessment included a review of the Company's turnover (overall and in top talent) and early career hiring.

The Company's fiscal year 2016 Operating Margin Dollar achievement equaled \$995 million representing 127.4% of the Company's Operating Margin Dollar target of \$780 million. Based on the Compensation Committee's assessment of the Company's overall performance and the factors discussed above, the Compensation Committee awarded the Company a balanced scorecard score of 4+ ("outstanding"). As a result, the payouts under the fiscal year 2016 Bonus Plan were 254.3% of the participants' target bonus amounts, before adjusting for individual performance.

The Bonus Plan also contains an element of individual performance assessment. The Compensation Committee retains the discretion to increase or decrease each executive

officer's bonus amount based on the officer's individual performance by applying an "individual performance multiplier" of between 80% and 120%. Following the completion of fiscal year 2016, the Compensation Committee conducted a performance assessment of each executive officer, with input from Mr. Wallace (except with respect to his own compensation), based on the executive officer's leadership skills, experience and performance, and established the individual performance multipliers for the Named Executive Officers set forth in the table below.

The following table presents each Named Executive Officer's target bonus (as a percentage of base salary and in dollars, based on actual salary paid during the year), as well as the bonus payout multiple generated by the fiscal year 2016 Bonus Plan's payout grid, based on the Company's performance, the individual performance multiplier assigned to the Named Executive Officer and the actual bonus amount paid to the officer. For fiscal year 2016, the Compensation Committee increased the target bonus (as a percentage of base salary) for Mr. Khan from 75% to 90%, to further align his cash compensation opportunities with the marketplace:

Name and Principal Position	Officer's Target Bonus Award Under Bonus Plan (as a Percentage of Base Salary Paid During FY16) ⁽¹⁾	Officer's Target Bonus Award Under FY16 Bonus Plan (\$)	Payout Multiple Based on Company Performance (Operating Margin Percentage and Balanced Scorecard)	Individual Performance Multiplier Assigned by Compensation Committee for FY16	Actual Bonus Payout Under FY16 Bonus Plan (\$)	Actual Bonus Payout as a Percentage of Target Bonus(2)
Richard P. Wallace President & Chief Executive Officer	150%	1,401,923	254.3%	118%	4,205,769	300%
Bren D. Higgins Executive Vice President & Chief Financial Officer	80%	366,154	254.3%	118%	1,098,462	300%
Bobby R. Bell Executive Vice President	90%	467,308	254.3%	118%	1,401,923	300%
Michael D. Kirk Executive Vice President, Wafer Inspection Division	90%	467,308	254.3%	118%	1,401,923	300%
Ahmad A. Khan Executive Vice President, Patterning Division	90%	430,962	254.3%	100%	1,095,935	254%

- (1) The amounts in this column represent the applicable Named Executive Officer's fiscal year 2016 full target bonus (stated as a percentage of the officer's base salary). Under the fiscal year 2016 Bonus Plan, this percentage, when multiplied by (a) the payout percentage determined by the Bonus Plan's bonus payout grid based on the Company's performance, and (b) the Named Executive Officer's individual performance multiplier assigned by the Compensation Committee based on the officer's performance, generated the officer's actual bonus payment amount (stated as a percentage of the officer's base salary).
- (2) For fiscal year 2015, the actual bonus payout as a percentage of the Named Executive Officer's target bonus was: (a) Mr. Wallace: 85%; (b) Mr. Higgins: 90%; (c) Mr. Bell: 73%; (d) Mr. Kirk: 90%; (e) Mr. Khan: 81%. For fiscal year 2014, the actual bonus payout as a percentage of the Named Executive Officer's target bonus was: (a) Mr. Wallace: 102%; (b) Mr. Higgins: 93%; (c) Mr. Bell: 112%; and (d) Mr. Kirk: 102%.

Long-Term Incentives:

Element	Variability	Objective	How Established	FY16 Terms/Outcomes for Named Executive Officers
Performance shares	Performance- based and value	Align long-term management and stockholder interests and strengthen	Target total value of annual awards set using market data (reviewed against our compensation peer	Fiscal year 2016 performance share awards tied to three-year Relative Free
shares	tied to stock price	retention with four-year vesting	group for competitiveness) and the executive	Cash Flow Margin. Earned shares vest
		provisions. Performance-based awards		50% at three years and 50% at four years
RSUs	37-1 4:- 4 t-	provide opportunity based upon the level of achievement of challenging	criticality to ongoing success. Additional service- based awards may be granted when necessary to	after grant date.
RSUS	Value tied to stock price	corporate goals. Service-based awards offer some certainty and create long-	remain competitive with the marketplace.	Fiscal year 2016 service-based awards vest 25% per year over four years, with the first vesting date occurring on the one
		term retention.		year anniversary of the grant date.

The purpose of the long-term incentive component of our executive compensation program is to align management and stockholder long-term interests, provide a meaningful incentive for recipients to build stockholder value and strengthen retention through service-based and performance-based awards with four-year vesting provisions. The long-term incentives offered by the Company have historically been in the form of equity awards. Since the end of fiscal year 2007, our executive officers' long-term incentive awards have been comprised entirely of performance shares and RSUs.

Fiscal Year 2014 Performance Shares – Performance Criteria Satisfaction Determination:

The fiscal year 2014 performance shares are tied to the three-year Relative Free Cash Flow Margin over fiscal years 2014, 2015 and 2016. As a result, after the completion of fiscal year 2016, the Compensation Committee determined the extent to which the fiscal year 2014 performance shares had been earned. The award was paid out based on the formula set at the beginning of fiscal year 2014. The terms of the fiscal year 2014 performance shares, including the target performance and payout level, actual results and vesting schedule, are summarized in the following table:

Terms of Fiscal Year 2014 Performance Shares	Threshold	Target Level	Maximum Level	Actual Results		
Level of Relative Free Cash Flow Margin Performance	30th percentile	55th percentile	75th percentile	76th percentile		
Payout Level (as Percentage of Target Shares)	25%	100%	125%	125%		
Vesting Schedule	Fifty percent (50%) of the earned shares were issued in September 2016 (when the performance criteria was determined to have been satisfied), and the remaining fifty percent (50%) will vest on the four-year anniversary of the grant date of the award, subje to the individual's continued employment.					

The following table sets forth the minimum, target and maximum performance shares achievable by each Named Executive Officer, as well as the actual number of shares earned by each Named Executive Officer, with respect to the fiscal year 2014 performance share awards (this table does not include the Named Executive Officers' fiscal year 2014 service-based restricted stock unit awards, which are listed in the section of this Proxy Statement entitled "Outstanding Equity Awards at Fiscal Year End"):

Name and Principal Position	Type of Grant	Minimum Shares	Target Shares	Maximum Shares	Actual Shares Earned
Richard P. Wallace	Annual	0	44,500	55,625	55,625
President & Chief Executive	Performance				
Officer	Share Award				
Bren D. Higgins	Annual	0	7,150	8,937	8,937
Executive Vice President & Chief Financial Officer	Performance				
	Share Award				
Bobby R. Bell	Annual	0	13,350	16,687	16,687
Executive Vice President	Performance				
	Share Award				
Michael D. Kirk	Annual	0	13,350	16,687	16,687
Executive Vice President, Wafer Inspection Division	Performance				
	Share Award				
Ahmad A. Khan	Annual	0	7,113	8,891	8,891
Executive Vice President,	Performance				
Patterning Division	Share Award				

Fiscal Year 2015 Performance Shares – Performance Criteria:

The fiscal year 2015 performance shares are tied to the three-year Relative Free Cash Flow Margin over fiscal years 2015, 2016 and 2017. As a result, after the completion of fiscal year 2017, the Compensation Committee will determine the extent to which the fiscal year 2015 performance shares have been earned. The award will be based on the formula set at the beginning of fiscal year 2015. The terms of the fiscal year 2015 performance shares, including the target performance and payout level and vesting schedule, are summarized in the following table:

Terms of Fiscal Year 2015 Performance Shares	Threshold	Target Level	Maximum Level			
Level of Relative Free Cash Flow Margin Performance	30th percentile	55th percentile	75th percentile			
Payout Level (as Percentage of Target Shares)	25%	100%	125%			
Vesting Schedule	Fifty percent (50%) of the earned shares will vest on the date the performance					
	determination is made, and the remaining fifty percent (50%) will vest on the four-year					
	anniversary of the grant date of the award, subject to the individual's continued					
	employment.					

Payouts will be interpolated if actual results fall between two of the defined percentile measurement points above.

The following table sets forth the minimum, target and maximum shares achievable by each Named Executive Officer with respect to the performance share and RSU awards comprising such officer's annual equity award for fiscal year 2015:

Name and Principal Position	Type of Grant	Minimum Shares	Target Shares	Maximum Shares
Richard P. Wallace	Annual Grant (Performance)(1)	0	44,000	55,000
President & Chief Executive Officer	Annual Grant (Service-Based Only)	44,000	44,000	44,000
Bren D. Higgins	Annual Grant (Performance)(1)	0	9,150	11,437
Executive Vice President & Chief Financial Officer	Annual Grant (Service-Based Only)	9,150	9,150	9,150
Bobby R. Bell	Annual Grant (Performance)(1)	0	14,650	18,312
Executive Vice President	Annual Grant (Service-Based Only)	14,650	14,650	14,650
Michael D. Kirk	Annual Grant (Performance)(1)	0	14,650	18,312
Executive Vice President, Wafer Inspection Division	Annual Grant (Service-Based Only)	14,650	14,650	14,650
Ahmad A. Khan	Annual Grant (Performance)(1)	0	9,150	11,437
Executive Vice President, Patterning Division	Annual Grant (Service-Based Only)	9,150	9,150	9,150

⁽¹⁾ The determination regarding the extent to which the fiscal year 2015 performance share awards are earned and become eligible for vesting will be made by the Compensation Committee following the completion of fiscal year 2017, unless an earlier determination is required to be made in connection with a change of control event.

Annual Equity Grants for Fiscal Year 2016:

The size of each Named Executive Officer's annual equity award represents the target equity value that the Compensation Committee aims to deliver to the executive officer as part of his total target annual compensation. In setting the target equity value for each Named Executive Officer's annual equity award, the Compensation Committee referred to the data and factors described under the section entitled "Compensation Committee Decision Making – Approval Procedures Overview and Market Data" below. Each Named Executive Officer's fiscal year 2016 annual award was divided into two equally sized grants (based on target equity value): a performance share award and a RSU award with vesting tied solely to continued service, both of which were consistent with the practices in fiscal years 2014 and 2015. The following table highlights the key terms of the fiscal year 2016 awards:

Type of Award	Performance Metric	Performance Period	Vesting Schedule ⁽¹⁾
Performance Share Awards	Relative Free Cash Flow Margin versus the compensation peer group	Three years	50% vests three years after grant; 50% vests four years after grant
RSUs (Service- Based Only)	N/A	N/A	25% vests on each of the first four anniversaries of the grant date

⁽¹⁾ In each case, vesting is subject to the Named Executive Officer's continued employment through the applicable vesting date.

The Relative Free Cash Flow Margin metric compares the Company's free cash flow margin (cash flow from operations less capital expenditures, as a percentage of revenues) versus the free cash flow margin of the Company's compensation peer group companies. We believe that the Relative Free Cash Flow Margin metric is a key measure of our long-term performance and stockholder value creation. Our ability to generate cash from operations is essential to fund the

(1)

expansive research and development efforts that are instrumental to our long-term success, as well as our efforts to return cash to stockholders. The relative nature of the metric ensures that the Company's performance must compare favorably to our compensation peer group companies for shares to be earned.

The following examples highlight the possible payouts under the fiscal year 2016 performance share awards at different levels of Company performance:

Level of Relative Free Cash Flow Margin Performance	Performance Share Payout Details
Less than 30th percentile	No shares will be eligible to vest under the fiscal year 2016 performance shares if the Company achieves a Relative Free Cash Flow Margin below the 30th percentile
30th percentile (Threshold)	25% of the target number of shares achievable under each award will become eligible to vest if the Company achieves a Relative Free Cash Flow Margin equal to the 30th percentile
55th percentile (Target)	Target performance level will require strong performance relative to the Company's compensation peer group and is therefore considered challenging
	 100% of the target number of shares achievable under each award will become eligible to vest if the Company achieves a Relative Free Cash Flow Margin equal to the 55th percentile
75th percentile or above (Maximum)	125% of the target number of shares achievable under each award will become eligible to vest if the Company achieves a Relative Free Cash Flow Margin equal to the 75th percentile or above
	Target performance level will require significant performance relative to the Company's compensation peer group and is therefore considered very challenging

Payouts will be interpolated if actual results fall between two of the defined percentile measurement points above.

The following table sets forth the minimum, target and maximum shares achievable by each Named Executive Officer with respect to the performance share and RSU awards comprising such officer's annual equity award for fiscal year 2016:

Name and Principal Position	Type of Grant	Minimum Shares	Target Shares	Maximum Shares
Richard P. Wallace	Annual Grant (Performance)(1)	0	52,950	66,187
President & Chief Executive Officer	Annual Grant (Service-Based Only)	52,950	52,950	52,950
Bren D. Higgins	Annual Grant (Performance)(1)	0	13,250	16,562
Executive Vice President & Chief Financial Officer	Annual Grant (Service-Based Only)	13,250	13,250	13,250
Bobby R. Bell	Annual Grant (Performance)(1)	0	17,650	22,062
Executive Vice President	Annual Grant (Service-Based Only)	17,650	17,650	17,650
Michael D. Kirk	Annual Grant (Performance)(1)	0	17,650	22,062
Executive Vice President, Wafer Inspection Division	Annual Grant (Service-Based Only)	17,650	17,650	17,650
Ahmad A. Khan	Annual Grant (Performance)(1)	0	13,250	16,562
Executive Vice President, Patterning Division	Annual Grant (Service-Based Only)	13,250	13,250	13,250

The determination regarding the extent to which the fiscal year 2016 performance share awards are earned and become eligible for vesting will be made by the Compensation Committee following the completion of fiscal year 2018, unless an earlier determination is required to be made in connection with a change of control event.

No Supplemental Equity Grants in Fiscal Year 2016:

From time to time, the Compensation Committee may take action to adjust an executive officer's target compensation opportunities in connection with a change to the officer's role and responsibilities, to respond to changes in the marketplace or to ensure that our executive compensation opportunities remain competitive. The Compensation Committee did not award supplemental equity grants to our Named Executive Officers during fiscal year 2016.

Perquisites and Other Compensation

Element	Variability	Objective	How Established	FY16 Terms/ Outcomes for Named Executive Officers
Benefit	Primarily	Provide competitive employee benefits. We do not view this as a significant	Reviewed for competitiveness	No significant changes.
plans	fixed	component of our executive compensation program.	against our compensation peer	
			group.	

We make only nominal use of perquisites in compensating our executive officers. All of our executive officers are entitled to receive Company-provided professional financial services. These services include tax planning, preparation and filing, as well as financial and estate planning services, up to a maximum cost of \$20,000 per calendar year, and are provided in order to allow our executive officers to devote their fullest attention to our business and to help ensure that their tax returns comply with IRS requirements.

In addition, our executive officers are eligible to participate in our 401(k) plan (including a Company matching contribution on employee 401(k) plan contributions) and the other employee benefit plans sponsored by us on the same terms and conditions that are available to all other Company employees.

Severance Benefits and Change of Control Agreements

We currently have two plans that provide certain compensation and benefits in the event that a participant's employment with the Company terminates under certain defined circumstances: our Executive Severance Plan, adopted in 2006 (the "Original Severance Plan"), and our 2010 Executive Severance Plan (the "2010 Severance Plan"). During fiscal year 2016, Mr. Wallace was a participant under the Original Severance Plan, and Messrs. Higgins, Bell, Kirk and Khan were participants under the 2010 Severance Plan. As part of a routine assessment of competitive market practices for executive severance benefits, the Board approved amendments to the Original Severance Plan and 2010 Severance Plan on September 21, 2015 to make certain amendments. For further information about these plans and the amendments, please see the section of this Proxy Statement entitled "Potential Payments Upon Termination or Change of Control."

We believe the Original Severance Plan and the 2010 Severance Plan are important for the long-term retention of our senior executives and enhance their commitment to the attainment of our strategic objectives. The benefits provided under our severance plans will allow the participating executives to continue to focus their attention on our business operations and strategic plans without undue concern over their own financial situation during periods when substantial disruptions and distractions might otherwise prevail. We believe that the benefits provided under our severance plans are fair and reasonable in light of the level of dedication and commitment the participating executive officers have rendered the Company, the

contribution they have made to our growth and financial success, and the value we expect to receive from retaining their services, including during challenging transition periods in connection with a change of control.

Deferred Compensation

We maintain an Executive Deferred Savings Plan, a nonqualified deferred compensation plan, which enables eligible employees to defer all or a portion of certain components of their compensation, with no Company match. For further information, please see the section of this Proxy Statement entitled "Nonqualified Deferred Compensation." We do not provide any defined benefit pension benefits or any other retirement benefits to Named Executive Officers, other than the 401(k) plan available to all of our employees and the executive retiree medical program described below.

Executive Retiree Medical Program

KLA-Tencor has established a retiree medical program to offer continued health benefits to certain current senior executive officers. To be eligible, an executive must be at least 55 years old with ten years of service with the Company, and must be in good standing with us at the time of retirement. Eligible executives are entitled to participate until age 65 and must pay the full cost of the premium. Participation in this program is limited to the Company's Section 16 executive officers as of February 2011. The benefits described above shall be referred to herein as the "Executive Retiree Medical Benefits." As of June 30, 2016, the only Named Executive Officers potentially eligible to participate in this program were Messrs. Wallace and Bell. No future participants (other than the current participants, to the extent they eventually become eligible to participate in the program) are allowed into the program.

Stock Ownership Guidelines; Policy Regarding Hedging

In November 2008, our Board adopted revised stock ownership guidelines applicable to our executive officers. Under that policy, our executives are expected to own KLA-Tencor Common Stock having a minimum value, denominated as a multiple of their annual base salaries, as follows:

 Title
 Shares

 CEO
 Value of at least four times annual base salary

 EVP/SVP
 Value of at least two times annual base salary

Unexercised options and unearned performance shares or units do not count for purposes of measuring compliance with the ownership guidelines. The value of outstanding RSUs and performance shares for which the performance-based vesting criteria have been achieved but for which the service-based vesting criteria have not yet been satisfied is included in measuring compliance. Each executive officer, once he or she has served in a position listed above for at least four years, is expected to comply with these guidelines. With respect to our Chief Executive Officer, the Compensation Committee conducts an annual review to assess compliance with the guidelines. Vice Presidents' compliance is evaluated by the Chief Executive Officer. As of the Record Date, each of our Named Executive Officers was in compliance with this stock ownership requirement.

Under our Policy on Insider Trading and Unauthorized Disclosures, our directors and employees (including our Named Executive Officers) are not permitted to engage in short sales of the Company's securities or any hedging or derivative securities transactions relating to the Company's securities.

Compensation Committee Decision Making - Approval Procedures Overview and Market Data

The Compensation Committee takes a broad-based approach in evaluating and making decisions with respect to executive compensation. The charter of the Compensation Committee gives the Compensation Committee full authority for determining the compensation of our executive officers, other than the Chief Executive Officer, for whom the Compensation Committee makes recommendations to the Independent Board Members for approval.

Advisor to the Compensation Committee

The Compensation Committee retains Semler Brossy Consulting Group, LLC ("Semler Brossy"), an independent compensation consultant, to provide the Compensation Committee with independent, objective analysis and advice on executive compensation matters. Semler Brossy reports directly to the Chair of the Compensation Committee and performs no other work for the Company.

Semler Brossy generally attends all meetings of the Compensation Committee in which evaluations of the effectiveness of overall executive compensation programs are conducted or in which compensation for executive officers is analyzed or approved. During fiscal year 2016, Semler Brossy's duties included providing the Compensation Committee with relevant market and industry data and analysis, as well as preparing and reviewing materials for the Compensation Committee's meetings. In fulfilling these duties, Semler Brossy met, as needed and at the direction of the Compensation Committee, with our Chief Executive Officer, Senior Vice President of Human Resources and other members of our Human Resources department.

The Compensation Committee determined that the work of Semler Brossy in fiscal year 2016 did not raise any conflicts of interest.

Approval Procedures

During multiple meetings (both with and without Company management present) and with the assistance of Semler Brossy, the Compensation Committee engaged in extensive deliberation in developing the fiscal year 2016 executive compensation program, seeking to establish compensation packages and target performance levels aimed at rewarding strong financial performance and long-term success of the Company. The Compensation Committee's deliberations for all executive officers took into account a broad range of market data (described below), individual performance reviews and total compensation reports for each officer, the cyclical nature of our business, internally appropriate levels and targets relative to the officer's role, and initial package recommendations from Semler Brossy and management. With regard to our Bonus Plan and performance shares, the proposed financial metrics and payout percentage recommendations were developed by Company management and approved by the Compensation Committee, with review and guidance from Semler Brossy.

With respect to the Chief Executive Officer's compensation, the Compensation Committee considered a performance review conducted by the Independent Board Members and

recommendations prepared by Semler Brossy. Following extensive deliberation, the Compensation Committee recommended Mr. Wallace's proposed fiscal year 2016 target compensation opportunities to the Independent Board Members. The Independent Board Members then discussed and, in August 2015, approved Mr. Wallace's fiscal year 2016 target compensation opportunities as recommended. Mr. Wallace was not present and did not participate in the discussions regarding his own compensation.

For the other Named Executive Officers, the Compensation Committee, after considering the performance reviews and recommendations of Mr. Wallace, as well as extensive comparative compensation data provided by Semler Brossy, approved the target compensation opportunities for the other Named Executive Officers in August 2015.

In each case, when establishing each element of compensation and the overall target compensation opportunities for the Named Executive Officers, the Compensation Committee and the Independent Board Members exercised their judgment based upon the data provided, and no specific formula was applied to determine the weight of each data point.

Market Data

Our ability to continue to attract and retain outstanding contributors, including our core executive team, is essential to our continuing success. Therefore, the Compensation Committee reviews a number of different data sources (including the Company's compensation peer group and broader market data) to assess whether we are offering compensation opportunities that are competitive with those offered by other employers seeking to attract the same talented individuals.

The compensation peer group is comprised of U.S. publicly traded companies in the semiconductor and semiconductor equipment industries that had at least 0.3x the Company's trailing four-quarter revenues and at least 0.2x the Company's 200-day average market capitalization value.

Below is the list of compensation peer group companies used in developing our fiscal year 2016 program:

- · Advanced Micro Devices, Inc.
- Altera Corporation
- · Analog Devices, Inc.
- · Applied Materials, Inc.
- Atmel Corporation
- · Avago Technologies Limited
- · Broadcom Corporation
- · Cree, Inc.
- · First Solar, Inc.
- · Lam Research Corporation
- Linear Technology Corporation
- Marvell Technology Group Ltd.
- Maxim Integrated Products, Inc. Microchip Technology, Inc.
- Micron Technology, Inc. Microsemi Corporation
- NVIDIA Corporation
- ON Semiconductor Corporation
- · Skyworks Solutions, Inc.
- · SunEdison, Inc.
- · SunPower Corporation
- · Teradyne, Inc.
- Texas Instruments Incorporated Xilinx, Inc.

The Compensation Committee periodically reviews and, as appropriate, may approve changes to the list. In the second half of fiscal year 2016, the Compensation Committee removed Altera Corporation and Atmel Corporation from the list of peer group companies following the completion of their acquisitions by Intel and Microchip Technology, respectively. In addition, in 2016 the business combination transaction between Broadcom Corporation and Avago Technologies Limited was completed.

When assessing our fiscal year 2016 program, the Compensation Committee reviewed information developed by Semler Brossy regarding the compensation levels, programs and practices of our compensation peer group to obtain comparative data and identify compensation trends and practices.

Though the Compensation Committee referred to percentile data in its analysis, as well as allocations between annual and long-term compensation, the Compensation Committee did not employ specific equations for determining compensation amounts based on such data. Rather, the Compensation Committee's emphasis was on establishing compensation packages for the executive officers that would be competitive with those offered by other employers, appropriately reflect each executive officer's skill set and experience, and encourage retention of top performers.

Tax Considerations

Section 162(m) of the Internal Revenue Code ("Section 162(m)") disallows an income tax deduction to publicly-traded companies for compensation paid to the Chief Executive Officer and the three other highest paid executive officers (other than the Chief Financial Officer) for compensation that exceeds \$1.0 million per officer in any taxable year, unless the compensation qualifies as "performance-based compensation" within the meaning of Section 162(m). Our 2004 Equity Plan is structured to allow the Compensation Committee the ability to approve awards under the 2004 Equity Plan to these executive officers that could qualify as performance-based compensation under Section 162(m).

Our Bonus Plan is a cash bonus plan structured in a manner to allow us to qualify all or part of the compensation earned under that plan as performance-based compensation under Section 162(m) and take a corporate income tax deduction for all amounts paid thereunder.

Notwithstanding the design of the 2004 Equity Plan and the Bonus Plan, the Compensation Committee retains the discretion to determine whether to grant awards under our 2004 Equity Plan or our Bonus Plan that qualify as performance-based compensation under Section 162(m). The Compensation Committee believes that the potential deductibility of the compensation payable under our executive compensation program should be only one of a number of relevant factors taken into consideration when establishing the program, and not the sole or primary factor. We may from time to time pay compensation or grant equity awards to our executive officers that may not be deductible when, for example, we believe that such compensation is appropriate and in the best interests of our stockholders, after taking into consideration changing business conditions and/or the executive officer's performance.

Claw-back Policy

We maintain a claw-back policy, which is set forth in the Compensation Committee's charter. This policy provides that in the event of a significant restatement of financial results resulting from fraud, misconduct, material non-compliance or material errors, the Compensation Committee may direct that the Company recover all or a portion of performance-based compensation, including bonuses and long-term incentive awards, made to executive officers during the restatement period. This direction may be made by the Compensation Committee in its sole discretion, as long as the Compensation Committee is acting in good faith and in compliance with applicable laws. The policy states that the amount to be recovered from an executive officer will be the amount by which the performance-based compensation exceeded

the amount that would have been payable to the executive officer had the financial statements been initially filed as restated. However, the Compensation Committee has the discretion to direct the Company to recover any different amount (including the entire award) that the Compensation Committee may determine. In addition, the Compensation Committee may, in its discretion, recover different amounts from different executive officers on any basis as the Compensation Committee deems appropriate and, to the extent it determines to seek any such recovery, has full discretion regarding the form of such recovery. More information regarding this policy is contained in the Compensation Committee's charter, which is available on our Investor Relations website at http://ir.kla-tencor.com.

Merger Agreement with Lam Research

The Merger Agreement with Lam Research contains certain limitations on our executive officer compensation practices while the Merger Agreement is in effect unless we obtain Lam Research's consent, including with respect to the following:

- significantly increasing base salary or short term cash incentives;
- granting performance share awards;
- granting service-based restricted stock unit awards to employees that contain dividend equivalent rights or that vest upon a change of control;
 and
- increasing the number of shares underlying service-based restricted stock unit awards.

COMPENSATION COMMITTEE REPORT

The information contained in this report shall not be deemed to be "soliciting material" or "filed" with the SEC or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that KLA-Tencor specifically incorporates it by reference into a document filed under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

The Compensation Committee has reviewed and discussed with management the Compensation Discussion and Analysis. Based on that review and its discussions, the Compensation Committee recommended to the Board that the Compensation Discussion and Analysis be included in this Proxy Statement.

Kevin J. Kennedy, Chairman Edward W. Barnholt Gary B. Moore Robert A. Rango

EXECUTIVE COMPENSATION TABLES

Summary Compensation Table

The following table sets forth certain summary information concerning the compensation earned for services rendered in all capacities to the Company and its subsidiaries for the fiscal years ended June 30, 2016, 2015 and 2014 by our Chief Executive Officer, our Chief Financial Officer and our three other most highly compensated executive officers in fiscal year 2016 who were serving as executive officers as of June 30, 2016. No other executive officers who would have otherwise been included in this table on the basis of their compensation for the fiscal year ended June 30, 2016 have been excluded by reason of their termination of employment or change in executive status during that year. Mr. Khan did not serve as an executive officer of the Company during any part of the fiscal year ended June 30, 2014. Therefore, his compensation information for that fiscal year is not included in the following table. The individuals named in the table below are referred to as our "Named Executive Officers."

Name and Principal Position	Year	Salary (\$) ⁽¹⁾	Stock Awards (\$) ⁽²⁾	Non-Equity Incentive Plan Compensation (\$)(1)(3)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)(4)	All Other Compensation (\$)(5)	Total (\$)
<u> </u>	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Richard P. Wallace	2016	934,615	5,501,505(6)	4,205,769	_	1,984,664	12,626,553
President & Chief	2015	900,000	6,303,440(7)	1,153,845	_	25,613	8,382,898
Executive Officer	2014	900,000	4,721,617(8)	1,242,945	_	24,951	6,889,513
Bren D. Higgins	2016	457,693	1,376,675(6)	1,098,462	_	255,640	3,188,470
Executive Vice	2015	390,385	1,310,829(7)	279,640	_	6,001	1,986,855
President & Chief	2014	328,846	1,289,059(8)	229,370	_	5,207	1,852,482
Financial Officer							
Bobby R. Bell	2016	519,231	1,833,835(6)	1,401,923	_	650,006	4,404,995
Executive Vice	2015	488,462	2,098,759(7)	322,062	_	128,709	3,037,992
President	2014	440,000	1,416,485(8)	441,936	_	24,730	2,323,151
Michael D. Kirk	2016	519,231	1,833,835(6)	1,401,923	_	650,006	4,404,995
Executive Vice	2015	488,462	2,098,759(7)	393,632	_	128,709	3,109,562
President, Wafer	2014	440,000	1,416,485(8)	405,108	_	24,730	2,286,323
Inspection Division							
Ahmad A. Khan	2016	478,846	1,376,675(6)	1,095,935	_	372,648	3,324,104
Executive Vice	2015	395,192	1,310,829(7)	241,265	_	107,046	2,054,332
President, Patterning Division							
DIVISIOII							

- (1) Includes amounts deferred under our 401(k) plan, a tax-qualified deferred compensation plan under Section 401(k) of the Internal Revenue Code, and our EDSP, a nonqualified deferred compensation program available to the executive officers and certain other employees.
- (2) The amounts shown in column (d) represent the aggregate grant date fair value of all RSUs and performance shares awarded to the particular executive officer during the applicable fiscal year. For further discussion regarding the assumptions used in calculating the grant date fair value for RSUs and performance shares, please refer to Note 1 to the Company's consolidated financial statements in Item 8 of the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2016, filed with the SEC on August 5, 2016.

The RSUs and performance shares granted in fiscal year 2016 were issued with dividend equivalent rights pursuant to an amendment to the 2004 Equity Plan. These dividend equivalent rights entitle the recipient to receive credits, payable in cash or additional shares of our

Common Stock, equal to the cash dividends that would have been received on the shares of our Common Stock had the shares been issued and outstanding on the dividend record date. The dividend equivalents would only be paid to the recipient upon vesting or settlement of the underlying award (including satisfaction of any performance-vesting criteria associated with any performance-based awards).

With respect to RSUs (i.e., awards issued with only service-based vesting criteria and no performance-based vesting criteria), the grant date fair value of each such RSU has been computed in accordance with the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 718, referred to in this Proxy Statement as ASC 718 (except that the fair values set forth above have not been reduced by the Company's estimated forfeiture rate). The ASC 718 grant date fair value of each RSU award was calculated based on the closing fair market value of our Common Stock on the grant date (reduced, with respect to awards granted during fiscal year 2014, by the present value of estimated forgone dividends over the vesting period).

With respect to performance shares (i.e., awards issued with both service-based and performance-based vesting criteria), the grant date fair value of each such award has been computed in accordance with ASC 718 based on the probable outcome (determined as of the grant date) of the performance-based conditions applicable to the awards and the closing fair market value of our Common Stock on the grant date (reduced, with respect to awards granted during fiscal year 2014, by the present value of estimated forgone dividends over the vesting period). For more information regarding specific awards, please refer to footnotes (6), (7) and (8) to this Summary Compensation Table.

We did not grant any stock options to any of the Named Executive Officers during fiscal years 2016, 2015 or 2014.

- (3) The amounts shown in column (e) for fiscal years 2016, 2015 and 2014 reflect the payments earned by each Named Executive Officer under our Bonus Plan for the applicable fiscal year.
- (4) Of the Named Executive Officers, Messrs. Wallace, Bell, Kirk and Khan participated in our EDSP during fiscal years 2016, 2015 or 2014. No portion of the applicable Named Executive Officer's investment earnings (or losses, as applicable) during fiscal years 2016, 2015 or 2014 on his nonqualified deferred compensation account under the EDSP was "above market" or "preferential." Each Named Executive Officer's earnings (or losses, as applicable) corresponded to the actual market earnings (or losses, as applicable) on a select group of investment funds utilized to track the notional investment return on the officer's account balance for the applicable fiscal year. The investment earnings (or losses, as applicable) under the EDSP for the Named Executive Officers who participated in such plan during the fiscal years listed in the Summary Compensation Table above were as follows:

		Earnings on Named Executive
Name	Year	Officer's EDSP Account (\$)
Richard P. Wallace	2016	18,120
	2015	66,766
	2014	246,497
Bobby R. Bell	2016	12,771
	2015	108,226
	2014	327,225
Michael D. Kirk	2016	8,613
	2015	40,934
	2014	139,981
Ahmad A. Khan	2016	1,337
	2015	12,031

For more information regarding the participation of the Named Executive Officers in the EDSP, please refer to the section of this Proxy Statement below entitled "Nonqualified Deferred Compensation."

(5) The amounts presented in column (g) consist of the following: For the fiscal year ended June 30, 2016:

	Company	Company-Paid		Dividend	
	Matching	Financial Planning	Term Life	Equivalents	
	Contribution to	and Tax Preparation	Insurance	Paid in Fiscal	Total
Name	401(k) Plan (\$)	Costs (\$)	Premiums (\$)	Year 2016 (\$)	(\$)
Richard P. Wallace	4,000	19,505	1,440	1,959,719	1,984,664
Bren D. Higgins	4,000	11,104	1,272	239,264	255,640
Bobby R. Bell	4,000	19,505	1,440	625,061	650,006
Michael D. Kirk	4,000	19,505	1,440	625,061	650,006
Ahmad A. Khan	4,000	9,776	1,332	357,540	372,648

The RSUs and performance shares granted to the Named Executive Officers in fiscal year 2016 were issued with dividend equivalent rights pursuant to the 2004 Equity Plan. These dividend equivalent rights entitle the recipient to receive credits, payable in cash or additional shares of our Common Stock, equal to the cash dividends that would have been received on the shares of our Common Stock had the shares been issued and outstanding on the dividend equivalents would only be paid to the recipient upon vesting or settlement of the underlying award (including satisfaction of any performance-eventing criteria associated with any performance-based awards). During fiscal year 2016, we paid dividend equivalents, including the amounts associated with the special cash dividend described above, in cash only.

For the fiscal year ended June 30, 2015:

					Tax Gross-Up		
	Company	Company-Paid			Amount	Dividend	
	Matching	Financial Planning	Term Life		Related to	Equivalents	
	Contribution to	and Tax Preparation	Insurance	Recognition	Recognition	Paid in Fiscal	Total
Name	401(k) Plan (\$)	Costs (\$)	Premiums (\$)	Gift (\$)	Gift (\$)	Year 2015 (\$)	(\$)
Richard P. Wallace	4,000	19,300	1,440	873	_	_	25,613
Bren D. Higgins	4,000	_	1,128	873	_	_	6,001
Bobby R. Bell	4,000	19,300	1,411	873	_	103,125	128,709
Michael D. Kirk	4,000	19,300	1,411	873	_	103,125	128,709
Ahmad A. Khan	_	_	1,410	873	1,908	103,125	107,316

The RSUs and performance shares granted to the Named Executive Officers in fiscal year 2015 were issued with dividend equivalent rights pursuant to the 2004 Equity Plan. These dividend equivalent rights entitle the recipient to receive credits, payable in cash or additional shares of our Common Stock, equal to the cash dividends that would have been received on the shares of our Common Stock had the shares been issued and outstanding on the dividend equivalents would only be paid to the recipient upon vesting or settlement of the underlying award (including satisfaction of any performance-vesting criteria associated with any performance-based awards). In November 2014, our Board declared a special cash dividend of \$16.50 per share on our outstanding Common Stock, which was substantially paid in December 2014. In connection with the special cash dividend, our Board and Compensation Committee approved an equitable and proportionate adjustment to the then-outstanding equity awards (RSUs and stock options) under the 2004 Equity Plan, as required by the 2004 Equity Plan that will be paid subject to the vesting requirements of the underlying awards. Accordingly, as a result of such adjustment, Messrs. Bell, Kirk and Khan each received \$103,125 upon the vesting of RSUs held by each of them in fiscal year 2015. During fiscal year 2015, we paid dividend equivalents, including the amounts associated with the special cash dividend described above, in cash only.

For the fiscal year ended June 30, 2014:

					Tax Gross-Up	
					Amount	
		Company-Paid			Related to	
	Company Matching	Financial Planning	Term Life	Performance	Performance	
	Contribution to 401(k)	and Tax Preparation	Insurance	Recognition	Recognition	
Name	Plan (\$)	Costs (\$)	Premiums (\$)	Award (\$)	Award (\$)	Total (\$)
Richard P. Wallace	4,000	19,300	1,224	195	232	24,951
Bren D. Higgins	4,000	_	780	195	232	5,207
Bobby R. Bell	4,000	19,300	1,003	195	232	24,730
Michael D. Kirk	4 000	19 300	1 003	195	232	24 730

- A portion of this amount reflects the estimated fair value of performance shares based on the probable outcome (determined as of the grant date) of the performance-based conditions applicable to the awards and the closing fair market value of our Common Stock on the grant date. The number of shares issuable under the fiscal year 2016 performance awards will be determined by the Company's Relative Free Cash Flow Margin over fiscal years 2016, 2017 and 2018 relative to our compensation peer group. The fiscal year 2016 performance awards are structured so that 100% of the target number of shares underlying the awards will be earned upon achievement by KLA-Tencor of a target Relative Free Cash Flow Margin percentile performance among this peer group (the 55th percentile), and up to 125% of that target number of shares could be earned for performance at or above the 75th percentile. Because the Company's relative performance over the three-year performance period was undeterminable as of the grant date of the performance awards, the probable outcome of the performance-based conditions applicable to the awards as of the grant date, for purposes of the calculations set forth in this table, has been determined to be equal to 100% of the target number of shares underlying the applicable award. Accordingly, the amounts included in the table above attributable to performance awards granted during fiscal year 2016 are as follows: (a) for Mr. Wallace, \$2,750,753; (b) for Mr. Kirk, \$916,918; and (e) for Mr. Khan, \$688,338. The grant date fair value of the fiscal year 2016 performance awards, if earned at their maximum, would be as follows: (a) for Mr. Wallace, \$3,438,415; (b) for Mr. Higgins, \$860,396; (c) for Mr. Bell, \$1,146,121; (d) for Mr. Kirk, \$1,146,121; and (e) for Mr. Khan, \$860,396. The Company's achievement of the performance-based conditions applicable to the fiscal year 2016 performance shares (and therefore the number of shares issuable under the fiscal year 2016 performance shares) will be determined by the Co
- (7) A portion of this amount reflects the estimated fair value of performance shares based on the probable outcome (determined as of the grant date) of the performance-based conditions applicable to the awards and the closing fair market value of our Common Stock on the grant date, adjusted to exclude the present value of dividends foregone over the vesting period. The number of shares issuable under the fiscal year 2015 performance awards will be determined by the Company's Relative Free Cash Flow Margin over fiscal years 2015, 2016 and 2017 relative to our compensation peer group. The fiscal year 2015 performance awards are structured so that 100% of the target number of shares underlying the awards will be earned upon achievement by KLA-Tencor of a target Relative Free Cash Flow Margin percentile performance among this peer group (the 55th percentile), and up to 125% of that target number of shares could be earned for performance at or above the 75th percentile. Because the Company's relative performance over the three-year performance period was undeterminable as of the grant date of the performance awards, the probable outcome of the performance-based conditions applicable to the awards as of the grant date, for purposes of

- the calculations set forth in this table, has been determined to be equal to 100% of the target number of shares underlying the applicable award. Accordingly, the amounts included in the table above attributable to performance awards granted during fiscal year 2015 are as follows: (a) for Mr. Wallace, \$3,151,720; (b) for Mr. Higgins, \$655,415; (c) for Mr. Bell, \$1,049,380; (d) for Mr. Kirk, \$1,049,380; and (e) for Mr. Kark, \$1,049,380; and (e) for Mr. Bell, \$1,141,724; (d) for Mr. Wallace, \$3,393,650; (b) for Mr. Higgins, \$1,311,724; (d) for Mr. Kirk, \$1,311,724; (a) for Mr. Kirk, \$1,248,724; (a) for Mr. Bell, \$1,248,724; (a) for Mr. Bell, \$1,248,724; (a) for Mr. Kirk, \$1,311,724; (a) for Mr. Bell, \$1,248,724; (a) for Mr. Kirk, \$1,311,724; (a) for Mr. Bell, \$1,311,724; (a) for Mr. Kirk, \$1,311,724; (a) for Mr. Kirk, \$1,311,724; (a) for Mr. Wallace, \$1,311,724; (a) for Mr. Wallac
- (8) A portion of this amount reflects the estimated fair value of performance shares based on the probable outcome (determined as of the grant date) of the performance-based conditions applicable to the awards and the closing fair market value of our Common Stock on the grant date, adjusted to exclude the present value of dividends foregone over the vesting period. The number of shares issuable under the fiscal year 2014 performance awards will be determined by the Company's Relative Free Cash Flow Margin over fiscal years 2014, 2015 and 2016 relative to our compensation peer group. The fiscal year 2014 performance awards are structured so that 100% of the target number of shares underlying the awards will be earned upon achievement by KLA-Tencor of a target Relative Free Cash Flow Margin percentile performance awards in the grant date of the performance awards, the probable outcome of the performance at or above the 75th percentile. Because the Company's relative performance over the three-year performance period was undeterminable as of the grant date of the performance awards, the probable outcome of the performance-based conditions applicable to the awards as of the grant date, for purposes of the calculations set forth in this table, has been determined to be equal to 100% of the target number of shares underlying the applicable awards. Accordingly, the amounts included in the table above attributable to performance awards granted during fiscal year 2014 are as follows:

 (a) for Mr. Wallace, \$2,322,535; (b) for Mr. Higgins, \$373,171; (c) for Mr. Bell, \$696,761; and (d) for Mr. Kirk, \$696,761. The grant date fair value of the fiscal year 2015 performance awards, if earned at their maximum, would be as follows: (a) for Mr. Wallace, \$2,903,169; (b) for Mr. Higgins, \$466,464; (c) for Mr. Bell, \$870,951; and (d) for Mr. Kirk, \$870,951. Following the completion of fiscal year 2016, the Compensation Committee (and, with respect to Mr. Wallace, the independent members of the Board) determined that the Company's Re

Grants of Plan-Based Awards

The following table provides certain summary information concerning each grant of an award made to a Named Executive Officer during the fiscal year ended June 30, 2016 under a compensation plan. No stock options or stock appreciation rights were granted to any of the Named Executive Officers during the fiscal year ended June 30, 2016.

		Potential Payouts Under Non-Equity Incentive Plan Awards(1)			Potential Future Payouts Under Equity Incentive Plan Awards			Grant Date Fair Value of Equity
Name and Principal Position (a)	Grant Date (b)	Threshold (\$) ⁽²⁾ (c)	Target (\$) ⁽³⁾ (d)	Maximum (\$) ⁽⁴⁾ (e)	Threshold (#) ⁽⁵⁾ (f)	Target (#)(6)	Maximum (#) ⁽⁷⁾ (h)	Awards (\$)(8) (i)
	(0)				(1)	(g)	(11)	(1)
Richard P. Wallace President & Chief Executive Officer	8/6/2015 ⁽⁹⁾ 8/6/2015 ⁽¹⁰⁾	148,500	1,350,000	4,050,000	13,237 52,950	52,950 52,950	66,187 52,950	2,750,753 2,750,753
Bren D. Higgins Executive Vice President & Chief Financial Officer	8/6/2015 ⁽⁹⁾ 8/6/2015 ⁽¹⁰⁾	35,200	320,000	960,000	3,312 13,250	13,250 13,250	16,562 13,250	688,338 688,338
Bobby R. Bell Executive Vice President	8/6/2015 ⁽⁹⁾ 8/6/2015 ⁽¹⁰⁾	49,500	450,000	1,350,000	4,412 17,650	17,650 17,650	22,062 17,650	916,918 916,918
Michael D. Kirk Executive Vice President, Wafer Inspection Division	8/6/2015 ⁽⁹⁾ 8/6/2015 ⁽¹⁰⁾	49,500	450,000	1,350,000	4,412 17,650	17,650 17,650	22,062 17,650	916,918 916,918
Ahmad A. Khan, Executive Vice President, Patterning Division	8/6/2015 ⁽⁹⁾ 8/6/2015 ⁽¹⁰⁾	33,000	300,000	900,000	3,312 13,250	13,250 13,250	16,562 13,250	688,338 688,338

- (1) The amounts set forth in the table as "Potential Payouts Under Non-Equity Incentive Plan Awards" reflect the potential cash payouts (threshold, target and maximum) that could have been earned under our fiscal year 2016 Bonus Plan based on the Company's performance for fiscal year 2016. In August 2016, following the completion of fiscal year 2016, the Company's actual performance was measured against the pre-established performance targets. Based on that measurement, the actual bonus amount under the fiscal year 2016 Bonus Plan was calculated for each Named Executive Officer. That bonus amount is reflected in the Summary Compensation Table in the column "Non-Equity Incentive Plan Compensation."
- (2) The threshold amount is calculated as the minimum amount that would have been payable under the fiscal year 2016 Bonus Plan to the applicable Named Executive Officer assuming satisfaction of the initial performance threshold required to fund the Bonus Plan (disregarding, for purposes of this calculation, potential downward adjustments of an executive's bonus payout based on that executive's individual performance multiplier (which could reduce an executive's bayout to 80% of the amount presented in the table above)). Under the structure of the fiscal year 2016 Bonus Plan, the actual percentage of the executive's bayout to 80% of the amount presented in the table above)). Under the structure of the fiscal year 2016 Bonus Plan was determined by a combination of (a) the Company's achieved level of Operating Margin Dollars, and (b) an assessment by the Compensation Committee (or the independent members of the Board, as applicable) of the extent to which the Company's balanced scorecard goals for the fiscal year had been achieved. If the Company had achieved exactly the threshold level of Operating Margin Dollars required to fund the fiscal year 2016 Bonus Plan (and no higher), the Compensation Committee and the independent members of the Board would have been able to set such percentage as low as ten percent (10%) of the executives' target bonus amounts based on their assessment of the Company's balanced scorecard achievement.
- (3) The amount in column (d) reflects the amount that would have been payable under the fiscal year 2016 Bonus Plan to the applicable Named Executive Officer assuming payment of the officer's full target bonus. Under the structure of the fiscal year 2016 Bonus Plan, a payout of 100% of a participant's target bonus was payable upon Company achievement of its target level of operating results (in terms of both the Company's Operating Margin Dollar achievement and the Company's achievement of its balanced scorecard goals).
- (4) The amount in column (e) reflects the maximum amount that was potentially payable under the fiscal year 2016 Bonus Plan to the applicable Named Executive Officer. Under the structure of the fiscal year 2016 Bonus Plan, each Named Executive Officer could potentially have earned up to 300% of his target bonus, based on the Company's Operating Margin Dollar achievement and the Compensation Committee's assessment of the Company's achievement of its balanced scorecard goals and the officer's individual performance multiplier.

- (5) The threshold amount is calculated as the minimum number of shares that would be able to be earned under the fiscal year 2016 RSUs (i.e., awards issued with only service-based vesting criteria) and performance shares (i.e., awards issued with both service-based and performance-based vesting criteria) granted to the applicable Named Executive Officer assuming satisfaction of the initial performance threshold, if any, required to earn any shares under the applicable award.
 - With respect to the fiscal year 2016 RSUs, they contain no performance-based vesting criteria (and therefore no initial performance threshold), so the total number of shares subject to such RSU is reported in column (f). With respect to the fiscal year 2016 performance shares, under the structure of such awards, the actual number of shares that will be potentially issuable under such award will be determined by the Company's three-year Relative Free Cash Flow Margin over fiscal years 2016, 2017 and 2018. The number of shares reported in column (f) reflects the number of shares that would be earned by the applicable officer if the Company were to achieve, for the three-year performance occurred by those awards, exactly the threshold level of Relative Free Cash Flow Margin percentile performance (the 30th percentile) necessary to earn any shares under the fiscal year 2016 performance share awards. If the Company were to achieve exactly the threshold level of Relative Free Cash Flow Margin percentile performance for such period (and no higher), then twenty-five percent (25%) of the target number of shares subject to such awards would be able to be earned by each Named Executive Officer, subject to such officer's satisfaction of the service-based vesting criteria applicable to such awards.
- (6) The target amount is calculated as the number of shares that would be able to be earned under the fiscal year 2016 RSUs and performance shares granted to the applicable Named Executive Officer assuming Company performance at target.
 - With respect to the fiscal year 2016 RSUs, they contain no performance-based vesting criteria, so the total number of shares subject to such RSU is reported in column (g).
 - With respect to the fiscal year 2016 performance shares, the number of shares reported in column (g) reflects the number of shares that would be earned by the applicable officer if the Company were to achieve exactly its target level of three-year Relative Free Cash Flow Margin percentile performance (the 55th percentile) for the three-year performance period covered by those awards. If the Company were to achieve that target level of Relative Free Cash Flow Margin percentile performance, then one hundred percent (100%) of the target number of shares subject to the fiscal year 2016 performance shares would be able to be earned by each Named Executive Officer, subject to such officer's satisfaction of the service-based vesting criteria applicable to such awards.
- (7) The maximum amount reflects the maximum number of shares potentially earnable under the applicable award.
 - With respect to the fiscal year 2016 RSUs, they contain no performance-based vesting criteria, so the total number of shares subject to such RSU is reported in column (h).
 - With respect to the fiscal year 2016 performance shares, the number of shares reported in column (h) reflects the maximum number of shares that can potentially be earned by the applicable officer under those awards. Under the terms of the fiscal year 2016 performance shares, each Named Executive Officer can potentially earn up to one hundred twenty-five percent (125%) of the target number of shares subject to those awards if the Company's three-year Relative Free Cash Flow Margin percentile performance for fiscal years 2016, 2017 and 2018 equals or exceeds the 75th percentile, subject to such officer's satisfaction of the service-based vesting criteria applicable to such awards.
- (8) The dollar value reported in column (i) represents the grant date fair value of the applicable RSU or performance share award calculated in accordance with the SEC's applicable requirements.
 - With respect to RSUs, the grant date fair value of each such RSU has been computed in accordance with ASC 718 (except that the fair values set forth above have not been reduced by the Company's estimated forfeiture rate). The ASC 718 grant date fair value of each RSU award was calculated based on the closing fair market value of our Common Stock on the grant date.
 - With respect to performance shares, the grant date fair value of each such award has been computed in accordance with ASC 718 based on the probable outcome (determined as of the grant date) of the performance-based conditions applicable to the awards and the closing fair market value of our Common Stock on the grant date. Because the performance shares granted during fiscal year 2016 were structured so that they would be fully earned upon achievement by KLA-Tencor of its target level of three-year Relative Free Cash Flow Margin percentile performance over fiscal years 2016, 2017 and 2018 (a target that was considered difficult to achieve at the time of grant), the probable outcome of the performance-based conditions applicable to the awards as of the grant date, for purposes of the calculations set forth in this table, has been determined to be equal to the target number of shares potentially issuable under the applicable award.
- (9) Reflects an award of performance shares (equal to one-half of the executive officer's annual equity award for fiscal year 2016) that have both a performance-vesting component tied to the Company's three-year Relative Free Cash Flow Margin over fiscal years 2016, 2017 and 2018 and a service-vesting component tied to continued service. The achievement of the performance-vesting component of these performance shares (i.e., the number of shares that will be issuable to each of the Named Executive Officers under his performance share award, if he satisfies the applicable service-vesting requirements) will be determined following the completion of fiscal year 2018. Fifty percent (50%) of the earned shares will vest on the three-year anniversary of the grant date (or on the date that such shares are determined to have been earned, if that date is later than the three-year anniversary of the grant date, provided the Named Executive Officer continues in our employ through the applicable vesting date. The underlying shares may also vest on an accelerated basis in the event the officer's employment terminates under certain circumstances, as described in the section of this Proxy Statement entitled "Potential Payments Upon Termination or Change of Control."

(10) Reflects an award of RSUs (equal to one-half of the executive officer's annual equity award for fiscal year 2016) that only has a service-vesting component tied to continued service beyond fiscal year 2016. Twenty-five percent (25%) of the shares will vest on the one-year anniversary of the grant date, and an additional twenty-five percent (25%) will vest on each of the second, third and fourth yearly anniversaries of the grant date, provided the Named Executive Officer continues in our employ through the applicable vesting date. The underlying shares may also vest on an accelerated basis in the event the officer's employment terminates under certain circumstances, as described in the section of this Proxy Statement entitled "Potential Payments Upon Termination or Change of Control."

Outstanding Equity Awards at Fiscal Year End

The following table provides certain summary information concerning outstanding equity awards held by the Named Executive Officers as of June 30, 2016. None of the Named Executive Officers held stock option awards as of June 30, 2016.

	Stock Awards	
	Number of Shares or Units of Stock	Market Value of Shares or Units of
Name and Principal Position	That Have Not Vested (#)	Stock That Have Not Vested (\$) (1)
Richard P. Wallace	66,187 ⁽²⁾	4,848,198
President & Chief Executive Officer	55,000(3)	4,028,750
	55,625(4)	4,074,531
	29,437(5)	2,156,260
	119,975(6)	8,788,169
Bren D. Higgins	16,562(2)	1,213,167
Executive Vice President &	11,437(3)	837,760
Chief Financial Officer	8,937(4)	654,635
	1,962(5)	143,717
	24,471(6)	1,792,501
	6,570(7)	481,253
Bobby R. Bell	22,062(2)	1,616,042
Executive Vice President	18,312(3)	1,341,354
	16,687(4)	1,222,323
	6,562 ⁽⁵⁾	480,667
	44,186(6)	3,236,625
	10,400(7)	761,800
Michael D. Kirk	22,062(2)	1,616,042
Executive Vice President,	18,312(3)	1,341,354
Wafer Inspection	16,687(4)	1,222,323
Division	6,562(5)	480,667
	44,186(6)	3,236,625
	10,400(7)	761,800
Ahmad A. Khan	16,562 ⁽²⁾	1,213,167
Executive Vice President,	11,437(3)	837,760
Patterning Division	8,891(4)	651,266
	3,269(5)	239,454
	31,225(6)	2,287,231
	3,135 ⁽⁷⁾	229,639

- (1) Calculated based on the \$73.25 closing price per share of our Common Stock on June 30, 2016.
- (2) These grants represent the maximum number of shares of our Common Stock that could be earned under performance share awards that were granted to the applicable executive officer in August 2015 in connection with their service during fiscal year 2016. The achievement of the performance-vesting component of these performance shares (i.e., the number of shares that will be issuable to each of the Named Executive Officers under his performance share award, if he satisfies the applicable service-vesting requirements) will be determined following the completion of fiscal year 2018 based on the Company's three-year Relative Free Cash Flow Margin over fiscal years 2016, 2017 and 2018. Fifty percent (50%) of the earned shares will vest on the three-year anniversary of the grant date (or on the date that such shares are determined to have been earned, if that date is later than the three-year anniversary of the grant date, provided the Named Executive Officer continues in our employ through the applicable vesting date. The underlying shares may also vest on an accelerated basis in the event the officer's employment terminates under certain circumstances, as described in the section of this Proxy Statement entitled "Potential Payments Upon Termination or Change of Control."

- These grants represent the maximum number of shares of our Common Stock that could be earned under performance share awards that were granted to the applicable executive officer in August 2014 in connection with their service during fiscal year 2015. The achievement of the performance-vesting component of these performance shares (i.e., the number of shares that will be issuable to each of the Named Executive Officers under his performance share award, if he satisfies the applicable service-vesting requirements) will be determined following the completion of fiscal year 2017 based on the Company's three-year Relative Free Cash Flow Margin over fiscal years 2015, 2016 and 2017. Fifty percent (50%) of the earned shares will vest on the three-year anniversary of the grant date (or on the date that such shares are determined to have been earned, if that date is later than the three-year anniversary of the grant date, and the remaining fifty percent (50%) will vest on the four-year anniversary of the grant date, provided the Named Executive Officer continues in our employ through the applicable vesting date. The underlying shares may also vest on an accelerated basis in the event the officer's employment terminates under certain circumstances, as described in the section of this Proxy Statement entitled "Potential Payments Upon Termination or Change of Control."
- (4) These grants represent the maximum number of shares of our Common Stock that could be earned under performance share awards that were granted to the applicable executive officer in 2013 in connection with their service during fiscal year 2014. The achievement of the performance-vesting component of these performance shares (i.e., the number of shares that will be issuable to each of the Named Executive Officers under his performance share award, if he satisfies the applicable service-vesting requirements) was determined to be above the 75th percentile following the completion of fiscal year 2016 based on the Company's three-year Relative Free Cash Flow Margin over fiscal years 2014, 2015 and 2016 relative to our compensation peer group and, therefore, the number of shares earned under the fiscal year 2014 performance awards was determined to be 125% of the target number of shares underlying the applicable awards. Fifty percent (50%) of the earned shares will vest on the three-year anniversary of the grant date (or on the date that such shares are determined to have been earned, if that date is later than the three-year anniversary of the grant date), and the remaining fifty percent (50%) will vest on the four-year anniversary of the grant date, provided the Named Executive Officer continues in our employ through the applicable vesting date. The underlying shares may also vest on an accelerated basis in the event the officer's employment terminates under certain circumstances, as described in the section of this Proxy Statement entitled "Potential Payments Upon Termination or Change of Control."
- (5) These grants represent the number of shares of our Common Stock earned under performance share awards that were granted to the applicable executive officer in 2012 in connection with their service during fiscal year 2013. On September 3, 2015, following the completion of fiscal year 2015, the Compensation Committee (and, with respect to Mr. Wallace, the independent members of the Board) determined that the Company's Relative Free Cash Flow Margin over fiscal years 2013, 2014 and 2015 relative to our compensation peer group was above the 75th percentile and, therefore, the number of shares earned under the fiscal year 2013 performance awards was determined to be 125% of the target number of shares underlying the applicable awards. Fifty percent (50%) of the earned shares will vest on the three-year anniversary of the grant date (or on the date that such shares are determined to have been earned, if that date is later than the three-year anniversary of the grant date), and the remaining fifty percent (50%) will vest on the four-year anniversary of the grant date, provided the Named Executive Officer continues in our employ through the applicable vesting date. The underlying shares may also vest on an accelerated basis in the event the officer's employment terminates under certain circumstances, as described in the section of this Proxy Statement entitled "Potential Payments Upon Termination or Change of Control."

(6) These RSUs were granted with only service-based vesting criteria that vests over a four-year period of service with the Company measured from the award date. Each RSU represents the right to receive one share of our Common Stock upon the vesting of that unit. Twenty-five percent (25%) of the total number of shares underlying these awards will vest and become issuable upon completion of one year of service measured from the grant date, and an additional twenty-five percent (25%) will vest on each of the second, third and fourth yearly anniversaries of the grant date, provided the Named Executive Officer continues in our employ through the applicable vesting date. The RSUs will vest on an accelerated basis in the event the officer's employment terminates under certain circumstances, as described in the section of this Proxy Statement entitled "Potential Payments Upon Termination or Change of Control."

		Total Number of Shares Subject to	Number of Shares Vested and
Name	RSU Award Date	Award	Issued Before July 1, 2016
Richard P. Wallace	8/6/2015	52,950	_
	8/7/2014	44,000	11,000
	8/6/2013	44,500	22,250
	8/2/2012	47,100	35,325
Bren D. Higgins	8/6/2015	13,250	
	8/7/2014	9,150	2,288
	8/6/2013	7,150	3,576
	9/7/2012	3,140	2,355
Bobby R. Bell	8/6/2015	17,650	_
	8/7/2014	14,650	3,663
	8/6/2013	13,350	6,676
	2/6/2013	25,000	18,750
	8/2/2012	10,500	7,875
Michael D. Kirk	8/6/2015	17,650	
	8/7/2014	14,650	3,663
	8/6/2013	13,350	6,676
	2/6/2013	25,000	18,750
	8/2/2012	10,500	7,875
Ahmad Khan	8/6/2015	13,250	_
	8/7/2014	9,150	2,288
	9/4/2013	7,112	3,556
	2/6/2013	25,000	18,750
	9/7/2012	5,230	3,923

(7) These RSUs are part of an award (either an RSU award granted with only service-based vesting criteria or a performance share award that, as of June 30, 2016, had been earned in part or in full) that vests over a four-year period of service with the Company measured from the award date. Each RSU represents the right to receive one share of our Common Stock upon the vesting of that unit. Fifty percent (50%) of the total number of shares underlying these awards will vest and become issuable upon completion of two years of service measured from the grant date, and the remaining fifty percent (50%) will vest and become issuable upon completion of four years of service measured from the grant date, and the remaining fifty percent (50%) will vest and become issuable upon completion of four years of service measured from the grant date, and the remaining fifty percent (50%) will vest and become issuable upon completion of four years of service measured from the grant date, and the remaining fifty percent (50%) will vest and become issuable upon completion of four years of service measured from the grant date, and the remaining fifty percent (50%) will vest and become issuable upon completion of four years of service measured from the grant date, and the remaining fifty percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest and become issuable upon completion of the percent (50%) will vest

		Total Number of Shares Subject to	Number of Shares Vested and
Name	RSU Award Date	Award	Issued Before July 1, 2016
Bren D. Higgins	8/6/2013	10,000	5,000
	9/7/2012	3,140	1,570
Bobby R. Bell	8/2/2012	20,800	10,400
Michael D. Kirk	8/2/2012	20,800	10,400
Ahmad A. Khan	9/7/2012	6,270	3,135

Option Exercises and Stock Vested

The following table sets forth information with respect to shares of our Common Stock subject to restricted stock, RSU or performance share awards held by the Named Executive Officers that vested during the fiscal year ended June 30, 2016. No stock appreciation rights or stock options were held or exercised by the Named Executive Officers during the fiscal year ended June 30, 2016.

	Stock Awards						
Name and Principal Position	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(1)					
Richard P. Wallace President & Chief Executive Officer	117,438 ⁽²⁾	6,021,000					
Bren D. Higgins Executive Vice President & Chief Financial Officer	14,224(2)	721,493					
Bobby R. Bell Executive Vice President	37,439(2)	2,012,082					
Michael D. Kirk Executive Vice President, Wafer Inspection Division	37,439(2)	2,012,082					
Ahmad A. Khan Executive Vice President, Patterning Division	21,392(2)	1,152,058					

- (1) Based on the closing market price of the vested shares on the vesting date (or, if the vesting date occurred on a day on which the NASDAQ Stock Market was closed for trading, the closing market price of our Common Stock on the last completed trading day immediately prior to the vesting date).
- (2) Our 2004 Equity Plan allows us to withhold shares issuable upon a vesting event to pay for the applicable withholding tax with respect to such vesting event. The gross number of shares acquired on vesting, which is set forth in the table above, was reduced by the withheld shares, and the net remaining shares were issued to each officer. The following reflects the net number of shares that were issued to each officer, after giving effect to such withholding, during the fiscal year ended June 30, 2016: Mr. Wallace: 58,385 shares; Mr. Higgins: 8,411 shares; Mr. Bell: 20,048 shares; Mr. Kirk: 20,048 shares; and Mr. Khan: 11,730 shares.

Nonqualified Deferred Compensation

We have established the EDSP in order to provide our executive officers and other key employees with the opportunity to defer all or a portion of their cash compensation each year. Pursuant to the plan, each participant can elect to defer between 5 to 100% of his or her salary, commissions and bonuses for the fiscal year. The deferred amount is credited to an account maintained in his or her name on our books. The portion of the account attributable to the participant's deferral is fully vested at all times but is not matched with any Company funds. The account is periodically adjusted to reflect earnings (or losses) based on the participant's investment elections among a select group of investment funds utilized to track the notional investment return on the account balance. As of June 30, 2016, there were a total of 22 investment funds available for selection under the EDSP, and the participant may periodically change his or her investment elections. The participant may elect to receive his or her vested account balance upon termination of employment or at an earlier designated date. The distribution may, at the participant's election, be made in a lump sum or in quarterly installments over a period ranging from five years to fifteen years, depending on the

circumstances triggering the distribution event. A participant can receive an early distribution of a portion of his or her vested account balance in the event of a financial hardship or in the event he or she agrees to forfeit a designated percentage of his or her remaining account balance. We maintain life insurance policies on EDSP participants as a funding vehicle for a portion of our obligations under the EDSP.

The following table shows the deferred compensation activity for each Named Executive Officer during the fiscal year ended June 30, 2016:

Name and Principal Position	Executive Contributions in Fiscal Year 2016 (\$)	Company Contributions in Fiscal Year 2016 (\$)	Aggregate Earnings in Fiscal Year 2016 (\$)(1)(2)	Aggregate Withdrawals/ Distributions (\$)	Aggregate Balance as of June 30, 2016 (\$)
(a)	(b)	(c)	(d)	(e)	(f)
Richard P. Wallace President & Chief Executive Officer	_	_	18,120	_	1,455,351
Bren D. Higgins Executive Vice President & Chief Financial Officer	_	_	_	_	_
Bobby R. Bell Executive Vice President	_	_	12,771	_	2,111,883
Michael D. Kirk Executive Vice President, Wafer Inspection Division	_	_	8,613	_	1,091,817
Ahmad A. Khan Executive Vice President, Patterning Division	_	_	1,337	6,788	256,705

⁽¹⁾ The reported amount corresponds to a composite of the actual market earnings on a group of investment funds selected by the applicable executive officer for purposes of tracking the notional investment return on the officer's account balance for fiscal year 2016. No portion of the reported amount was "above market" or "preferential." Accordingly, amounts reported in this column (d) for each Named Executive Officer are not reported in the "Change in Pension Value and Nonqualified Deferred Compensation Earnings" column of the Summary Compensation Table.

(2) The 23 investment funds named below were available for selection under the EDSP for some or all of fiscal year 2016. The rate of return for each such fund for fiscal year 2016 was as follows:

Name of Fund	% Rate of Return for Fiscal year 2016
American Funds IS Growth 2	1.91%
Deutsche Small Cap Index VIP A	(6.95%)
DFA VA US Targeted Value	(5.25%)
Dreyfus IP Technology Growth Initial	0.31%
MFS VIT Global Equity Initial	(1.50%)
MFS VIT Utilities	(0.45%)
PIMCO VIT Total Return Instl	4.54%
Rydex VT Energy	(17.21%)
T. Rowe Price Blue Chip Growth	(1.68%)
T. Rowe Price Equity Income(*)	(0.38%)
T. Rowe Price Health Sciences	(14.09%)
T. Rowe Price Mid Cap Growth	0.20%
Templeton VIP Foreign 1	(12.48%)
Transamerica JP Morgan Mid Cap Value VP Initial	2.12%
Vanguard VIF Balanced	4.75%
Vanguard VIF Equity Income (*)	3.09%
Vanguard VIF Equity Index	3.87%
Vanguard VIF High Yield Bond	2.15%
Vanguard VIF International Inv	(8.50%)
Vanguard VIF REIT Index	23.75%
Vanguard VIF Small Company Growth	(8.01%)
Vanguard VIF Total Bond Market Index	6.06%
Wells Fargo Cash Investment Money Market I	0.23%

^(*) The rates of return set forth in the table above reflect the rates of return of these investments for the portion of fiscal year 2016 during which these investments were available for selection under the EDSP.

Potential Payments Upon Termination or Change of Control

In January 2006, our Board adopted an Executive Severance Plan (the "Original Severance Plan"). In November 2010, our Compensation Committee adopted a 2010 Executive Severance Plan (the "2010 Severance Plan"). The 2010 Severance Plan exists in parallel with the Original Severance Plan, which remains in full force and effect for existing participants under that plan until terminated or modified in accordance with its terms. No participant under the 2010 Severance Plan is eligible to simultaneously participate under the Original Severance Plan is eligible to simultaneously participate under the 2010 Severance Plan.

The Original Severance Plan and the 2010 Severance Plan each provide certain compensation and benefits in the event that a participant's employment with us terminates under certain defined circumstances. In exchange for receiving severance benefits under either plan, the participant will be subject to a non-compete covenant and non-solicitation restrictions for the period of time co-terminous with the period for which he or she will receive continued compensation and benefits under the applicable severance plan. Each severance plan also contains a mitigation provision in which the benefits payable are subject to reduction to the extent the participant earns post-termination compensation from sources other than the Company. All of our Named Executive Officers participated in either the Original Severance Plan or the 2010 Severance Plan during fiscal year 2016, as described in more detail below.

The terms of and benefits payable under our two severance plans are in many ways similar to one another. However, unlike the Original Severance Plan, the 2010 Severance Plan does not contain tax gross-up provisions related to excise taxes that may be imposed by Section 4999 of the Internal Revenue Code of 1986, as amended (the "Code"), as the result of a participant receiving a payment that would constitute a "parachute payment" within the meaning of Code Section 280G upon or in connection with a change of control of the Company. Instead, the 2010 Severance Plan contains a "best results" provision, which is described in more detail below. In addition, as part of a routine assessment of competitive market practices for executive severance benefits, the Board of Directors approved amendments to the Original Severance Plan and 2010 Severance Plan on September 21, 2015 (the "2015 Severance Plan Amendments") to remove the mitigation provisions and the non-compete covenants described in the preceding paragraph, and provide that all cash severance amounts are payable under the applicable plan in a lump sum. The 2015 Severance Plan Amendments also revised the Original Severance Plan and 2010 Severance Plan to include the Executive Retiree Medical Benefits and make certain other clarifications. For additional information about this benefit, please refer to the "Executive Retiree Medical Program" description.

Original Severance Plan:

Mr. Wallace currently participates in the Original Severance Plan, which was amended by the 2015 Severance Plan Amendments in September 2015.

If Mr. Wallace is terminated other than for cause, or voluntarily resigns for good reason, prior to a change of control, then he will receive (i) salary continuation payments for two years (which was changed to a lump sum payment pursuant to the 2015 Severance Plan Amendments), (ii) a pro-rated annual incentive payment for the fiscal year of his termination or resignation (calculated based on his annual incentive bonus for the then-most recently completed fiscal year and the proportion of the then-current fiscal year served through the date

of termination or resignation), (iii) pro-rated vesting of all of his outstanding equity awards through the date of his termination or resignation (rounded up to the next whole month and disregarding any "cliff-vesting" provisions applicable to the award), and (iv) the extension of the post-termination exercise period of each stock option or stock appreciation right granted after January 1, 2006 so that the option or right will remain exercisable for twelve months following the date of termination or resignation, but in no event beyond the original term of the award. The calculation in clause (iii) of this paragraph with respect to any performance-based equity awards for which the achievement of the applicable performance criteria has not yet been determined as of the participant's termination date will be delayed until the extent of the achievement of those criteria (and thus the maximum number of shares issuable under the applicable award) has been finally determined in accordance with the terms of the applicable award.

If Mr. Wallace is terminated other than for cause, or voluntarily resigns for good reason, within two years following a change of control, then he will receive (i) salary continuation payments for three years (which was changed to a lump sum payment pursuant to the 2015 Severance Plan Amendments), (ii) an amount equal to three times his average annual bonus for the preceding three completed fiscal years, payable in equal installments over the salary continuation period (which was changed to a lump sum payment pursuant to the 2015 Severance Plan Amendments), (iii) a pro-rated annual incentive payment for the fiscal year of his termination or resignation (calculated as described in clause (ii) of the preceding paragraph), (iv) 100% vesting acceleration of all of his outstanding equity awards, (v) an additional \$2,000 per month for the three-year severance period (which was changed to a lump sum payment pursuant to the 2015 Severance Plan Amendments) and (vi) the extension of the post-termination exercise period of each stock option or stock appreciation right granted after January 1, 2006 so that the option or right will remain exercisable for twelve months following the date of termination or resignation, but in no event beyond the original term of the award. As of June 30, 2016, the calculation in clause (iv) of this paragraph with respect to any performance-based equity awards for which the achievement of the applicable performance criteria had not yet been determined as of the participant's termination date would have been calculated, pursuant to the terms of the applicable awards, based on a shortened performance period, which would have been deemed to have ended as of the most recent fiscal quarter end preceding the closing date of the change of control.

Mr. Wallace also is eligible for the Executive Retiree Medical Benefits in accordance with the terms described above.

In addition, Mr. Wallace will be entitled under certain circumstances to a full tax gross-up payment to cover any excise tax liability he may incur under Code Section 4999 and the resulting income and employment tax liability attributable to that payment, should the benefits to which he becomes entitled in connection with a change of control constitute parachute payments that exceed by more than \$50,000 the maximum parachute payment otherwise allowable under the federal tax laws without the imposition of Section 4999 excise tax.

The RSUs and performance shares granted to Mr. Wallace in fiscal year 2016 were issued with dividend equivalent rights pursuant to the 2004 Equity Plan. These dividend equivalent rights entitle the recipient to receive credits, payable in cash or additional shares of our Common Stock, equal to the cash dividends that would have been received on the shares of our Common Stock had the shares been issued and outstanding on the dividend record date. The dividend equivalents would only be paid to the recipient upon vesting or settlement of the underlying

award (including satisfaction of any performance-vesting criteria associated with any performance-based awards). In November 2014, our Board declared a special cash dividend of \$16.50 per share on our outstanding Common Stock, which was substantially paid in December 2014. In connection with the special cash dividend, our Board and Compensation Committee approved an equitable and proportionate adjustment to then-outstanding equity awards (RSUs and stock options) under the 2004 Equity Plan, as required by the 2004 Equity Plan, which will be paid subject to the vesting requirements of the underlying awards. Accordingly, in connection with an acceleration of vesting of some or all outstanding equity awards held by Mr. Wallace, as applicable, Mr. Wallace would be entitled to receive accrued dividend equivalents and the benefit of the equitable and proportionate adjustment of the special cash dividend attributable to such outstanding equity awards that accelerate.

2010 Severance Plan:

Messrs. Higgins, Bell, Kirk and Khan participate in the 2010 Severance Plan, which was amended by the 2015 Severance Plan Amendments in September 2015. They each have the right to receive benefits under that plan solely in connection with a termination of their employment under certain circumstances within one year following a change of control of the Company.

If Mr. Higgins, Mr. Bell, Mr. Kirk or Mr. Khan is terminated other than for cause, or voluntarily resigns for good reason, within one year following a change of control, then such officer will receive (i) salary continuation payments for 18 months (which was changed to a lump sum payment pursuant to the 2015 Severance Plan Amendments), (ii) a pro-rated annual incentive payment for the fiscal year of his termination or resignation (calculated based on such officer's annual incentive bonus for the then-most recently completed fiscal year and the proportion of the then-current fiscal year served through the date of termination or resignation), (iii) 100% vesting acceleration of all of his outstanding equity awards, and (iv) the extension of the post-termination exercise period of each stock option or stock appreciation right granted after January 1, 2006 so that the option or right will remain exercisable for twelve months following the date of termination or resignation, but in no event beyond the original term of the award. As of June 30, 2016, the calculation in clause (iii) of this paragraph with respect to any performance-based equity awards for which the achievement of the applicable performance criteria had not yet been determined as of the participant's termination date would have been calculated, pursuant to the terms of the applicable awards, based on a shortened performance period, which would have been deemed to have ended as of the most recent fiscal quarter end preceding the closing date of the change of control.

Mr. Bell may also be eligible for the Executive Retiree Medical Benefits in accordance with the terms described above.

The RSUs and performance shares granted to Messrs. Higgins, Bell, Kirk and Khan in fiscal year 2016 were issued with dividend equivalent rights pursuant to the 2004 Equity Plan. These dividend equivalent rights entitle the recipient to receive credits, payable in cash or additional shares of our Common Stock, equal to the cash dividends that would have been received on the shares of our Common Stock had the shares been issued and outstanding on the dividend record date. The dividend equivalents would only be paid to the recipient upon vesting or settlement of the underlying award (including satisfaction of any performance-vesting criteria associated with any performance-based awards). In November 2014, our Board declared a special cash dividend of \$16.50 per share on our outstanding Common Stock, which was

substantially paid in December 2014. In connection with the special cash dividend, our Board and Compensation Committee approved an equitable and proportionate adjustment to outstanding equity awards (RSUs and stock options) under the 2004 Equity Plan, as required by the 2004 Equity Plan, which will be paid subject to the vesting requirements of the underlying awards. Accordingly, in connection with an acceleration of vesting of all outstanding equity awards held by Messrs. Higgins, Bell, Kirk or Khan, such officer would be entitled to receive accrued dividend equivalents and the benefit of the equitable and proportionate adjustment for the special cash dividend attributable to his accelerated equity awards.

As noted above, the 2010 Severance Plan does not contain tax gross-up provisions related to excise taxes that may be imposed by Code Section 4999 as the result of a participant receiving a payment that would constitute a "parachute payment" within the meaning of Code Section 280G upon or in connection with a change of control of the Company. Instead, the 2010 Severance Plan provides that, if a payment under the 2010 Severance Plan would constitute such a "parachute payment" and would therefore be subject to Code Section 4999 excise tax, then the payment will be reduced to either (a) the largest portion of the payment that would result in no portion of the payment being subject to the excise tax, or (b) the largest portion, up to and including the total, of the payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the excise tax (all computed at the highest applicable marginal rate), results in the participant's receipt, on an after-tax basis, of the greater amount of the payment, notwithstanding that all or some portion of the payment may be subject to the excise tax.

Table Reflecting Potential Termination and Change of Control Payments

The following table shows the estimated amounts that would have been payable to each of the Named Executive Officers upon the occurrence of each of the indicated events, had the applicable event occurred on June 30, 2016. For such officers, the amount attributable to the accelerated vesting of stock options, performance shares and RSUs is based upon the closing fair market value of our Common Stock on the last trading day of fiscal year 2016. That value was \$73.25 per share, as reported on the NASDAQ Global Select Market on June 30, 2016. The actual compensation and benefits the officer would receive at any subsequent date would likely vary from the amounts set forth below as a result of certain factors, such as a change in the price of our Common Stock and any additional benefits the officer may have accrued as of that time under applicable benefit or compensation plans.

The amounts that would have been payable to each of our Named Executive Officers upon the occurrence of the indicated event had the applicable event occurred on June 30, 2016 are as follows:

Original Severance Plan

Name and Principal Position	Event	Salary/Bonus Continuation & Additional Monthly Payments (\$)	Pro-rated Bonus (\$)	Accelerated Vesting of Stock Awards (\$) ⁽¹⁾	Payment of Dividend Equivalents (\$) ⁽²⁾	Excise Tax Gross-Up (\$)	Total (\$)
Richard P. Wallace President & Chief Executive Officer	Termination without Cause or Resignation for Good Reason ⁽⁴⁾	1,800,000	1,153,845	11,244,296 ⁽⁴⁾	2,287,796	_	16,485,937
	Termination without Cause or Resignation for Good Reason following Change of Control(4)(6)	6,612,596	1,153,845	23,509,185(6)	3,909,612	_	35,185,238

2010 Severance Plan

Name and Principal Position	Event	Salary Continuation Payments (\$)	Pro-rated Bonus (\$)	Accelerated Vesting of Stock Awards (\$) ⁽¹⁾	Payment of Dividend Equivalents (\$) ⁽²⁾	Reduction (If Any) to Maximize Net Amount Received (\$)	Total (\$)
Bren D. Higgins Executive Vice President and Chief Financial Officer	Termination without Cause or Resignation for Good Reason following Change of Control(3)(5)	675,000	279,640	5,042,713 ⁽⁶⁾	774,809	(924,084)	5,848,078
Bobby R. Bell Executive Vice President	Termination without Cause or Resignation for Good Reason following Change of Control ⁽³⁾⁽⁵⁾	750,000	322,062	8,530,146(6)	1,459,346	_	11,061,554
Michael D. Kirk Executive Vice President, Wafer Inspection Division	Termination without Cause or Resignation for Good Reason following Change of Control ⁽³⁾⁽⁵⁾	750,000	393,632	8,530,146(6)	1,459,346	_	11,133,124
Ahmad A. Khan, Executive Vice President, Patterning Division	Termination without Cause or Resignation for Good Reason following Change of Control(3)(5)	712,500	241,265	5,378,180(6)	850,375	_	7,182,320

(1) As noted above, pursuant to the terms of the Original Severance Plan and the 2010 Severance Plan, the vesting acceleration of outstanding equity awards, when applied to any performance-based equity awards for which the achievement of the applicable performance criteria has not yet been determined as of the participant's termination date, is to be delayed until the extent of the achievement of those criteria (and thus the maximum number of shares issuable under the applicable award) has been finally determined in accordance with the terms of the applicable award, except that, under the Original Severance Plan and the 2010 Severance Plan, in a qualifying termination following a Change of Control, the vesting acceleration of performance-based equity awards for which the achievement of the applicable performance criteria has not yet been determined as of the participant's termination date is based on a shortened performance period, which would have been deemed to have ended as of the most recent fiscal quarter end preceding the closing date of the Change of Control.

The number of shares earnable under the fiscal year 2016 performance share awards is based on the Company's achieved level of three-year Relative Free Cash Flow Margin over fiscal years 2016, 2017 and 2018. Under the terms of the fiscal year 2016 performance share awards, however, in the event of a Change of Control of the Company during the three-year performance period, the performance period will be shortened, so that it ends as of the most recent fiscal quarter end preceding the closing date of the Change of Control. Using that methodology, the fiscal year 2016 performance share awards have been included for purposes of this table at 125% of the target number of shares underlying the awards.

The number of shares earnable under the fiscal year 2015 performance share awards is based on the Company's achieved level of three-year Relative Free Cash Flow Margin over fiscal years 2015, 2016 and 2017. Under the terms of the fiscal year 2015 performance share awards, however, in the event of a Change of Control of the Company during the three-year performance period, the performance period will be shortened, so that it ends as of the most recent fiscal quarter end preceding the closing date of the Change of Control. Using that methodology, the fiscal year 2014 performance share awards have been included for purposes of this table at 113% of the target number of shares underlying the awards.

The number of shares earnable under the fiscal year 2014 performance share awards is based on the Company's achieved level of three-year Relative Free Cash Flow Margin over fiscal years 2014, 2015 and 2016. Under the terms of the fiscal year 2014 performance share awards, however, in the event of a Change of Control of the Company during the three-year performance period, the performance period will be shortened, so that it ends as of the most recent fiscal quarter end preceding the closing date of the Change of Control. Using that methodology, the fiscal year 2014 performance share awards have been included for purposes of this table at 125% of the target number of shares underlying the awards.

- (2) The RSUs and performance shares granted to Messrs. Wallace, Higgins, Bell, Kirk and Khan in fiscal year 2016 were issued with dividend equivalent rights pursuant to the 2004 Equity Plan. These dividend equivalent rights entitle the recipient to receive credits, payable in cash or additional shares of our Common Stock, equal to the eash dividends that would have been received on the shares of our Common Stock had the shares been issued and outstanding on the dividend record date. The dividend equivalents would only be paid to the recipient upon vesting or settlement of the underlying award (including satisfaction of any performance-vesting criteria associated with any performance-based awards). In November 2014, our Board declared a special cash dividend of \$16.50 per share on our outstanding Common Stock, which was substantially paid in December 2014. In connection with the special cash dividend, our Board and Compensation Committee approved an equitable and proportionate adjustment to outstanding equity awards (RSUs and stock options) under the 2004 Equity Plan, as required by the 2004 Equity Plan, which will be paid subject to the vesting requirements of the underlying awards. Accordingly, in connection with an acceleration of vesting of some or all of outstanding equity awards held by Mr. Wallace, Mr. Higgins, Mr. Bell, Mr. Kirk and Mr. Khan would be entitled to receive accrued dividend equivalents and the benefit of the equitable and proportionate adjustment of the special cash dividend attributable to his accelerated equity awards.
- (3) For purposes of the Original Severance Plan and the 2010 Severance Plan, "Cause" means (A) outside of the applicable period following a Change of Control (two years for the Original Severance Plan; one year for the 2010 Severance Plan), the occurrence of any of the following events: (i) the participant's conviction of, or plea of nolo contendre to, a felony; (ii) the participant's goss misconduct; (iii) any material act of personal dishonesty taken by the participant in connection with his or her responsibilities as an employee of the Company, or (iv) the participant's willfull and continued failure to perform the duties and responsibilities of his or her position after there has been delivered to the participant a written demand for performance from the Board which describes the basis for the Board's belief that the participant has not substantially performed his or her duties and provides the participant with thirty (30) days to take corrective action, and (B) within the applicable period following a Change of Control, the occurrence of any of the following events: (i) the participant's conviction of, or plea of nolo contendre to, a felony that the Board reasonably believes has had or will have a material detrimental effect on our reputation or business; (ii) the participant's willful gross misconduct with regard to the Company with the intention or reasonable expectation that such action may result in substantial personal enrichment of the participant or (iv) the participant's willful and continued failure to perform the duties and responsibilities of his or her position after there has been delivered to the participant at written demand for performance from the Board which describes the basis for the Board's belief that the participant has not substantially performed his or her duties and provides the participant with thirty (30) days to take corrective action.

For purposes of the Original Severance Plan and the 2010 Severance Plan, "Good Reason" means the occurrence of any of the following events without the participant's written consent: (i) a material change in the participant's reporting requirements such that the participant is required to report to a person whose duties, responsibilities and authority are materially less than those of the person to whom the

participant was reporting immediately prior to such change; (ii) a material reduction of the participant's duties, authority or responsibilities; (iii) a material reduction in the participant's base salary, other than a reduction that applies to other executives generally; (iv) a material reduction in the aggregate level of the participant's overall compensation, other than a reduction that applies to other executives generally; or (v) a material relocation of the participant's office, with a relocation of more than fifty (50) miles from its then present location to be deemed material, unless such relocated office is closer to the participant's then principal residence; provided however, that in no event shall Good Reason exist unless (a) the participant provides us, within ninety (90) days after the occurrence of the event or transaction, written notice specifying in detail the grounds for a purported Good Reason resignation, (b) we fail to cure the purported grounds for the Good Reason within thirty (30) days following the receipt of such notice, and (c) the participant resigns within sixty (60) days after we fail to take such timely curative action, but in no event more than one hundred eighty (180) days after the occurrence of the event or transaction identified in the notice to us as the grounds for the Good Reason resignation.

- (4) The vesting schedules for the RSUs and performance shares outstanding as of June 30, 2016 are listed in the footnotes to the table entitled "Outstanding Equity Awards at Fiscal Year End." The amounts marked by this footnote (4) reflect the pro-rated vesting of the applicable officer's outstanding equity awards through the date of his termination or resignation, without giving effect to the "cliff-vesting" provisions applicable to the awards and considering the maximum potential payout for the performance based awards.
- (5) For purposes of the Original Severance Plan and the 2010 Severance Plan, a "Change of Control" means the occurrence of any of the following events: (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becoming the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities representing 50% or more of the total voting power represented by our then outstanding voting securities; (ii) the sale or disposition by us of all or substantially all of our assets; (iii) the consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in our voting securities outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or (iv) a change in the composition of our Board, as a result of which fewer than a majority of the directors are Incumbent Directors (where "Incumbent Directors" means directors who either (A) were directors of the Company as of a specified date (February 16, 2006 for the Original Severance Plan; November 3, 2010 for the 2010 Severance Plan), or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of those directors whose election or nomination was not in connection with any transactions described in subsections (i), (ii) or (iii), or in connection with an actual or threatened proxy contest relating to the election of directors of the Company).
- (6) The amounts marked by this footnote (6) reflect both (a) the pro-rated vesting of the applicable officer's outstanding equity awards through the date of his termination or resignation, without giving effect to the "cliff-vesting" provisions applicable to the awards, and (b) the accelerated vesting of the applicable officer's outstanding equity awards for service periods after the date of his termination or resignation. The following table provides the breakdown for each such reported amount:

Name	Value of Pro-Rated Vesting Through Date of Termination/ Resignation (\$)	Value of Accelerated Vesting for Service Period After Date of Termination/ Resignation (\$)	Total Value Reported (\$)
Richard P. Wallace	11,058,992	12,450,193	23,509,185
Bren D. Higgins	2,067,628	2,975,085	5,042,713
Bobby R. Bell	4,166,973	4,363,173	8,530,146
Michael D. Kirk	4,166,973	4,363,173	8,530,146
Ahmad A. Khan	2.287.744	3,090,436	5,378,180

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Review, Approval or Ratification of Related Party Transactions

Our Standards of Business Conduct require that all employees and Directors avoid conflicts of interests, including situations in which their personal interests interfere in any way, or appear to interfere, with the interests of KLA-Tencor.

In addition, our Board has adopted a written policy and procedures for the review, approval or ratification of related party transactions. Under this policy, the Audit Committee reviews transactions, arrangements or relationships in which the Company (including any of its subsidiaries) is a participant, the amount involved exceeds \$100,000 in any fiscal year, and one of our executive officers, Directors, Director nominees or 5% stockholders (or their immediate family members) has a direct or indirect material interest (other than solely as a result of being a director or beneficial owner of less than a specified percentage of shares of the other entity (5% for publicly traded entities and 10% for other entities)). As part of that review, the Audit Committee may consider such factors as it determines to be appropriate under the circumstances, which factors may include the position of the related party with the Company, the related party's interest in the transaction, the materiality of the transaction, the business purpose for and reasonableness of the transaction, and comparable market terms for similar transactions that do not involve related parties.

Following that review, if the Audit Committee concludes that the terms of the related party transaction are acceptable and appropriate, the Audit Committee either approves or ratifies (as applicable) the transaction. No member of the Audit Committee participates in the review of a transaction for which he or she is the related party. The related party transaction policy created standing pre-approval for certain recurring related party transactions, including, among others, (i) executive officer or Director compensation that has been approved by the Compensation Committee or the Board, and (ii) any contract, transaction or arrangement with any party who was not a related party at the time such contract, transaction or arrangement was entered into with the Company, and renewals or extensions thereof pursuant to contractual arrangements in effect and binding on the Company prior to the date that the party became a related party.

Transactions with Related Persons

There were no transactions in which KLA-Tencor was a participant during fiscal year 2016 where the aggregate amount involved exceeded \$120,000 and any related person had a material direct or indirect interest (as determined, and as required to be reported, in accordance with SEC rules and regulations).

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of June 30, 2016 with respect to shares of our Common Stock that may be issued under our existing equity compensation plans:

	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights ⁽¹⁾	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights B	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in Column A) C
Equity Compensation Plans Approved by Stockholders ⁽²⁾	1,678,922		8,167,060(3)(4)(5)
Equity Compensation Plans Not Approved by Stockholders ⁽⁶⁾	0	_	_
Total	1,678,922	_	8,167,060

- (1) Includes 1,678,922 shares of our Common Stock subject to RSUs that will entitle each holder to the issuance of one share of our Common Stock for each unit that vests over the holder's period of continued employment with the Company. Excludes purchase rights accruing under our 1997 Amended and Restated Employee Stock Purchase Plan (the "Purchase Plan"). Under the Purchase Plan, each eligible employee may purchase shares of Common Stock at each semi-annual purchase date (the last day of June and December each year), up to a maximum of \$25,000 worth of stock (determined on the basis of the fair market value per share on the date the purchase right is granted) for each calendar year the purchase right remains outstanding. As of June 30, 2016, the date of the information set forth in the table above (and a date on which a purchase occurred under the Purchase Plan), the purchase price payable per share under the terms of the Purchase Plan was equal to eighty-five percent (85%) of the lower of (i) the closing selling price per share of our Common Stock on the purchase date is not a trading day, on the immediately preceding trading day).
- (2) Consists of our (a) 2004 Equity Plan, (b) Purchase Plan, and (c) 1998 Outside Director Option Plan (the "Outside Director Plan").
- (3) Includes shares of our Common Stock available for future issuance as of June 30, 2016 under the 2004 Equity Plan (5,118,369 shares), the Purchase Plan (1,389,101 shares), and the Outside Director Plan (1,659,590 shares).
- (4) As of June 30, 2016, 5,118,369 shares of our Common Stock were available for issuance under the 2004 Equity Plan. Shares reserved for issuance under the 2004 Equity Plan may be issued pursuant to full value awards such as restricted stock awards or RSUs that vest upon the completion of designated service periods or performance units or performance shares that vest upon the attainment of prescribed performance milestones (and the completion of designated service periods) and upon the exercise of stock options or stock appreciation rights. Shares issued pursuant to full value awards made under the 2004 Equity Plan (a) prior to November 6, 2013 reduce the share reserve available under the 2004 Equity Plan by 2.0 shares for every one full value share issued; and (b) on or after November 6, 2013 reduce the share reserve available under the 2004 Equity Plan by 2.0 shares for every one full value share issued.
- (5) As of June 30, 2016 (after giving effect to the purchase under the Purchase Plan on that date), 1,389,101 shares of our Common Stock were reserved for issuance under the Purchase Plan. The Purchase Plan contains an annual automatic share renewal provision pursuant to which the number of shares of our Common Stock reserved for issuance under the Purchase Plan will automatically increase on the first day of each fiscal year by an amount equal to the lesser of 2,000,000 shares or the number of shares which we estimate will be required to be issued under the Purchase Plan during the forthcoming fiscal year.
- (6) Excludes information for options assumed by us in connection with acquisitions of companies. As of June 30, 2016, a total of 100 shares of our Common Stock were issuable upon exercise of outstanding options assumed in those acquisitions and issued under the following plan, which has not been approved by our stockholders: Therma-Wave, Inc. 2000 Equity Incentive Plan (as amended) (the "Therma-Wave 2000 Equity Plan"). The weighted-average exercise price of those outstanding options is \$33.76 per share. No additional options may be granted under the Therma-Wave 2000 Equity Plan under which these options were assumed.

REPORT OF THE AUDIT COMMITTEE

KLA-Tencor's Audit Committee is comprised of Outside Directors, each of whom meets current standards of independence and financial experience requirements of the NASDAQ Stock Market. Each of Ms. Higashi and Messrs. Calderoni, Patel and Wang has served on the Audit Committee from the beginning of fiscal year 2016 through the date of this Proxy Statement, with Mr. Calderoni serving as the Chairman of the Committee. Robert T. Bond served on the Audit Committee from the beginning of fiscal year 2016 until the 2015 Annual Meeting in November 2015, at which time Mr. Dickson replaced him on the Audit Committee.

The Board has determined that, of the current members of the Audit Committee, each of Mr. Calderoni, Ms. Higashi, Mr. Dickson and Mr. Patel is an "audit committee financial expert" within the meaning of the rules and regulations promulgated by the SEC. The Board has adopted a written charter for the Audit Committee that details the responsibilities of the Audit Committee. This report relates to the activities undertaken by the Audit Committee In fulfilling such responsibilities. The charter is reviewed at least annually for changes, as appropriate, and is posted on KLA-Tencor's website at http://ir.kla-tencor.com in the Corporate Governance section.

KLA-Tencor's management is responsible for establishing and maintaining a system of internal controls and the financial reporting process. The Audit Committee is responsible for overseeing the Company's auditing, accounting and financial reporting processes, system of internal controls, and legal and ethical compliance. This report relates to the activities undertaken by the Audit Committee in fulfilling such responsibilities. During fiscal year 2016 and subsequent to the completion of the fiscal year, the Audit Committee reviewed, discussed and provided input to management on the Company's audited consolidated financial statements contained in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2016. The Audit Committee also met routinely with PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm, with and without members of the Company's management team present, to evaluate and approve the Company's internal controls and the overall quality of the Company's financial reporting. The Audit Committee also met with the Company's Chief Executive Officer and Chief Financial Officer to discuss and act, as necessary, on accounting issues and risks facing the Company.

The Audit Committee also discussed with the independent registered public accounting firm the matters required to be discussed by Statement on Auditing Standards No. 61, as amended (and/or superseded) (AICPA, Professional Standards, Vol. 1, AU Section 380), as adopted by the Public Company Accounting Oversight Board ("PCAOB") in Rule 3200T.

The Audit Committee received from the independent registered public accounting firm the written disclosures and the letter required by the applicable requirements of the PCAOB regarding the independent registered public accounting firm's communications with the Audit Committee concerning independence. In addition, on a quarterly basis, the members of the Audit Committee discussed with the independent registered public accounting firm reaffirmed the independence of the Audit Committee members. After reviewing such information, the Audit Committee determined that the independent registered public accounting firm is independent from management and KLA-Tencor. The Audit Committee also concluded that the provision of services covered by fees paid to the independent registered public accounting firm was compatible with maintaining their independence.

Based on the reviews and discussions referred to above, the Audit Committee recommended to the Board, and the Board approved, the inclusion of the audited financial statements in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2016, filed with the SEC on August 5, 2016.

MEMBERS OF THE AUDIT COMMITTEE

Robert M. Calderoni, Chairman John T. Dickson Emiko Higashi Kiran M. Patel David C. Wang

KLA-TENCOR ANNUAL MEETING OF STOCKHOLDERS NOVEMBER 2, 2016

12:00 p.m., local time

KLA-Tencor Milpitas Facility Building Three Three Technology Drive Milpitas, California 95035

Directions to KLA-Tencor's Milpitas Facility:

From Highway 237 Heading East:

Exit at McCarthy Boulevard. At the stop light, turn right onto McCarthy Boulevard. At the next intersection, turn right onto Technology Drive. KLA-Tencor is on the right side.

From Highway 237 Heading West:

Exit at McCarthy Boulevard. At the stop light, turn left onto McCarthy Boulevard (this will take you back over the freeway). At the next intersection, turn right onto Technology Drive. KLA-Tencor is on the right side.



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Electronic Voting Instructions

Available 24 hours a day, 7 days a week!

Instead of mailing your proxy, you may choose one of the voting methods outlined below to vote your proxy.

VALIDATION DETAILS ARE LOCATED BELOW IN THE TITLE BAR.

Proxies submitted by the Internet or telephone must be received by 11:59 p.m., Eastern Time, on November 1, 2016.



Vote by Internet

- Go to www.envisionreports.com/klac
- Or scan the QR code with your smartphone
- Follow the steps outlined on the secure website

Vote by telephone

- Call toll free 1-800-652-VOTE (8683) within the USA, US territories & Canada on a touch tone telephone

 • Follow the instructions provided by the recorded message

Annual Meeting Proxy Card

Using a <u>black ink</u> pen, mark your votes with an X as shown in this example. Please do not write outside the designated areas.

(1234 5678 9012 345)

▼ IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

A Proposals —	The Board and a vote					ote <u>FOR</u>	each of	the Dire	ector No	minees (Proposal 1)				
1. To elect as Directors	s the ten candid	lates nomin	ated by the	Compa	ny's Boa	rd of Direct	tors to each	serve for	a one-year	term, each	until his or her	successor is	duly elect	ed.	+
	For	Against	Abstain				For	Against	Abstain			For	Against	Abstain	
01 - Edward W. Bar	mholt			02 -	Robert N	Calderor	i 🗌			03 - Joh	nn T. Dickson				
04 - Emiko Higashi				05 -	Kevin J.	Kennedy				06 - Ga	ry B. Moore				
07 - Kiran M. Patel				08 -	Robert A	. Rango				09 - Ric	hard P. Wallace				
10 - David C. Wang					For	Against	Abstain							For Again	st Abstai
Ratification of the ap as the Company's in for the fiscal year en	ndependent reg	istered publ								on-binding, a compensati	advisory basis o ion.	ur named	[
In their discretion, the	proxy holders a	re authorize	ed to vote or	n all su	ch matter	rs as may p	properly cor	me before t	the meeting	g or at any a	djournment or p	ostponeme	nt thereof.		
B Non-Voting It	tems														
Change of Address -	 Please print r 	new address	s below.												
C Authorized S	ignatures -	- This se	ction mu	ıst be	compl	leted for	your vo	te to be	counted	l. — Date	and Sign B	elow			
Please sign exactly as r			oint owners s	should e	ach sign.	When sign	ing as attor	ney, execu	tor, adminis	trator, corpo	rate officer, trust	ee, guardian	, or custodi	an, please gi	ve full title.
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Proxy — KLA-TENCOR CORPORATION

Notice of Annual Meeting of Stockholders

One Technology Drive Milpitas, CA 95035

Proxy Solicited by Board of Directors for Annual Meeting - November 2, 2016

To the Stockholders:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of KLA-Tencor Corporation (the "Company"), a Delaware corporation, will be held on Wednesday, November 2, 2016 at 12:00 p.m., local time, in Building Three of the Company's Milpitas facility, located at Three Technology Drive, Milpitas, CA 95035, for the purposes stated on the reverse side.

The undersigned hereby appoints Bren D. Higgins and Teri A. Little, or either of them, as proxies, each with the power to appoint his or her substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side, all of the shares of Common Stock of the Company that the undersigned is entitled to vote at the Annual Meeting of Stockholders or at any adjournment or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE UNDERSIGNED STOCKHOLDER. IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE NOMINEES LISTED ON THE REVERSE SIDE FOR THE BOARD OF DIRECTORS, AND FOR PROPOSALS 2 AND 3.

PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE.

CONTINUED AND TO BE SIGNED ON THE REVERSE SIDE