NANOMETRICS INC
Form DEF 14A
April 04, 2017

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

(Amendment No. __)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement
Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
Definitive Proxy Statement
Definitive Additional Materials
Soliciting Material Pursuant to §240.14a-12

NANOMETRICS INCORPORATED

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box)

No fee required.
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8. Filing Party:

9. Date Filed:

NANOMETRICS INCORPORATED

1550 Buckeye Drive

Milpitas, California 95035

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On May 23, 2017

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of NANOMETRICS INCORPORATED, a Delaware corporation. The meeting will be held on Tuesday, May 23, 2017, at 9:00 a.m. local time, at our Corporate Headquarters located at 1550 Buckeye Drive, Milpitas, California 95035 for the following purposes:

1. To elect the Board's seven nominees for director to serve until the next annual meeting and until their successors are duly elected and qualified.
2. To approve, on an advisory basis, the compensation of Nanometrics' named executive officers, as disclosed in this proxy statement.
3. To approve, on an advisory basis, the frequency of advisory votes on executive compensation.
4. To approve the Nanometrics Incorporated 2017 Executive Performance Bonus Plan.
5. To approve the Nanometrics Incorporated Amended and Restated 2005 Equity Incentive Plan.
6. To ratify the appointment by the Audit Committee of the Board of Directors of PricewaterhouseCoopers LLP as the independent registered public accounting firm of Nanometrics for its fiscal year ending December 30, 2017.
7. To conduct any other business properly brought before the meeting.

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

The record date for the Annual Meeting is March 27, 2017. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

Important Notice
Regarding the
Availability of Proxy
Materials for the
Stockholders'
Meeting to Be Held
on
May 23, 2017, at
1550 Buckeye Drive,
Milpitas, California
95035.

The proxy statement
and annual report to
stockholders
are available at
www.proxyvote.com

By Order
of the
Board of
Directors

/s/
Bruce
C.
Rhine
Bruce C.
Rhine
Chairman
of the
Board of
Directors

Milpitas, California
April 3, 2017

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the proxy card that may be mailed to you, or vote over the telephone or the Internet as instructed in these materials, as promptly as possible in order to ensure your representation at the meeting. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

NANOMETRICS INCORPORATED

2017 ANNUAL MEETING OF STOCKHOLDERS

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NANOMETRICS INCORPORATED

1550 Buckeye Drive

Milpitas, California 95035

PROXY STATEMENT FOR THE 2017 ANNUAL MEETING OF STOCKHOLDERS

May 23, 2017

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why did I receive a notice regarding the availability of proxy materials on the Internet?

Pursuant to rules adopted by the Securities and Exchange Commission (the "SEC"), we have elected to provide access to our proxy materials over the Internet. Accordingly, we have sent you a Notice of Internet Availability of Proxy Materials (the “Notice”) because the Board of Directors of Nanometrics Incorporated is soliciting your proxy to vote at the 2017 Annual Meeting of Stockholders, including at any adjournments or postponements of the meeting. All stockholders will have the ability to access the proxy materials on the website referred to in the Notice or request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials over the Internet or to request a printed copy may be found in the Notice.

We intend to mail the Notice on or about April 11, 2017, to all stockholders of record entitled to vote at the annual meeting.

Will I receive any other proxy materials by mail?

We may send you a proxy card, along with a second Notice, on or after April 21, 2017.

How do I attend the annual meeting?

The meeting will be held on Tuesday, May 23, 2017, at 9:00 a.m., local time, at our Corporate Headquarters located at 1550 Buckeye Drive, Milpitas, California 95035. Directions to the annual meeting may be found on our website www.nanometrics.com by clicking on “Contact” then “Map & Local Driving Directions.” Information on how to vote in person at the annual meeting is discussed below.

Who can vote at the annual meeting?

Only stockholders of record at the close of business on March 27, 2017, will be entitled to vote at the annual meeting. On this record date, there were 25,226,960 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on March 27, 2017, your shares were registered directly in your name with Nanometrics' transfer agent, Computershare Trust Company, N.A., then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to fill out and return a proxy card (if you have received one), or vote by proxy over the telephone or on the Internet as instructed below, to ensure your vote is counted.

Beneficial Owner Shares Registered in the Name of a Broker or Bank

If on March 27, 2017, your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in “street name” and the Notice is being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the annual meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the annual meeting. However, since you are not the stockholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are six matters scheduled for a vote:

- Election of seven directors;
- Advisory approval of the compensation of Nanometrics' named executive officers, as disclosed in this proxy statement in accordance with SEC rules;
- Approval on an advisory basis of the frequency of advisory votes on executive compensation; and
- Approval of the Nanometrics Incorporated 2017 Executive Performance Bonus Plan;
    - Approval of the Nanometrics Incorporated Amended and Restated 2005 Equity Incentive Plan; and
- Ratification of appointment by the Audit Committee of the Board of Directors of PricewaterhouseCoopers LLP as the independent registered public accounting firm of Nanometrics for its fiscal year ending December 30, 2017.

What if another matter is properly brought before the meeting?

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How do I vote?

You may either vote "For" all the nominees to the Board of Directors or you may "Withhold" your vote for any nominee you specify. For each of the other matters to be voted on, you may vote "For" or "Against" or "Abstain" from voting.

The procedures for voting are as follows:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote in person at the annual meeting or vote by proxy over the telephone, or vote by proxy through the Internet, or vote by proxy using a proxy card that you may request or that we may elect to deliver at a later time. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote in person even if you have already voted by proxy.

- To vote in person, come to the annual meeting and you will receive a ballot when you arrive.
- To vote using a proxy card, you may request a proxy card and simply complete, sign and date the proxy card that may be delivered and return it promptly in the envelope that will be provided with the proxy card. If you return your signed proxy card to us before the annual meeting, we will vote your shares as you direct.
- To vote over the telephone, dial toll-free 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the Notice. Your telephone vote must be received by 11:59 p.m., Eastern Time on May 22, 2017, to be counted.
- To vote through the Internet, go to www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the company number and control number from the Notice. Your Internet vote must be received by 11:59 p.m., Eastern Time on May 22, 2017, to be counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a Notice containing voting instructions from that organization rather than from Nanometrics. Simply follow the voting instructions in the Notice to ensure that your vote is counted. To vote in person at the annual meeting, you must obtain a valid proxy from your broker, bank or another agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

Internet proxy voting may be provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your Internet access, such as usage charges from Internet access providers and telephone companies.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of March 27, 2017.

What happens if I do not vote?

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record and do not vote by completing your proxy card, by telephone, through the Internet or in person at the annual meeting, your shares will not be voted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the New York Stock Exchange ("NYSE") deems the particular proposal to be a "routine" matter. Brokers and nominees can use their discretion to vote "uninstructed" shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Under the rules and interpretations of the NYSE, "non-routine" matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation and on the frequency of stockholder advisory votes on executive compensation), and certain corporate governance proposals, even if management-supported. Accordingly, your broker or nominee may not vote your shares on Proposals 1, 2, 3, 4 or 5 without your instructions, but may vote your shares on Proposal 6 even in the absence of your instruction.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, "For" the election of all seven nominees for director, "For" the advisory approval of executive compensation, "For" the advisory approval of a frequency of one year on advisory votes on executive compensation, "For" the approval of the Nanometrics Incorporated 2017 Executive Performance Bonus Plan, "For" the approval of the Nanometrics Incorporated Amended and Restated 2005 Equity Incentive Plan, and "For" the ratification of the appointment by the Audit Committee of the Board of Directors of PricewaterhouseCoopers LLP as the independent registered public accounting firm of Nanometrics for its fiscal year ending December 30, 2017. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your

shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one Notice?

If you receive more than one Notice, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on the Notices to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

Yes. You can revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of the following ways:

- You may submit another properly completed proxy card with a later date.
- You may grant a subsequent proxy by telephone or through the Internet.
- You may send a timely written notice that you are revoking your proxy to Nanometrics' Secretary at Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035.
- You may attend the annual meeting and vote in person. Simply attending the meeting will not, by itself, revoke your proxy.

Your most current proxy card or telephone or Internet proxy is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

When are stockholder proposals and director nominations due for next year's annual meeting?

To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing by December 12, 2017, to Nanometrics' Secretary at Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035. If the date of our 2018 annual meeting is changed by more than 30 days from the one year anniversary of the date of the 2017 annual meeting, the proposal must be received a reasonable time before we begin to print and mail our proxy materials. The submission of a stockholder proposal does not guarantee that it will be included in our proxy statement.

If you wish to submit a proposal (including a director nomination) at the meeting that is not to be included in next year's proxy materials, you must do so by December 12, 2017 to Nanometrics' Secretary at Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035. If we set the date of our 2018 annual meeting to a date more than 30 days from the one year anniversary of the date of our 2017 annual meeting, then the deadline for receipt of stockholder proposals will be no later than the close of business on the later of 120 calendar days in advance of the 2018 annual meeting or ten days following the date on which we first publicly announce the date of the 2018 annual meeting. You are also advised to review Nanometrics' Bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count the votes for the proposals as follows:

- Proposal 1, to elect directors, votes "For," "Withhold" and broker non-votes;

- Proposal 2, the advisory vote on executive compensation, votes "For" and "Against," abstentions and, if applicable, broker non-votes;
- Proposal 3, the advisory vote on frequency of advisory votes on executive compensation, votes for the frequency of “1 YEAR,” “2 YEARS” and “3 YEARS,” abstentions and, if applicable, broker non-votes; and

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- Proposal 4, the approval of the Nanometrics Incorporated 2017 Executive Performance Bonus Plan, votes "For" and "Against," abstentions and, if applicable, broker non-votes;
- Proposal 5, the approval of the Nanometrics Incorporated Amended and Restated 2005 Equity Incentive Plan, votes "For" and "Against," abstentions and, if applicable, broker non-votes; and
- Proposal 6, the ratification of the appointment by the Audit Committee of the Board of Directors of PricewaterhouseCoopers LLP as the independent registered public accounting firm of Nanometrics for its fiscal year ending December 30, 2017, votes "For" and "Against," abstentions and, if applicable, broker non-votes.

What are "broker non-votes"?

As discussed above, when a beneficial owner of shares held in “street name” does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed by the NYSE to be “non-routine,” the broker or nominee cannot vote the shares. These unvoted shares are counted as "broker non-votes."

How many votes are needed to approve each proposal?

For Proposal 1, the election of directors, the seven nominees receiving the most “For” votes from the holders of shares present in person or represented by proxy and entitled to vote on the election of directors will be elected. Only votes “For” or “Withheld” will affect the outcome. However, the Board of Directors has adopted a Majority Vote Policy, pursuant to which any director-nominee that is elected but fails to receive more “For” votes than “Withheld” votes must submit his/her resignation for consideration by the Board. The Board will then decide whether to accept the director’s resignation. Details of the Majority Vote Policy are set out below under “Corporate Governance - Voting for Directors - Majority Vote Policy.”

For Proposal No. 2, the advisory approval of the compensation of Nanometrics’ named executive officers, will be approved if it receives “For” votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter. If you “Abstain” from voting, it will have the same effect as an “Against” vote. Broker non-votes will have no effect.

For Proposal 3, the advisory vote on the frequency of advisory votes on Nanometrics’ executive compensation, the frequency (“1 Year,” “2 Years” or “3 Years”) receiving the greatest number of votes will be considered the frequency recommended by the stockholders to the Board of Directors. If you abstain from voting the abstention will have no effect on this advisory vote since approval by a percentage of the shares present or outstanding is not required. Broker non-votes will have no effect.

For Proposal No. 4, the approval of the Nanometrics Incorporated 2017 Executive Performance Bonus Plan, will be approved if it receives “For” votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter. If you “Abstain” from voting, it will have the same effect as an “Against” vote. Broker non-votes will have no effect.

For Proposal No. 5, the approval of the Nanometrics Incorporated Amended and Restated 2005 Equity Incentive Plan, will be approved if it receives “For” votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter. If you “Abstain” from voting, it will have the same effect as an “Against” vote. Broker non-votes will have no effect.

For Proposal No. 6, ratification of the appointment by the Audit Committee of the Board of Directors of PricewaterhouseCoopers LLP as the independent registered public accounting firm of Nanometrics for its fiscal year ending December 30, 2017, will be approved if it receives “For” votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter. If you “Abstain” from voting, it will have the same effect as an “Against” vote. Broker non-votes will have no effect.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority of the outstanding shares entitled to vote are present at the meeting in person or represented by proxy. On the record date, there were 25,226,960 shares outstanding and entitled to vote. Thus, the holders of 12,613,481 shares must be present in person or represented by proxy at the meeting to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares present at the meeting in person or represented by proxy may adjourn the meeting to another date.

How can I find out the results of the voting at the annual meeting?

Preliminary voting results will be announced at the annual meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the annual meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8 K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

PROPOSAL 1

ELECTION OF DIRECTORS

At the 2017 annual meeting of stockholders, unless otherwise instructed, the proxy holders will vote the proxies received by them for the nominees named below, each of whom has been nominated by the Board of Directors.

The Board of Directors currently has seven members. All current directors are standing for election at the 2017 annual meeting. The nominees were recommended by the Nominating and Governance Committee of the Board of Directors. All of the nominees named below, with the exception of Robert G. Deuster, were previously elected as directors by our stockholders. Mr. Deuster was identified by and recommended to the Nominating and Governance Committee as a member of our Board of Directors by a non-management director.

If the nominees are unable or decline to serve as a director at the time of the annual meeting, the proxies will be voted for any nominee who shall be designated by the present Board to fill the vacancy. We do not have any reason to believe that any of the nominees will be unable or will decline to serve as a director. Directors are elected by a plurality of the votes of the holders of shares present in person or by proxy and entitled to vote on the election of directors. The seven nominees receiving the highest number of affirmative votes will be elected. Pursuant to our Majority Vote Policy, if a nominee for director receives a greater number of “Withhold” votes than “For” votes, that director shall promptly tender to the Nominating and Governance Committee his/her offer of resignation. Within 90 days following certification of the stockholder vote, the Committee shall recommend to the Board the action to be taken with respect to such offer of resignation, and the Board shall consider and act upon the Committee’s recommendation. Unless marked otherwise, the proxy holders will vote proxies returned to us for the nominees named below.

Director Nominees

Set forth below is information regarding each of our directors, including their ages, as of April 6, 2017, the periods during which they have served as a director, certain information as to principal occupations and directorships held by them in corporations whose shares are publicly registered, and a discussion of the specific experience, qualifications, attributes or skills of each nominee that led the Board to nominate that person as a nominee for director, as of the date of this proxy statement.

J. Thomas Bentley, age 67, has served as a director since April 2004. Mr. Bentley served as a Managing Director at SVB Alliant (formerly Alliant Partners), a mergers and acquisitions firm, from 1990, when he co-founded the firm, until October 2005. Mr. Bentley currently serves on the board of directors of Rambus, Inc., a chip interface technology company. Mr. Bentley holds a B.A. degree in Economics from Vanderbilt University and a Master of Science in Management from the Massachusetts Institute of Technology. Mr. Bentley’s extensive knowledge of the capital markets, strategic planning and mergers and acquisitions from his experience at SVB Alliant provides expertise to the Board in matters regarding Nanometrics’ capital requirements and strategic direction.

Edward J. Brown, Jr., age 59, has served as a director since February 2013. From May 2013 until September 2015, Mr. Brown was the Chief Executive Officer of Cymer Light Source, following the merger of Cymer, Inc. with ASML Holding Ltd. Mr. Brown served as President and Chief Operating Officer of Cymer, Inc. from September 2005 until the May 2013 merger with ASML. From 1984 to 2005, Mr. Brown was employed at Applied Materials, Inc. where he held numerous high-level management positions including group vice president and senior advisor to the president, vice president and general manager of the Intel business unit, as well as managing director heading up their largest product division, Global Operations. Prior to Applied Materials Inc., Mr. Brown held key engineering positions at TRW Corporation and Burroughs Corporation. Mr. Brown received a master’s degree in business administration from

National University and a bachelor's degree in industrial studies from San Diego State University. Mr. Brown's qualifications to serve as a director include his 30 years of experience in the semiconductor equipment industry and his extensive senior executive management experience.

Robert Deuster, age 66, has served as a director since March 2017. Mr. Deuster has been the Chief Executive Officer of Collective Universe, Inc., a public company that provides authentication and grading services to dealers and collectors of coins, trading cards, event tickets, autographs and historical and sports memorabilia, since October 2012. He is also a director of Collective Universe, Inc. Mr. Deuster served as Chairman and Chief Executive Officer of Newport Corporation (acquired by MKS Instruments in 2016), a public company that is a global supplier of laser, optical and motion control products, from May 1996 until his retirement in October of 2007. He also served as President of Newport from May 1996 until July 2004, and in June 1997 became Chairman of the Board. From 1985 to 1996, Mr. Deuster served in various senior management positions at Applied Power, Inc. (now Actuant Corporation, a New York Stock Exchange listed company), which is a global manufacturer of electrical and hydraulic products, serving as Senior Vice President of the Distributed Products Group from 1994 to 1996, President of the Barry Controls Division from 1989 to 1994, President of the APITECH Division from 1986 to 1989 and Vice

President of Sales and Marketing of the Enerpac Division from 1985 to 1986. From 1975 to 1985, he held engineering and marketing management positions at General Electric Company's Medical Systems Division. Mr. Deuster currently serves as a director of Ondax, Inc., a private optical components company. He also was a director of Symmetry Medical Inc., a publicly traded provider of medical devices and solutions to the global orthopedic market, until that company was sold in June 2016. Mr. Deuster received a B.S. in Electrical Engineering from Marquette University in 1973. Mr. Deuster holds a Masters Professional Director Certification from the American College of Corporate Directors, a public company director education and credentialing organization. Mr. Deuster’s extensive management experience, including as a CEO of and a senior executive at other public companies, combined with his experience as an independent director of both public and private companies, qualifies him to serve as a member of our Board of Directors.

Bruce C. Rhine, age 59, has served as our Chairman of the Board of Directors since July 2007 and as a director since July 2006. From July 2006 to February 2008, Mr. Rhine served as our Chief Strategy Officer. From March 2007 to August 2007, Mr. Rhine served as our Chief Executive Officer. From 2000 to 2006, Mr. Rhine served as Chairman and Chief Executive Officer of Accent Optical Technologies, Inc. and as its President from January 2003 to April 2005 and from August 2000 to September 2001. Mr. Rhine holds a B.S. degree in Chemical Engineering and an M.B.A. in Finance from The Pennsylvania State University. In addition to his experience from his prior senior management service to Nanometrics, Mr. Rhine brings extensive industry knowledge and executive management experience to the Board.

Christopher A. Seams, age 54, has served as a director since August 2015. Mr. Seams served as the Chief Executive Officer of Deca Technologies from June 2013 to 2016, where he was responsible for the overall management of the business. Prior to Deca Technologies, Mr. Seams served as executive vice president of sales and marketing at Cypress Semiconductor, and held various technical and operational management positions in its manufacturing, development and operations. Prior to joining Cypress in 1990, he worked in process development for Advanced Micro Devices and Philips Research Laboratories. Mr. Seams also serves on the Board of Directors of Xperi Corporation, and previously served on the Board of Directors of Tessera Technologies, Inc. until December 2016. Mr. Seams earned his bachelor's degree in electrical engineering from Texas A&M University and his master's degree in electrical and computer engineering from the University of Texas at Austin. Mr. Seams is a senior member of the Institute of Electrical and Electronics Engineers. The Board believes that Mr. Seams brings extensive management, sales and marketing, and engineering experience in the semiconductor industry to his role as a member of the Board.

Timothy J. Stultz, Ph.D., age 69, has served as President, Chief Executive Officer and director of Nanometrics Incorporated since August 2007. Dr. Stultz has more than 30 years of executive management experience. Prior to joining Nanometrics, Dr. Stultz was President and Chief Executive Officer of Imago Scientific Instruments Corporation, a supplier of proprietary 3-D atom probe microscopes to the research, materials and microelectronics industries; President and Chief Executive Officer for ThauMDx, a developer of diagnostic systems for the healthcare industry; and Vice President and General Manager of Veeco Instruments' Metrology and Instrumentation Business. Dr. Stultz, previously served as a member of the board of directors of Tessera Technologies, Inc. Dr. Stultz received his B.S., M.S. and Ph.D. in Materials Science and Engineering from Stanford University. In addition to his institutional knowledge as the executive leader of Nanometrics, Dr. Stultz’s scientific background and significant senior executive management experience in high tech industries is important to the Board.

Christine A. Tsingos, age 58, has served as a director since May 2014. Ms. Tsingos is currently the Executive Vice President and Chief Financial Officer of Bio-Rad Laboratories. In 2002, Ms. Tsingos was named Bio-Rad’s Chief Financial Officer; in 2003, she became Vice President and in 2012, she was named Executive Vice President. Bio-Rad designs, manufactures and distributes a broad range of innovative products and solutions for the global life science and clinical diagnostic markets. Prior to Bio-Rad, Ms. Tsingos held executive positions at Autodesk, The Cooper Companies, and Attest Systems. Prior to that, Ms. Tsingos was a consultant to Attest Systems from 2000 to 2002. Ms.

Tsingos also serves on the Board of Directors of Varex Imaging Corporation. She earned her bachelor of arts in International Studies from the American University in Washington D.C. and an M.B.A in International Business from the George Washington University. In 2010, Ms. Tsingos was awarded the prestigious Bay Area CFO of the Year. Ms. Tsingos' qualifications to serve as a director include over 25 years of financial and operational experience

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF EACH NAMED NOMINEE.

CORPORATE GOVERNANCE

Board Structure

Bruce C. Rhine serves as the Chairman of the Board and Timothy J. Stultz, Ph.D. serves as the President, Chief Executive Officer and a director of Nanometrics. We believe that having a separate Chairman and Chief Executive Officer is appropriate and is consistent with corporate governance best practices. From July 2006 to February 2008, Mr. Rhine served as our Chief Strategy Officer, and from March 2007 to August 2007, Mr. Rhine served as our Chief Executive Officer. Because of his previous roles with Nanometrics, Mr. Rhine is intimately familiar with Nanometrics' business and industry, and very capable of effectively identifying strategic priorities, leading discussions of the Board of Directors and defining Nanometrics' strategic objectives. The Board of Directors determined that Mr. Rhine became an independent member of the Board effective February 2011 under the NASDAQ Listing Rules due to the passage of time subsequent to his previous management role with Nanometrics. Dr. Stultz, as the Chief Executive Officer, is the individual selected by the Board of Directors to manage Nanometrics on a day-to-day basis, and his prior experience and direct involvement in Nanometrics' operations allow him to provide valuable insights with respect to strategic planning and the operational requirements to meet Nanometrics' short- and long-term objectives. Nanometrics' independent directors bring experience, oversight and expertise from outside the company and industry.

The Board's Role in Risk Oversight

One of the Board's primary responsibilities is reviewing Nanometrics' strategic plans and objectives, including oversight of the principal risk exposures of the company. The Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through various Board standing committees that address risks inherent in their respective areas of oversight. In particular, the Board is responsible for monitoring and assessing strategic risk exposure, including a determination of the nature and level of risk appropriate for the company. The Audit Committee assists the Board in oversight and monitoring of the legal and financial risks facing Nanometrics, and management's approach to addressing these risks and strategies for risk mitigation. The Audit Committee is also responsible for discussing guidelines and policies governing the process by which management and other persons responsible for risk management, assess and manage Nanometrics' exposure to risk, as well as Nanometrics' major financial risk exposures and the steps management has taken to monitor and control such exposures, based on consultation with Nanometrics' management and independent auditors. Our Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking. The Board addresses, at least annually, the principal current and future risk exposures of Nanometrics. The Board receives regular reports from members of senior management on areas of material risk to Nanometrics, including operational, financial, legal and regulatory, strategic and reputation risks.

Board of Directors Meetings and Committees

The full Board of Directors met seven times during the fiscal year ended December 31, 2016. During the fiscal year ended December 31, 2016, all directors attended at least 75% of the aggregate number of meetings of the Board of Directors and meetings of committees on which they served. The standing committees of the Board of Directors include an Audit Committee, a Compensation Committee and a Nominating and Governance Committee.

Directors are encouraged to attend the annual meeting of stockholders. All members of the Board of Directors, then in office, attended the 2016 annual meeting of stockholders.

The Board of Directors has determined that all of its directors meet the independence requirements of the NASDAQ Stock Market, with the exception of Timothy J. Stultz, Ph.D., due to his position as our President and Chief Executive Officer.

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The Board has a standing Audit Committee, Compensation Committee and Nominating and Governance Committee. The following table provides membership and meeting information for fiscal 2016 for each of the Board standing committees:

Name	Audit	Compensation	Nominating and Governance
Bruce C. Rhine	X		X*
J. Thomas Bentley	X	X	
Edward J. Brown, Jr.		X*	X
Christopher A. Seams	X		X
Christine A. Tsingos	X*	X	
Total meetings in fiscal 2016	8	5	5

*Chair of the committee

Audit Committee

The Audit Committee of the Board of Directors oversees our financial reporting, our internal audit and control functions, the results and scope of the annual audit and quarterly reviews conducted by our independent registered public accounting firm, and our compliance with legal matters that may have a significant impact on our financial reports. In addition, the Audit Committee has the responsibility to consider and recommend the engagement of, and to review and approve fee arrangements with, our independent registered public accounting firm. The Audit Committee also monitors transactions between Nanometrics and our officers and directors for any potential conflicts of interest and assists the Board of Directors in its risk oversight role.

The Board of Directors has determined that each member of our Audit Committee is “independent” within the meaning of the rules of the Securities and Exchange Commission and the Listing Rules of NASDAQ, and has the qualifications or previous experience to be able to read and understand financial statements. Further, the Board of Directors has determined that each of Ms. Tsingos, Chair of the Audit Committee, and Mr. Bentley qualify as an “audit committee financial expert,” as such term is used in the Securities and Exchange Commission rules.

The report of the Audit Committee is included at the end of the “Corporate Governance” section of this Proxy Statement. The Board of Directors has adopted a written Audit Committee Charter, which is available on our website at http://investor.nanometrics.com/governance.cfm.

Compensation Committee

The Compensation Committee has overall responsibility for evaluating and approving our executive officer compensation, including incentive compensation, benefit, severance, equity-based and other compensation plans, policies and programs. During the 2016 fiscal year, the Compensation Committee reviewed and approved our compensation policies and programs for the chief executive officer, as well as established and had oversight responsibility with regard to the compensation of other executive officers of Nanometrics. The Compensation Committee also has the responsibility to recommend to the Board of Directors a compensation program for non-employee members of the Board.

The Compensation Committee is also responsible for approving the grant of stock options and stock awards to our employees under our equity compensation plans. The Compensation Committee has delegated to Nanometrics' officers the authority, within certain parameters, to approve the grant of stock options and restricted stock units, or RSUs, with respect to employees and consultants who are not executive officers for purposes of Section 16 of the Exchange Act and hold positions below the level of vice president. The Compensation Committee also assists the Board of Directors in assessing the risks, if any, associated with Nanometrics' overall compensation policies. Although the Compensation Committee has not done so to date, the Compensation Committee may, to the extent permitted under applicable law, the rules of NASDAQ and the Securities and Exchange Commission, and Nanometrics' Certificate of Incorporation and Bylaws, form and delegate its authority to a subcommittee, when appropriate, including delegating to a subcommittee consisting solely of independent, non-employee, outside directors to make grants of stock options or RSUs to executive officers and directors, provided that such grants are presented to the full Compensation Committee for approval at the following Compensation Committee meeting.

Each current member of our Compensation Committee is an "outside" director as defined in Section 162(m) of the Internal Revenue Code of 1986, as amended, and a "non-employee" director within the meaning of Rule 16b-3 of the Exchange Act. The Board of Directors has determined that each of the directors serving on our Compensation Committee is "independent" within the meaning of the Listing Rules of NASDAQ as currently in effect.

The Compensation Committee Report is included under the caption "Compensation Committee Report" of this Proxy Statement. The Board of Directors has adopted a written Compensation Committee Charter, which is available on our website at http://investor.nanometrics.com/governance.cfm.

Compensation Committee Processes and Procedures. Typically, the Compensation Committee meets at least quarterly, and with greater frequency, if necessary. The Compensation Committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside consultants may be invited by the Compensation Committee to make presentations, to provide financial or other background information or advice, or to otherwise participate in Compensation Committee meetings. The Chief Executive Officer may not participate in, or be present during, any deliberations or determinations of the Compensation Committee regarding his compensation. The charter of the Compensation Committee grants the Compensation Committee full access to all books, records, facilities and personnel of Nanometrics, as well as authority to obtain, at the expense of Nanometrics, advice and assistance from internal and external legal, accounting or other advisers and consultants and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. In particular, the Compensation Committee has the authority to retain compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant's reasonable fees and other retention terms.

The Compensation Committee typically makes most of the significant adjustments to annual compensation, determines bonus and equity awards, and approves annual performance objectives, at one or more meetings held during the first quarter of the year. However, the Compensation Committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of Nanometrics' compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year. Generally, the Compensation Committee's process comprises two related elements: the determination of compensation levels and the establishment of performance objectives for the current year. As discussed further in the Compensation Discussion and Analysis below, for executives other than the Chief Executive Officer, the Compensation Committee solicits and considers evaluations and recommendations submitted to the Committee by the Chief Executive Officer. In the case of the Chief Executive Officer, the evaluation of his performance is conducted by the Compensation Committee, which determines any adjustments to his compensation as well as awards to be granted. For all executives, as part of its deliberations, the Compensation Committee may review and consider, as appropriate, materials such as financial reports and projections, operational data, tax and accounting information, tally sheets that set forth the total compensation that may become payable to executives in various hypothetical scenarios, executive and director stock ownership information, company stock performance data, analyses of historical executive compensation levels, current company-wide compensation levels, and recommendations of the Compensation Committee's compensation consultant, including analyses of executive compensation paid at other companies identified by the consultant. Under its charter, the Compensation Committee may select, or receive advice from, a compensation consultant, legal counsel or other adviser to the Compensation Committee, other than in-house counsel and certain other types of advisers, only after taking into consideration six factors, prescribed by the SEC and NASDAQ, that bear upon the adviser's independence; however, there is no requirement than any adviser be independent.

During the past fiscal year, the Compensation Committee engaged Compensia, Inc. as its compensation consultant. Compensia has advised the committee for several years and is very familiar with the industry and geographies in which Nanometrics operates. The Compensation Committee requested that Compensia:

•evaluate the efficacy of Nanometrics' existing compensation strategy and practices in supporting and reinforcing Nanometrics' long-term strategic goals;

•assist in refining Nanometrics' compensation strategy and in developing and implementing an executive compensation program to execute that strategy; and

•provide market information to assist Compensation Committee in establishing 2016 executive compensation.

As part of its engagement, the Compensation Committee requested that Compensia develop a comparative group of companies and to perform analyses of competitive performance and compensation levels for that group. The Committee instructed Compensia to select comparator companies similarly sized and in the same or closely related industry to that of Nanometrics using factors such as, but not limited to, revenue size, market capitalization, and number of employees. At the request of the Compensation Committee, Compensia also provided information regarding the labor markets in which Nanometrics competes. Compensia ultimately developed

recommendations that were presented to the Compensation Committee for its consideration. Following an active dialogue with Compensia, the Compensation Committee made its independent determinations regarding the compensation of Nanometrics' executive officers. These decisions are discussed in the Compensation Discussion and Analysis section of this Proxy Statement.

Nominating and Governance Committee

The Nominating and Governance Committee assists the Board of Directors in identifying and qualifying candidates to join the Board of Directors and addresses various governance issues. The Nominating and Governance Committee utilizes a variety of methods for identifying and evaluating nominees. Its general policy is to assess the appropriate size and needs of the Board of Directors and whether any vacancies are expected due to retirement or otherwise. In addition, candidates for director nominees are typically reviewed in the context of the current composition of the Board, the operating requirements of Nanometrics, the current needs of the Board, and the long-term interests of stockholders, with the goal of maintaining a balance of knowledge, experience and capability. In the event those vacancies are anticipated, or otherwise arise, the Nominating and Governance Committee will consider recommending various potential candidates to fill such vacancies. Candidates may come to the attention of the Nominating and Governance Committee through its current members, stockholders or other persons. Pursuant to the Nominating and Governance Committee charter, the Committee will consider properly submitted stockholder recommendations for nominations for candidacy. Stockholders who wish to recommend individuals for consideration by the Nominating and Governance Committee to become nominees for election to the Board may do so by delivering a written recommendation to the Nominating and Governance Committee at our principal offices. Nominees may also be submitted directly by stockholders in accordance with Nanometrics' Bylaws as discussed under "Questions and Answers About These Proxy Materials and Voting - When are stockholder proposals and director nominations due for next year's annual meeting?" above. Although the Nominating and Governance Committee does not have a formal policy regarding stockholder recommendations for director nominees because the Board of Directors has an open policy regarding communications with stockholders and has not deemed it necessary to develop a formal policy regarding recommendations for director nominations by stockholders, the Nominating and Governance Committee intends to consider director candidates properly submitted by stockholders under the same criteria as candidates recommended by directors or others.

The Nominating and Governance Committee has no specific minimum qualifications for director candidates. In general, however, persons considered for Board of Directors positions must have demonstrated leadership capabilities, be of sound mind and high moral character, have no personal or financial interest that would conflict or appear to conflict with the interests of Nanometrics and be willing and able to commit the necessary time for Board of Directors and committee service. The Nominating and Governance Committee also intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of Nanometrics' stockholders. However, the Nominating and Governance Committee retains the right to modify these qualifications from time to time.

The Nominating and Governance Committee also recommends to the Board of Directors certain guidelines regarding corporate governance and standards regarding the independence of outside directors applicable to Nanometrics and reviews such guidelines and standards and the provisions of the Nominating and Governance Committee charter on a regular basis to confirm that such guidelines, standards and charter remain consistent with sound corporate governance practices and with any legal or regulatory requirements of NASDAQ and the Securities and Exchange Commission. The Nominating and Governance Committee also monitors the Board of Directors, and Nanometrics' compliance with any commitments made to our regulators and changes in corporate governance practices.

The Nominating and Governance Committee does not have a stated policy with regard to diversity of the Board of Directors. However, the Committee believes that Board members should represent a balance of diverse backgrounds and skills, including marketing, finance, manufacturing, engineering, science, and international experience.

The Board of Directors has determined that each of the directors serving on our Nominating and Governance Committee is “independent” within the meaning of the Listing Rules of NASDAQ.

The Board of Directors has adopted a written Nominating and Governance Committee Charter, which is available on our website at http://investor.nanometrics.com/governance.cfm.

Voting For Directors – Majority Vote Policy

If a nominee for director in an uncontested election receives a greater number of “Withhold” votes for election than “For” votes (“Majority Withheld Vote”), that director must promptly tender to the Board his or her offer of resignation. If a director receives a

Majority Withheld Vote, our Nominating and Governance Committee (or such other committee as the Board may appoint) shall make a recommendation to the Board, which will decide whether to accept or reject the resignation previously tendered by such director.

The Board must act on the tendered resignation, taking into account the recommendation of such committee, within 90 days from the date of the certification of the election results. The director whose resignation is under consideration is not permitted to participate in the recommendation of the committee or deliberations of the Board with respect to his or her resignation. However, if the only directors who did not receive a Majority Withheld Vote in the same election constitute less than a majority of directors, all directors may participate in the action regarding whether to accept the resignation offers. If a director's resignation is not accepted by the Board, the director will continue to serve until the next annual meeting of shareholders or until his or her successor is duly elected and qualified, or his or her earlier resignation or removal. If a director's resignation is accepted by the Board, then the Board, in its sole discretion, must fill any resulting vacancy or decrease the size of the Board.

Stockholder Communication Policy

We have established a formal process for stockholders to send communications to the Board of Directors or to individual directors. The names of all directors are available to stockholders in this Proxy Statement. Stockholder communications may be submitted in writing to Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035, Attention: Office of the Secretary. If we receive any stockholder communication intended for the full Board of Directors or any individual director, we will forward the communication to the full Board of Directors or the individual director, unless the communication is clearly of a marketing nature or is unduly hostile, threatening, illegal or similarly inappropriate.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all directors, executive officers and employees. We post our Code of Business Conduct and Ethics on our website at: http://investor.nanometrics.com/governance.cfm. If Nanometrics makes any substantive amendments to the Code of Business Conduct and Ethics or grants any waiver from a provision of the Code of Business Conduct and Ethics to any executive officer or director, Nanometrics will promptly disclose the nature of the amendment or waiver on its website.

Stock Ownership Guidelines

We have a stock ownership policy that establishes for our non-employee directors and executive officers guidelines for minimum levels of stock ownership in the company by 2019 or within five years of their appointment to the Board of Directors, hire date, or promotion, whichever is later. The stock ownership guidelines are as follows:

- For non-employee directors, ownership of stock with a value equal to three times the annual Board retainer;
- For our Chief Executive Officer, ownership of stock with a value equal to three times his annual base salary; and
- For each other executive officer, ownership of stock with a value equal to his or her annual base salary.

Related Person Transaction Policy

Nanometrics has a written policy regarding related party transactions that requires that the Audit Committee review any transaction or series of transactions in excess of $50,000 in any year between Nanometrics, on the one hand, and an officer, director or 5% or greater stockholder, on the other. Nanometrics' Chief Financial Officer has the responsibility for bringing the facts concerning a proposed related party transaction to the Audit Committee. The policy permits approval only in the event of a finding that the transaction is on terms no less favorable than would

have been obtained in an ordinary arms-length transaction with an independent third party.

Report of the Audit Committee of the Board of Directors*

The Audit Committee reviews Nanometrics' financial reporting process on behalf of the Board of Directors. Management has the primary responsibility for establishing and maintaining adequate internal control over financial reporting, for preparing the financial statements and for the reporting process. The Audit Committee members do not serve as professional accountants or auditors, and their functions are not intended to duplicate or to certify the activities of management and the independent registered public accounting firm. Nanometrics' independent auditors are engaged to audit and report on the conformity of our financial statements to accounting principles generally accepted in the United States and the effectiveness of our internal control over financial reporting.

In this context, the Audit Committee reviewed and discussed with management the audited financial statements of Nanometrics for the year ended December 31, 2016. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by Auditing Standard 1301, Communications with Audit Committees, as adopted by the Public Company Accounting Oversight Board ("PCAOB"). In addition, the Audit Committee has received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent registered public accounting firm's communications with the Audit Committee concerning independence, and has discussed with the independent registered public accounting firm its independence.

Based on the foregoing, the Audit Committee recommended to the Board of Directors that our audited financial statements as of and for the year ended December 31, 2016, be included in our Annual Report on Form 10 K for the fiscal year ended December 31, 2016, for filing with the United States Securities and Exchange Commission.

The Audit Committee

Christine A. Tsingos (Chair)

J. Thomas Bentley

Bruce C. Rhine

Christopher A. Seams

* The material in this report is not "soliciting material," is not deemed "filed" with the Securities and Exchange Commission and is not to be incorporated by reference in any filing of Nanometrics under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth beneficial ownership of Nanometrics common stock as of March 1, 2017, by each director, by each of the named executive officers, by all directors and executive officers as a group, and by all persons known to Nanometrics to be the beneficial owners of more than 5% of Nanometrics stock. Unless otherwise indicated, all persons and entities have sole voting and investment power over the shares reported. As of the close of business on March 1, 2017, there were 25,186,831 shares of common stock outstanding.

	Amount and Nature of Beneficial Ownership [1] Shares	
	Number of Shares	Percent of Shares
Name Of Beneficial Owner – Principal Stockholders	Beneficially Owned	Beneficially Owned
Franklin Resources, Inc. [2]	1,476,218	5.9%
Royce & Associates, LLC [3]	1,846,681	7.3%
BlackRock, Inc. [4]	2,826,067	11.2%
	Number of Shares	Percent of Shares
Name Of Beneficial Owner – Directors And Officers	Beneficially Owned	Beneficially Owned
Bruce C. Rhine [5]	755,031	3.0%
J. Thomas Bentley [6]	85,532	*
Edward Brown Jr.	19,318	*
Christine A. Tsingos [7]	327,287	1.3%
Christopher A. Seams	5,108	*
Robert Deuster	—	*
Timothy J. Stultz, Ph.D. [8]	450,768	1.8%
Jeffrey Andreson	27,880	*
Janet Taylor	6,064	*
Dr. S. Mark Borowicz [9]	4,428	*
Rollin Kocher [10]	313	*
All executive officers and directors as a group (12 persons) [11]	1,700,074	6.7%

* Less than 1 percent

(1) As determined in accordance with Rule 13d-3 under the Securities and Exchange Act of 1934. Information with respect to principal stockholders is obtained from Schedules 13G and 13G/A and except as indicated in the footnotes below, is as of December 31, 2016, and does not reflect changes, if any, since that date.

(2) According to a Schedule 13G/A filed with the SEC on February 9, 2017, reporting beneficial ownership as of December 31, 2016, each of Franklin Resources, Inc. ("FRI"), Charles B. Johnson and Rupert H. Johnson has no voting or investment power over any of these shares but may be deemed to be the beneficial owner of these shares of common stock. Franklin Advisers, Inc. has sole voting and investment power over 1,456,118 of these shares. The address of FRI, Mr. Johnson, Mr. Johnson and Franklin Advisers, Inc. is One Franklin Parkway, San Mateo, CA 94403. Each of these entities disclaim beneficial ownership of these shares.

(3) According to a Schedule 13G/A filed with the SEC on January 11, 2017, reporting beneficial ownership as of December 31, 2016, Royce & Associates, LP has sole voting and investment power over all of these shares. The address of Royce & Associates, LP is 745 Fifth Avenue, New York, NY 10151.

(4) According to a Schedule 13G/A filed with the SEC on January 17, 2017, reporting beneficial ownership as of December 31, 2016, BlackRock, Inc. has sole voting power with respect to 2,776,671 of these shares and sole investment power over all of these shares. The address of BlackRock, Inc. is 55 East 52nd Street, New York, NY 10022.

(5) Includes 6,988 shares that may be acquired by exercise of stock options within 60 days of March 1, 2017. Mr. Rhine has indirect beneficial ownership over 1,428 shares owned by his spouse.

(6) Includes 6,988 shares that may be acquired by exercise of stock options within 60 days of March 1, 2017.

(7) Includes 314,899 number of shares owned by Bio Rad Laboratories Inc. over which Ms. Tsingos has shared voting and investment power.

(8) Includes 252,499 shares that may be acquired by exercise of stock options or vesting of restricted stock units within 60 days of March 1, 2017.

(9) Includes 209 shares that may be acquired by exercise of stock options within 60 days of March 1, 2017.

(10) Includes 313 shares that may be acquired by exercise of stock options within 60 days of March 1, 2017.

(11) Includes 266,997 shares that may be acquired by exercise of stock options or vesting of restricted stock units within 60 days of March 1, 2017, including those reflected in footnotes 5 through 9 above.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership and changes in ownership with the Securities and Exchange Commission. Executive officers, directors and greater than 10% stockholders are required by Securities and Exchange Commission regulations to furnish Nanometrics with copies of all Section 16(a) forms that they file. Nanometrics assists our executive officers and directors in the preparation and filing of Forms 4, and generally files the Forms 4 on behalf of our directors and executive officers using the powers of attorney given to certain executive officers of Nanometrics by our executive officers and directors delegating the authority to make the filings. Based solely on our review of the copies of such form received by us or written representations from certain reporting persons, we believe that our executive officers, directors and greater than 10% stockholders have complied with all applicable filing requirements, except as follows: each of Dr. Timothy J. Stultz, our Chief Executive Officer, Janet Taylor, our General Counsel, and Kevin Heidrich, our Senior Vice President, Strategic Marketing and Business Development, filed one Form 4 late.

EXECUTIVE COMPENSATION

2016 Compensation Discussion and Analysis

Philosophy and Objectives

Nanometrics' compensation program for our named executive officers (the officers appearing in our summary compensation table) is intended to enable us to attract, retain and motivate key executives and to align their interests with those of the stockholders by tying executive compensation to our short-term and long-term company performance. The Compensation Committee acts on behalf of the Board of Directors and, by extension, on behalf of our stockholders, to establish, implement and continually monitor adherence to our compensation philosophy. The Compensation Committee's philosophy is to design a compensation package that addresses the need for alignment between the interests of executive officers and stockholders in terms of producing short-term and long-term enhanced stockholder value, as well as achieves retention and motivation through appropriate incentives. This philosophy takes into account both internal equity and external market information relative to our industry and size. The Compensation Committee designs the executive compensation program with the goal of providing total compensation to our named executive officers that is competitive and consistent with our compensation philosophy.

The Compensation Committee's principal objectives are to: (a) develop, recommend and approve compensation packages that are consistent with our philosophy; (b) link executive compensation to the achievement of our financial, management or other performance goals and; (c) support our culture and core values by promoting equity among the executive team and maintaining the competitiveness of our overall compensation when compared with external opportunities.

Philosophy and Objectives Applied

The Compensation Committee relied on an independent outside compensation consulting firm, Compensia, our human resources department, and (other than with respect to himself) Timothy Stultz, our Chief Executive Officer ("CEO"), to

provide information and recommendations to establish specific compensation packages for our named executive officers for the 2016 fiscal year that ended December 31, 2016.

Our executive compensation packages for the 2016 fiscal year included three primary components - base salaries, cash bonus award opportunities and long-term equity incentive awards. Other elements of compensation include limited perquisites, other benefits (including retirement (401(k) plan, including matching contributions), health, and welfare benefits), and severance arrangements. The Compensation Committee considered the three primary components individually and in the aggregate to assess their competitiveness and effectiveness in retaining our executives and motivating them to create short-term and long-term enhanced stockholder value.

In the Compensation Committee’s review of our named executive compensation for the 2016 fiscal year, the Compensation Committee considered publicly available market data for companies that typically include similarly-sized semiconductor and semiconductor capital equipment or similar firms for each executive in a like or similar role. In November 2015, for compensation decisions for the 2016 fiscal year, Compensia recommended and the Compensation Committee approved modifications to the group of peer companies for conducting compensation analysis to better reflect our size and business. The Compensation Committee considered the following factors:

- primary focus on semiconductor and semiconductor equipment companies, and secondary focus on hardware companies;
- revenues;
- market capitalization; and
- several other factors including profitability, growth and revenues relative to market capitalization.

The Compensation Committee removed eight companies from the peer group companies used in our 2015 fiscal year analysis: two companies (PLX Technology, Inc. and Silicon Image, Inc.) because they were acquired; one company (Ambarella) because it was above the market capitalization range; and five companies (Brooks Automation, Inc., The GSI Group, Inc., Lattice Semiconductor Corporation, Veeco Instruments Inc., and Xcerra Corporation) because they were above the revenue range. The Compensation Committee added three new companies (Electro Scientific Industries, Inc., Axcelis Technologies, Inc., and Mattson Technology, Inc.) to our peer group for the 2016 fiscal year analysis that reflect the criteria described above. Our peer group companies considered for compensation for the 2016 fiscal year are listed below.

2016 Fiscal Year Peer Group Companies	
Axcelis Technologies, Inc.	Form Factor, Inc.
Cascade Microtech, Inc.	Mattson Technology, Inc.
Cohu, Inc.	Maxwell Technologies Inc.
Electro Scientific Industries, Inc.	Rudolph Technologies Inc.
Exar Corporation	Ultratech, Inc.
FARO Technologies, Inc.	

The Compensation Committee selected companies above because they operate in our industry or similar industries, are comparable to Nanometrics based on both survey data and proxy data, revenues (in the range of $90 million to $370 million), and/or market capitalization (in the range of $100 million to $1.0 billion). Compensia gathered data with respect to base salary, target bonus awards and all equity awards, including stock options, restricted stock units ("RSUs") and performance based equity. We generally do not gather data regarding employee benefits such as 401(k) or health care coverage normally available to broad groups of employees.

While the market data may identify a certain percentile of the market in which we operate with regard to base salary, bonus or long-term incentives, the Compensation Committee did not target any specific percentile but instead looked at each element as compared to the total targeted cash package and the various components, in light of the desired results, internal equity and the information provided, and then decided if a change to compensation was warranted or not. The Compensation Committee also consulted with our Chief Executive Officer with respect to the appropriate compensation for the executives who reported to him, including: Mr. Andreson, our Chief Financial Officer; Dr. Borowicz, our Executive Vice President, Business Operations; Ms. Taylor, our General Counsel; and Mr. Kocher, our Senior Vice President, Commercial Operations. The Chief Executive Officer reviewed the experience and qualifications, and performance of our executives using the elements and framework described under "2016 Executive Compensation Components" below, and made recommendations to the Compensation Committee about the structure of the overall compensation program and individual compensation arrangements. This framework provided a guide for the Compensation Committee's deliberations and recommendations regarding proposals for base salary, bonus opportunities and long-term equity incentive awards for each executive position. The Compensation Committee considered those factors that are controllable by management such as expenses and cash, account penetration and long-term stockholder value delivery and others that are less within management control such as revenue, which is subject to the short-term industry cycles and the timing of customer capital spending cycles. The Compensation Committee did not apply formulas or assign specific mathematical weights to the peer group data or any of the factors

or elements of compensation discussed above, but rather exercised its business judgment and discretion to make a subjective determination of both the amounts of compensation as well as the distribution of compensation among the various components, after considering all the measures collectively. The Compensation Committee then concluded based on the framework outlined above to approve an appropriate compensation package for each executive.

2016 Executive Compensation Components

For the 2016 fiscal year, the principal components of compensation for our named executive officers, Drs. Stultz and Borowicz, Messrs. Andreson and Kocher, and Ms. Taylor, were:

- Base salary;
- Bonus;

- Equity awards; and
- Retirement and other benefits.

The Compensation Committee has chosen these components because it believes that each supports achievement of one or more of our compensation objectives, and that together they will be effective in this regard. The use of each compensation component is based on a determination by the Compensation Committee of the importance of each compensation objective in supporting our business and talent strategies. These components are commonly used for executives at companies within our peer group and, therefore, the Compensation Committee finds these to be appropriate in our talent retention strategy. The Compensation Committee's determination varies for each executive officer depending on a number of factors, including but not limited to, scope of his or her responsibilities, leadership skills and values, and individual performance. The Compensation Committee did not apply formulas or assign specific mathematical weights to any of these factors, but rather exercised its business judgment and discretion to make a subjective determination after considering all the measures collectively.

Base Salary

Base salaries serve as the foundation of Nanometrics' compensation program. Other executive compensation elements, including annual short-term cash incentives and long-term equity incentives, the Compensation Committee derives by weighing them against base salary. Nanometrics provides named executive officers with base salaries to compensate them for services rendered during the fiscal year and sets base salaries at levels which the Compensation Committee believes will effectively attract and retain top talent. The Compensation Committee determines base salaries for each named executive officer based on his or her experience, position and responsibility, as well as the contribution that he or she brings to Nanometrics through performance. During its annual review of base salaries for executives, the Compensation Committee primarily considers:

- the salaries of executive officers in similar positions at our peer group companies as discussed in the above section titled "Philosophy and Objectives Applied";
- our financial performance over the past year based upon the ability to achieve Board-approved financial metrics including revenue targets, operating income targets and other operating results metrics; and
- the individual performance of each named executive officer, and his or her duties and areas of responsibility, on a subjective basis, which may include, among other things: span of control; ability to influence, manage and produce results that increase the profitability of Nanometrics; and ability to streamline and create efficiencies in the organization.

The Compensation Committee considers salary levels annually as part of our performance review process as well as upon a promotion or other change in job responsibility. The Compensation Committee reviews and determines salaries after reviewing salary data supplied by Compensia, including data regarding our peer comparison group, as well as consideration of the compensation for our executives on a company-wide basis, based on their relative duties and responsibilities and the recommendations of our Chief Executive Officer as it relates to the executives who report to him. Stock price performance has not been a direct factor in determining annual base salary compensation because the price of our common stock is subject to a variety of factors outside of our control. The Compensation Committee also considered comparisons of peer group compensation to peer group performance provided by Compensia. The Compensation Committee did not apply formulas or assign specific mathematical weights to any of these factors, but rather exercised its business judgment and discretion to make a subjective determination regarding each executive's base salary after considering all of these measures collectively.

For fiscal year 2016, based on all of the data considered, the Compensation Committee exercised its business judgment and discretion to make a subjective determination regarding each named executive officer's 2016 base salary as set forth in the table below. Mr. Kocher was promoted in 2016, and therefore his salary for 2016 is not compared to his salary in 2015 in the table below.

Named Executive Officer	Annual Base Salary Approved for Fiscal Year 2016	Year-Over-Year Percentage Increase Represented by Fiscal Year 2015 Base Salary
Timothy J. Stultz, Ph.D. President, Chief Executive Officer and Director	$ 500,000	1.3%
Jeffrey Andreson Chief Financial Officer	$ 340,000	3.0%
S. Mark Borowicz, Ph.D. Executive Vice President, Business Operations	$ 305,000	4.4%
Rollin Kocher [(1)] Senior Vice President, Commercial Operations	$ 271,889	n/a
Janet Taylor General Counsel	$ 276,000	2.2%

(1) Mr. Kocher became our SVP Commercial Operations in September 2016.

Bonus

The Compensation Committee views cash bonuses as part of its performance-based compensation program designed to align the recipient’s interests with our annual goals and objectives and our stockholders’ interests. At our 2012 annual meeting of stockholders, the stockholders approved the Executive Performance Bonus Plan (the “Plan”). Within the parameters of the Plan, the Compensation Committee established the 2016 Executive Performance Bonus Program (the “2016 Bonus Program”). The 2016 Bonus Program is intended to motivate senior executives to achieve short-term and long-term corporate objectives relating to the performance of Nanometrics or one of its business units as established by the Compensation Committee of the Board of Directors and to reward them when those objectives are achieved, thereby tying performance to stockholder value. Bonuses would be triggered upon our achievement of target metrics determined by the Compensation Committee.

As part of the 2016 Bonus Program, the Compensation Committee established the following target bonus opportunities:

Named Executive Officer [1]	Target Bonus Opportunity (as a % of annual base salary)
Timothy J. Stultz, Ph.D.	100%
Jeffrey Andreson	60%
S. Mark Borowicz, Ph.D.	60%
Rollin Kocher	30%
Janet Taylor	45%

The Compensation Committee reviews and approves target bonus opportunities for each executive officer based on market data and each executive officer's relative duties and responsibilities.

For Dr. Stultz, Mr. Andreson, Dr. Borowicz and Ms. Taylor 100% of the target bonus opportunity was based upon overall company financial performance objectives recommended by the CEO and approved by the Compensation Committee. For Mr. Kocher, 50% of the target bonus opportunity was based on overall company financial performance objectives recommended by the CEO and approved by the Compensation Committee, while the remaining 50% was based on individual management objectives determined by the CEO prior to the time Mr. Kocher became an executive officer. In addition, Mr. Kocher received commissions based on recognized revenue from sale of products, upgrades and service contracts.

The maximum award that an executive could receive under the 2016 Bonus Program was two times the target bonus opportunity. Achievement of the bonus opportunity tied to the overall company performance for the 2016 Bonus Program was determined based on annual Revenues and Non-GAAP Operating Margin. The 2016 Bonus Program provided that Annual Revenue of

$200 million and Non-GAAP Operating Margin of 10% resulted in funding at 100% of the company performance component of Total Target Bonus. The formula for determining the actual company performance component was the product of (i) achieved Non-GAAP Operating Margin divided by 10% and (ii) $200 million in annual Revenues divided by actual annual Revenues achieved. The company performance factor would be zero when Non-GAAP Operating Margin is less than or equal to 0%. For the 2016 Bonus Program, Non-GAAP Operating Margin was defined as Operating Income/(Loss) as reported in accordance with generally accepted accounting principles in the United States, plus amortization of intangible assets, and any unusual charges, such as restructurings, litigation or acquisition charges, divided by Annual Revenues.

For Mr. Kocher, a portion of his bonus was tied to the achievement of individual management objectives. His individual management objectives related to (i) achieving forecasted sales and service revenue, (ii) improved operating efficiencies, (iii) accurately forecasting revenue, and (iv) other organization-wide initiatives. For fiscal year 2016, based on achieved Revenues and Non-GAAP Operating Income, the Compensation Committee approved the following bonus amounts for the named executive officers:

Named Executive Officer	Approved Bonus under 2016 Bonus Program
Timothy J. Stultz, Ph.D.	$ 625,000
Jeffrey Andreson	$ 255,000
S. Mark Borowicz, Ph.D.	$ 228,750
Rollin Kocher [(1)]	$ 101,959
Janet Taylor	$ 155,250

(1)Mr. Kocher became our SVP Commercial Operations in September 2016. He was also eligible for Commission Plan in the amount of $237,514.

Long-Term Incentive Compensation

The Compensation Committee believes that equity compensation plans are an essential tool to link the long-term interests of Nanometrics' stockholders and our employees, particularly our executive officers, and serve to motivate executives to make decisions that will, in the long run, optimize returns to our stockholders. Equity compensation plans also enable us to provide an opportunity for increased equity ownership by executives, thereby increasing the link between the incentives of our executives and the interests of our stockholders, and maintain competitive levels of total compensation. Each year the Compensation Committee considers incentive and retention needs, market competitiveness and industry and business conditions to make its subjective determination of the appropriate balance of RSUs, which provide a more predictable value; and Performance Stock Units, or PSUs, which provide predictable value to the extent pre-defined performance metrics are achieved. The company has not granted stock options since 2014. The Compensation Committee considered both the broader market environment and the individual equity profile of each executive in awarding all Named Executive Officers RSUs for 2016, and awarding the CEO PSUs for 2016.

Restricted Stock Unit Grants. All of the executives received RSU awards during the 2016 fiscal year. The Compensation Committee believes that RSUs, which increase in value as the market price of our common stock increases, both encourage our executives to work toward the longer term goal of creating stockholder value and provide retention value. RSUs align the interests of our executives to the interests of our stockholders because an executive that holds RSUs is exposed to the same market risks to which our stockholders are exposed. The Compensation Committee approved RSU award levels for 2016 based on an analysis of peer group data related to the size of equity awards as described under our section “Philosophy and Objectives Applied” above. The Compensation Committee did not benchmark to a specific target percentile, but instead considered proposed RSU awards in the context of each executive’s cash and total compensation package. In addition, the Compensation Committee considered other factors when determining each executive’s RSU award, including: the level of resulting alignment with the interests of our stockholders; such executive’s position within the organization and the appropriate level of equity compensation for such position relative to others in the organization’s hierarchy; such executive’s contributions to our financial, operational and general performance; our stock price; and the value of such awards based on the company’s currency stock price. The Compensation Committee did not apply formulas or assign specific mathematical weights to any of these factors, but rather exercised its business judgment and discretion to make a subjective determination regarding whether to grant, and the size of grants of RSUs to each executive.

Performance Stock Unit Grants. Our CEO received his 2016 equity value 50% in time-based RSUs and 50% in performance-based RSUs (“PSUs”). The 2016 PSUs are earned based on Nanometrics’ stock price performance relative to the Top 30 companies in the Philadelphia Stock Exchange Semiconductor Index over a one, two and three-year performance period. To earn the target number of shares, Nanometrics’ stock price performance must be at the 50th percentile of the Index; for stock price performance at or above the 75th percentile, the CEO earns 150% of the target shares (maximum payout is 150% of target). If Nanometrics’ stock price performance for any period is negative, the number of shares earned is capped at target, regardless of performance relative to the

Index. The Compensation Committee determined the PSU award level for our CEO in 2016 based on an analysis of peer group data related to the size of equity awards as described under our section “Philosophy and Objectives Applied” above.

Although historically the Compensation Committee granted PSUs only to our CEO, in 2017, the Compensation Committee determined to grant PSUs to our CEO as well as to our CFO, Mr. Andreson, and to Dr. Borowicz and Mr. Kocher.

Our Compensation Committee grants equity awards under our 2005 Equity Incentive Plan to the named executive officers and other employees as incentive compensation. The Compensation Committee meeting schedule is determined several months in advance, and, therefore, proximity of any award date to a material news announcement or a change in our stock price, if any, is coincidental. We do not backdate equity awards or make equity awards retroactively. In addition, we do not coordinate our equity grants to precede announcements of favorable information or follow announcements of unfavorable information. Equity awards are priced using the closing market price of the common stock on the date of grant.

Other Elements of Compensation

All Nanometrics employees in the United States, including our named executive officers, are eligible to participate in our 401(k) plan, medical, dental and vision insurance, employee stock purchase plan, as well as our life and disability insurance policy. Nanometrics’ 401(k) Plan and other generally available benefits programs allow us to remain competitive for employee talent, and we believe that the availability of these benefits programs generally enhances employee productivity and loyalty to Nanometrics. The main objectives of Nanometrics’ benefits programs are to give employees access to quality healthcare, financial protection from unforeseen events, assistance in achieving retirement financial goals, and enhanced health and productivity, all in full compliance with applicable legal requirements. These generally available benefits typically do not specifically factor into decisions regarding an individual named executive officer’s total compensation or equity award package.

Perquisites

Nanometrics provides certain named executive officers with a limited number of perquisites that the Compensation Committee believes are reasonable and consistent with our overall compensation program. Although the Compensation Committee seeks the advice of the human resources department on general market competitiveness for these benefits, it does not use a formal benchmarking process. The aggregate incremental costs to Nanometrics of these perquisites are included in the Summary Compensation Table in the “All Other Compensation” column. Dr. Stultz receives a car allowance. All named executive officers are eligible to participate in an Executive Healthcare Reimbursement plan that provides for reimbursement of usual and customary costs that may not be covered under the medical, dental and eye care plans available to all other Nanometrics employees; actual amounts reimbursed are included in the Summary Compensation Table as “All Other Compensation.”

Severance Benefits

The Compensation Committee considers maintaining a stable and effective management team to be essential to protecting and enhancing the best interests of Nanometrics and its stockholders. Accordingly, the Compensation Committee has taken steps to encourage the continued attention, dedication and continuity of members of our management to their assigned duties without the distraction that may arise from the potential termination of employment. Specifically, we have entered into agreements with our named executive officers providing for severance payments and benefits, consisting of cash severance, accelerated vesting of equity awards and continued health care benefits, upon a termination of employment without cause or resignation for good reason in connection with a “change

in control" of Nanometrics, as described in greater detail below in the section titled "Employment Contracts and Termination of Employment and Change-in-Control Arrangements." Nanometrics entered into these agreements with Dr. Stultz in 2010, and with Mr. Andreson in 2014. In May 2015, these agreements were superseded and replaced with new agreements, which Nanometrics entered into with Dr. Stultz, Mr. Andreson and Dr. Borowicz, and with Ms. Taylor in July 2015 when she was hired. Nanometrics entered into such an agreement with Mr. Kocher in 2016 when he became an executive officer.

When entering into these agreements, the Compensation Committee analyzed data and suggestions from Compensia in 2014 as well as our human resources department. The Compensation Committee then exercised its business judgment and discretion to make a subjective determination after considering this information.

After considering industry practices, the Compensation Committee determined that our severance and benefits agreements are necessary and appropriate in substance and scope to provide competitive compensation to the types of individuals that Nanometrics desires to attract, hire and retain. The Compensation Committee also believes that these agreements are consistent with our overall compensation philosophy. The Compensation Committee periodically monitors industry practice in this area to ensure that these

agreements remain consistent with industry practice and our overall compensation philosophy of offering competitive compensation to preserve our ability to attract and retain key executives.

Tax and Accounting Implications

As part of its role, the Compensation Committee reviews and considers both tax and accounting related implications as they apply and as they evolve.

As part of its role, the Compensation Committee reviews and considers the deductibility of executive compensation under Section 162(m) of the Internal Revenue Code, which provides that we may not deduct compensation of more than $1,000,000 that is paid to certain executive officers, unless certain exemption requirements are met. Exemptions to this deductibility limit may be made for various forms of “performance-based” compensation. However, in certain situations, the Compensation Committee may approve compensation that will not meet these requirements to ensure competitive levels of total compensation for our executive officers.

Section 4999 and Section 280G of the Internal Revenue Code provide that executives could be subject to additional taxes if they receive payments or benefits that exceed certain limits in connection with a change in control of Nanometrics and that Nanometrics could lose an income tax deduction for such payments. We have not provided any executive with a tax “gross up” or other reimbursement for tax amounts the executive might be required to pay under Section 4999 or Section 280G of the Internal Revenue Code as the Compensation Committee determined that this was not consistent with best practices.

Section 409A of the Internal Revenue Code imposes additional taxes and interest on underpayments in the event that an executive defers compensation under a compensation plan that does not meet the requirements of Section 409A. We believe that we are operating in good faith compliance with Section 409A and have structured our compensation and benefits programs and individual arrangements in a manner intended to comply with the requirements thereof.

Risks Associated With Compensation Plans

In 2016, the Compensation Committee determined that our compensation policies and practices for our employees are not reasonably likely to cause employees to take risks that would have a material adverse effect on the company.

Equity Ownership Guidelines

We have a stock ownership policy that establishes, for our executive officers, guidelines for minimum levels of stock ownership in the company by 2019 or within five years of their hire date or promotion date, whichever is later. The stock ownership guidelines are, for our Chief Executive Officer, ownership of stock with a value equal to three times his annual base salary, and for each other executive officer, ownership of stock with a value equal to his or her annual base salary.

Results of 2016 Shareholder Advisory Vote to Approve Executive Compensation

At our 2013, 2014, 2015 and 2016 annual meetings of stockholders, we requested our stockholders to approve, on an advisory (non-binding) basis, the compensation paid to our executive officers as reported in the proxy statements for those annual meetings. Our stockholders expressed substantial support for our executive compensation, with approximately 97.8%, 96.1%, 95.1% and 92.7%, respectively, of the shares present and entitled to vote voting for approval of the “say-on-pay” advisory vote approving our executive compensation. Because of the high level of support expressed by our stockholders for the executive compensation, the Compensation Committee has continued to apply a similar approach for executive compensation decisions and policies.

Clawback Policy

We have established a clawback policy. This policy provides that in the event of a material restatement of our consolidated financial statements resulting from fraud or intentional misconduct by any Section 16 officer who has either erroneously been awarded or paid a greater amount of incentive compensation than he or she would have received had the financial statements been fairly stated, the Board or its designated committee has the discretion to direct that the company either recoup or cancel payment, though not forced, of all or a portion of the excess of performance-based cash or equity compensation to the Section 16 officer(s). This clawback policy is effective for compensation awarded or paid after implementation of the policy and applies to current Section 16 officers as well as those who terminate after the clawback program has been approved by the Board. The covered period is the three-year period preceding the effective date for which it is determined that a restatement is required.

Insider Trading Policy

We have an insider trading policy that, in addition to prohibiting insider trading, has provisions prohibiting margining the company's securities, engaging in short sales of securities not owned, and trading in derivative securities.

2016 Summary Compensation

The following table sets forth compensation information for (i) our Chief Executive Officer, (ii) our Chief Financial Officer, and (iii) each of our other three highest compensated executive officers during fiscal 2016, all of whom are collectively referred to as the “named executive officers.”

Summary Compensation Table

Fiscal Year 2016

	Year	Salary ($)	Stock Awards[1],[2]	Non-Equity Incentive Plan Compensation[3]	All Other Compensation[4]	Total ($)
Timothy J. Stultz, Ph.D.	2016	$498,343	$1,170,482	$ 625,000	$ 28,205	$2,322,030
President, Chief	2015	$493,204	$1,817,800	$ 468,702	$ 26,002	$2,805,708
Executive Officer and	2014	$479,000	$1,596,300	$ 593,960	$ 27,767	$2,697,027
Director						
Jeffrey Andreson [5]	2016	$337,500	$357,210	$ 255,000	$ 7,229	$956,939
Chief Financial	2015	$330,000	$179,200	$ 188,100	$ 5,830	$703,130
Officer	2014	$86,308	$578,000	$ 75,000	$ —	$739,308
Janet Taylor [6]	2016	$274,500	$132,300	$ 155,250	$ 7,218	$569,268
General Counsel	2015	$124,615	$276,800	$ 60,995	$ 5,460	$467,870
S. Mark Borowicz, Ph.D. [7]	2016	$301,750	$330,750	$ 228,750	$ 4,530	$865,780
Executive VP, Business	2015	$291,871	$161,280	$ 151,110	$ 5,545	$609,806
Operations						
Rollin Kocher [8]	2016	$269,909	$244,156	$ 339,473	$ 4,800	$858,338
Sr. VP, Commercial						
Operations						

(1) Amounts shown do not reflect compensation actually received by the named executive officer. Instead, the amounts shown are the aggregate grant date fair value of equity awards granted for financial statement reporting purposes in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 718. The assumptions used to calculate the value of the restricted stock units (“RSUs”) and/or performance stock units (“PSUs”) are set forth under Note 13 of the Notes to Consolidated Financial Statements included in Nanometrics' Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 3, 2017. The amount with respect to PSUs is also based on the probable outcome of the satisfaction of the performance conditions; the grant date fair value assuming satisfaction of the performance conditions is $575,132.

(2) For fiscal year 2016, the Board of Directors awarded on February 22, 2016: Dr. Stultz RSUs to acquire 45,000 shares, and PSUs to acquire 67,500 shares; Mr. Andreson RSUs to acquire 27,000 shares; Ms. Taylor RSUs to acquire 10,000 shares; and Dr. Borowicz RSUs to acquire 25,000 shares. The grant date fair value of these grants was $13.23 per share. Mr. Kocher received an award of 12,987 RSUs at the grant date value of $18.80 per share on

May 27, 2016. All RSUs vest annually over three years from grant date, and all PSUs vest annually over three years on February 22 of each year subject to attainment of certain stock performance metrics.

(3) Amounts reflected for each fiscal year are those earned, but not paid until the following fiscal year, under our executive performance bonus programs and in the case of Mr. Kocher, $237,514 in sales commissions.

(4) Fiscal 2016 amounts represent additional compensation for the named executive officers as follows: Dr. Stultz received reimbursements under our Executive Health Care Plan in the amount of $9,005, an employer 401(k) match in the amount of $4,800, and a car allowance in the amount of $14,400; Mr. Andreson received reimbursements under our Executive Health Care Plan $2,504 and an employer 401(k) match of $4,725; Ms. Taylor received reimbursements under our Executive Health Care Plan in the amount of $2,418 and an employer 401(k) match of $4,800; Dr. Borowicz received reimbursements under our Executive Health Care Plan in the amount of $930 and an employer 401(k) match of $3,600; and Mr. Kocher received an employer 401(k) match of $4,800.

(5) Mr. Andreson joined Nanometrics in September 2014.

(6) Ms. Taylor joined Nanometrics in July 2015.

(7) Dr. Borowicz became an executive officer in February 2015.

(8) Mr. Kocher became an executive officer in September 2016.

2016 Grants of Plan-Based Awards

The following table sets forth information with respect to grants of plan-based awards during the 2016 fiscal year that ended December 31, 2016, to each of the named executive officers.

Grants of Plan-Based Awards For Fiscal Year 2016

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards [1]			All Other Stock Awards: Number of	
Name	Grant Date	Threshold ($)	Target ($)	Maximum ($)	Shares of Stock or Units (#)	Grant Date Fair value Of Stock And Options Awards ($)[4]
Timothy J. Stultz, Ph.D.	2/22/2016	$ —	$500,000	$1,000,000		
	2/22/2016 [2]				45,000	$ 595,350
	2/22/2016 [3]				67,500	$ 575,132
Jeffrey Andreson	2/22/2016	$ —	$204,000	$408,000		
	2/22/2016 [2]				27,000	$ 357,210
Janet Taylor	2/22/2016	$ —	$124,200	$248,400		
	2/22/2016 [2]				10,000	$ 132,300
S. Mark Borowicz, Ph.D.	2/22/2016	$ —	$183,000	$366,000		
	2/22/2016 [2]				25,000	$ 330,750
Rollin Kocher	2/22/2016	$ —	$81,557	$163,114		
	5/27/2016 [2]				12,987	$ 244,156

(1) Reflects awards under our 2016 Executive Performance Bonus Plan as described under "Compensation Discussion and Analysis".
(2) Restricted stock units vest in equal annual installments over a three-year period.
(3) PSUs vest in equal annual installment over a three-year period subject to achievement of certain metrics.
(4) Amounts shown do not reflect compensation actually received by the named executive officer. Instead, the amounts shown are the aggregate grant date fair value of equity awards granted for financial statement reporting purposes, as determined pursuant to ASC Topic 718. The assumptions used to calculate the value of the RSUs and PSUs are set forth under Note 13 of the Notes to Consolidated Financial Statements included in Nanometrics' Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 3, 2017. The amount with respect to PSUs (granted to Dr. Stultz in 2016) is also based on the probable outcome of the satisfaction of the performance conditions: the grant date fair value assuming satisfaction of the performance conditions is $575,132.

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Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table

Our 401(k) savings plan allows employees to contribute up to 100% of their annual compensation to the plan on a pre-tax or after-tax basis, limited to a maximum annual amount as set periodically by the Internal Revenue Service. The plan provides a 20% match by Nanometrics of all employee contributions.

In the 2016 fiscal year, all corporate officers and non-employee directors were eligible to participate in a Nanometrics self-funded Executive Reimbursement Plan (currently administered by Benefit and Risk Management Services). This plan is intended to supplement our basic health plan by reimbursing expenses that are not covered by our health plan. Dr. Stultz is also entitled to a car allowance. Attributed costs of the perquisites described above for the named executive officers for the fiscal year ended December 31, 2016, are included in the "Summary Compensation Table." All such perquisites are taxable to the executive and included as a portion of such executive's wages.

Outstanding Equity Awards at Fiscal 2016 Year End

The following table sets forth the number of shares covered by both stock options and stock awards held by each of the named executive officers at the end of the fiscal year which ended December 31, 2016.

		Option Awards				Stock Awards	
		Number of Securities Underlying Unexercised Options (#)		Option Exercise	Option Expiration	Number of Shares or Units of Stock that have not	Market Value of Shares or Units of Stock That have Not Vested
Name	Grant Date	Exercisable	Unexercisable	Price ($)	Date	Vested (#)	($)[1]
Timothy J. Stultz, Ph.D.	2/22/2016 [6]					67,500	$1,691,550
	2/22/2016 [2]					45,000	$1,127,700
	3/18/2015 [5]					40,000	$1,002,400
	2/24/2015 [2]					26,666	$668,250
	3/6/2014 [2]					28,333	$710,025
	3/12/2013 [3]	56,250	—	$15.85	03/12/2020		
	2/17/2012 [3]	50,000	—	$19.03	02/17/2019		
	11/16/2010 [3]	114,166	—	$11.37	11/16/2017		
Jeffrey Andreson	2/22/2016 [2]					27,000	$676,620
	2/24/2015 [2]					6,666	$167,050
	11/9/2014 [4]					13,333	$334,125
Janet Taylor	2/22/2016 [2]					10,000	$250,600
	8/28/2015 [2]					13,333	$334,125
S. Mark Borowicz, Ph.D.	2/22/2016 [2]					25,000	$626,500

	2/24/2015 (2)					6,000	$150,360
	5/19/2014 (2)					2,000	$50,120
	5/20/2013 (3)	—	625	$14.34	5/20/2013		
Rollin Kocher	5/27/2016 (2)					12,987	$325,454
	5/29/2015 (2)					4,760	$119,286
	5/20/2013 (3)	—	938	$14.34	5/20/2013		

(1) The closing market price of Nanometrics common stock on December 30, 2016, the last trading day of our 2016 fiscal year, was $25.06 per share.
(2) Restricted stock units vest annually over three years on each anniversary of the grant date.
(3) Options vest in equal monthly installments over a total of four years and have a term of seven years.
(4) Restricted stock units vest annually over three years on each anniversary of Mr. Andreson's hire date.
(5) Performance stock units vest annually, subject to stock performance metrics, over three years on each anniversary of February 24, 2015.

(6) Performance stock units vest annually, subject to stock performance metrics, over three years on each anniversary of February 22, 2016.

Option Exercises and Stock Vested

The following table provides, on an aggregate basis, the value realized upon the exercise of stock options and vesting of stock awards, by the named executive officers during the 2016 fiscal year that ended December 31, 2016.

Option Exercises and Stock Vested For Fiscal 2016

	Option Awards		Stock Awards	
Name	Number of Shares Acquired On Exercise (#)	Value Realized on Exercise ($) [1]	Number of Shares Acquired On Vesting (#)	Value Realized on Vesting ($) [2]
Timothy J. Stultz, Ph.D.	45,834	$853,429	75,000	$1,068,483
Jeffrey Andreson	—	—	16,667	$345,668
Janet Taylor	—	—	6,667	139,274
S. Mark Borowicz, Ph.D.	6,875	$129,368	9,666	$142,037
Rollin Kocher	14,062	$287,869	5,713	$92,606

(1) The value realized on exercise is calculated by multiplying the number of shares shown in the table by the excess of the market value of the shares on the vesting date and the exercise price.
(2) The value realized on vesting is calculated by multiplying the number of shares shown in the table by the market value of the shares on the vesting date.

Employment Contracts and Termination of Employment and Change in Control Arrangements

In September 2014, Nanometrics entered into an employment agreement with Mr. Jeffrey Andreson setting forth his then-effective salary, bonus and equity grants, and severance benefits; Mr. Andreson's current compensation is discussed above, and his current severance benefits are discussed below.

Nanometrics entered into severance benefits and change in control severance benefits agreements (the "Severance Agreements") with each of Dr. Timothy Stultz, Jeffrey Andreson, and Dr. S. Mark Borowicz in May 2015, with Janet Taylor in July 2015, and with Rollin Kocher in November 2016. The general severance benefits will become payable under the Severance Agreements in the event of the executive officer's termination without cause or resignation for good reason which occurs other than on or within 12 months following a qualifying change in control event. With respect to Dr. Stultz, Mr. Andreson and Ms. Taylor, the general severance benefits consist of 12 months of base salary continuation and COBRA premium benefits, and with respect to Mr. Stultz an additional lump sum payment of 100% of his annual target bonus. With respect to Dr. Borowicz and Mr. Kocher, the general severance benefits consist of six months of base salary continuation and COBRA premium benefits.

The change in control severance benefits will become payable under the severance agreements in the event that (i) a qualifying change in control event occurs and (ii) the executive's termination without cause or resignation for good reason occurs within the period commencing on and ending 12 months following the qualifying change in control event. With respect to Dr. Stultz, the change in control severance benefits consist of (i) a lump sum payment of 18 months' base salary and 100% of his annual target bonus, (ii) 18 months of COBRA premium benefits, and (iii) full acceleration of the vesting and exercisability of all then outstanding equity awards will generally apply. With respect to Mr. Andreson, Ms. Taylor, Dr. Borowicz and Mr. Kocher, the change in control severance benefits consist of (i) a lump sum payment of 12 months' base salary and 100% of the annual target bonus, (ii) 12 months of COBRA premium benefits, and (iii) full acceleration of the vesting and exercisability of all then outstanding equity awards will generally apply.

For purposes of the severance agreements, a qualifying change of control event generally includes any of the following events: (i) an acquisition by any person, entity or group of the beneficial ownership of securities of Nanometrics representing more than fifty percent of the total voting power of Nanometrics' then outstanding securities; (ii) a change in a majority of the members constituting the Board within a two year period that is not approved by a majority of the incumbent Board members, (iii) a merger or consolidation involving Nanometrics and, immediately after the consummation of such transaction, the stockholders of Nanometrics immediately prior thereto do not own, directly or indirectly, outstanding voting securities representing more than fifty percent of the combined outstanding voting power of the surviving or resulting entity; and (iv) a sale, lease or other disposition of all or substantially all of the assets of Nanometrics.

Payment of general severance benefits or change in control severance benefits, as applicable, is in all cases conditioned upon the executive officer providing a timely and effective release of claims against Nanometrics and the

executive officer's ongoing compliance with the non-competition, non-solicitation and other requirements set forth in the severance agreements.

In addition, under the terms of our 2005 Equity Incentive Plan, in the event of a merger or change in control in which outstanding stock options or restricted stock units held by the named executive officers are not assumed or substituted with stock options or restricted stock units of the surviving company, such awards will vest and become fully exercisable or payable.

Termination of Employment and Change-in-Control Potential Payouts

The table below estimates amounts payable upon a separation as if the individuals were separated on December 31, 2016, which was the last day of our 2016 fiscal year.

		Not in connection with Change in Control Termination Without Cause For Good Reason Or Due to Cause/Good Reason ($)	In Connection with Change in Control Termination Without Cause For Good Reason Or Due to Disability or Death ($)
Timothy J. Stultz, Ph.D.	Severance pay	$500,000	$750,000
	Equity vesting acceleration[1]	—	3,250,537
	Bonus	500,000	500,000
	Health care benefits continuation	34,304	51,456
		$1,034,304	$4,551,993
Jeffrey Andreson	Severance pay[2]	$340,000	$340,000
	Equity vesting acceleration[1]	—	1,177,795
	Bonus	—	204,000
	Health care benefits continuation	25,362	25,362
		$365,362	$1,747,157
Janet Taylor	Severance pay	$276,000	$276,000
	Equity vesting acceleration[1]	—	584,725
	Bonus	—	124,200
	Health care benefits continuation	22,935	22,935
		$298,935	$1,007,860
S. Mark Borowicz, Ph.D.	Severance pay	$152,500	$305,000
	Equity vesting acceleration[1]	—	833,680
	Bonus	—	183,000
	Health care benefits continuation	21,558	43,116
		$174,058	$1,364,796
Rollin Kocher	Severance pay	$135,945	$271,889
	Equity vesting acceleration[1]	—	454,795
	Bonus	—	81,567
	Health care benefits continuation	21,558	43,116

	$157,502	$851,367

(1) Represents the estimated potential incremental value of additional stock options and restricted stock units that would have vested for our named executive officers as of December 31, 2016. For stock options, the value is based on the difference between the aggregate exercise price of all accelerated options and the aggregate market value of the underlying shares as of December 31, 2016, calculated based on the closing market price of our stock on December 30, 2016, the last trading day of our fiscal year $25.06 per share. Accelerated restricted stock unit award value is calculated by multiplying the number of accelerated shares by the closing price of our stock on December 30, 2016, $25.06 per share.

COMPENSATION COMMITTEE REPORT[1]

The Compensation Committee has reviewed and discussed with management the Compensation Discussion and Analysis contained in this Proxy Statement. Based on this review and discussion, the Compensation Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement and incorporated into Nanometrics Incorporated's Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

The Compensation Committee

Edward J. Brown Jr., Chairman
J. Thomas Bentley
Christine A. Tsingos

[1] The material in this report is not "soliciting material," is furnished to, but not deemed "filed" with, the Securities and Exchange Commission and is not deemed to be incorporated by reference in any filing of the company under the Securities Act or the Exchange Act, other than the company's Annual Report on Form 10 K, where it shall be deemed to be "furnished," whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

COMPENSATION OF DIRECTORS

During the 2016 fiscal year, non-employee directors received an annual retainer fee of $50,000. In addition, the Chairman of the Board, Audit Committee Chairman, Compensation Committee Chairman and Nominating and Governance Committee Chairman received an incremental $30,000, $20,000, $20,000 and $10,000 annual retainer, respectively, for serving in such capacities. Committee members, other than the chairpersons, received an incremental $10,000 annual retainer for service on the Audit or Compensation Committee and an incremental $7,500 annual retainer for service on the Nominating and Governance Committee. All retainer fees are paid annually, as of the date of our annual stockholders meeting, and in advance of the provision of services to which the retainer relates.

Non-employee directors are also eligible to participate in our 2005 Equity Incentive Plan, and in fiscal year 2016, each such director received equity incentives, issued in restricted stock units, valued at $100,000. We calculated the value of such equity incentives using the 30-day average of the closing market price of our stock on the NASDAQ Stock Market as of the date of our annual stockholders meeting. These awards vest on the earlier of the first anniversary date of the grant or the date of the next annual meeting of stockholders.

Any new non-employee director will be eligible to receive restricted stock units valued at $100,000 pro-rated to reflect the amount of time served before the next annual meeting of stockholders.

Non-employee directors are eligible to participate in Nanometrics' self-funded Executive Reimbursement Plan, which is intended to supplement our basic health plan by reimbursing expenses that are not covered by our health plan. All such reimbursements are considered taxable income to our non-employee directors.

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2016 Director Compensation

The following table sets forth information regarding the compensation for each of our non-employee directors for the 2016 fiscal year that ended December 31, 2016. Nanometrics' non-employee director compensation program for the 2016 fiscal year comprised: (a) cash compensation, consisting of annual retainer fees, additional fees for chairing Board committees, and additional fees for serving as a committee member; and (b) equity compensation, consisting of restricted stock units. Each of these components is detailed below.

Director Compensation Table For Fiscal Year 2016

	Fees Earned or Paid in Cash	Stock Awards	All Other Compensation	Total
	($)	($)[1],[2]	($)[3]	($)
Bruce C. Rhine [4]	$ 100,000	$ 100,000	$ 864	$200,864
J. Thomas Bentley [5]	$ 70,000	$ 100,000	$ 24,188	$194,188
Edward Brown Jr. [6]	$ 77,500	$ 100,000	$ —	$177,500
Mr. Christopher Seams [7]	$ 67,500	$ 100,000	$ —	$167,500
Ms. Christine Tsingos [8]	$ 80,000	$ 100,000	$ —	$180,000

(1) Amounts shown do not reflect compensation actually received by the named director. Instead, the amounts shown are the aggregate grant date fair value calculated for financial statement reporting purposes, as determined pursuant to Accounting Standards Codification ("ASC") Topic 718, but excluding the effect of any estimated forfeitures. The assumptions used to calculate the value of awards are set forth under Note 13 of the Notes to Consolidated Financial Statements included in Nanometrics' Annual Report on Form 10-K for fiscal 2015 filed with the SEC on March 3, 2017.

(2) On May 24, 2016, each non-employee director received a restricted stock unit award in the amount of 6,493 shares of common stock. All RSUs vest one year from the first anniversary date of said award or the next annual meeting, if earlier. The fair market value for these RSUs was $15.40 per share on the date of the grant.

(3) Representing health care reimbursements extended to Directors.

(4) At December 31, 2016, Mr. Rhine had 6,988 outstanding options to purchase shares of common stock and 6,493 unvested restricted stock units.

(5) At December 31, 2016, Mr. Bentley had 6,988 outstanding options to purchase shares of common stock and 6,493 unvested restricted stock units.

(6) At December 31, 2016, Mr. Brown had 6,493 unvested restricted stock units.

(7) At December 31, 2016, Mr. Seams had 6,493 unvested restricted stock units.

(8) At December 31, 2016, Ms. Tsingos had 6,493 unvested restricted stock units.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During the 2016 fiscal year, the Compensation Committee consisted of Edward J. Brown Jr. (Chair), J. Thomas Bentley and Christine A. Tsingos. None of Nanometrics' executive officers serves as a member of the board of

directors or compensation committee of any entity that has one or more executive officers serving as a member of Nanometrics' Board or Compensation Committee.

PROPOSAL 2

ADVISORY (NON-BINDING) VOTE ON EXECUTIVE COMPENSATION

At the 2011 Annual Meeting of Stockholders, the stockholders indicated their preference that Nanometrics solicit a non-binding advisory vote on the compensation of the named executive officers, commonly referred to as a "say-on-pay" vote, every year. The Board of Directors adopted a policy that is consistent with that preference. In accordance with this policy, this year we are again requesting our stockholders to approve an advisory resolution on Nanometrics' executive compensation as reported in this Proxy Statement, and as required by Section 14A(a)(1) of the Exchange Act. This vote is not intended to address any specific item of compensation, but the overall compensation of our named executive officers and the philosophy, policies and practices described in this Proxy Statement.

As described more fully in the Compensation Discussion and Analysis section and other compensation-related disclosures in the proxy statement, consistent with its compensation philosophy and pay-for-performance principles, Nanometrics' executive compensation program has been designed to provide competitive compensation packages that enable Nanometrics to attract and retain talented executives, motivate executive officers to achieve Nanometrics' short- and long-term business strategies and objectives, and align the interests of executives with those of stockholders, and are consistent with current market practices and good corporate governance principles.

We encourage you to read the Compensation Discussion and Analysis, compensation tables and related narrative discussion in this Proxy Statement.

The Compensation Committee and the Board of Directors 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 reported in this Proxy Statement has contributed to our recent and long-term success.

In accordance with Section 14A(a)(1) of the Exchange Act, as a matter of good corporate governance, and in accordance with the policy adopted by the Board of Directors to provide an annual "say-on-pay" advisory vote, we are asking stockholders to approve the following advisory resolution at the annual meeting:

RESOLVED, that the stockholders of Nanometrics approve, on an advisory basis, the compensation of Nanometrics' named executive officers disclosed in the Compensation Discussion and Analysis, the Summary Compensation Table and the related compensation tables, notes and narratives in the Proxy Statement for Nanometrics' 2017 Annual Meeting of Stockholders.

This advisory, "say-on-pay" resolution is non-binding on Nanometrics, the Compensation Committee and the Board of Directors. Although this resolution is non-binding, the Compensation Committee and the Board of Directors value the opinions that stockholders express in their votes and in any additional dialogue, and will review and consider the outcome of the vote and those opinions when making future compensation decisions.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" THE ADVISORY RESOLUTION APPROVING THE COMPANY'S EXECUTIVE COMPENSATION.

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PROPOSAL 3

ADVISORY (NON-BINDING) VOTE ON FREQUENCY OF ADVISORY VOTES ON EXECUTIVE COMPENSATION

Pursuant to Section 14A of the Exchange Act, we are requesting stockholders to vote on whether future advisory votes on executive compensation of the nature reflected in Proposal No. 2 above, commonly referred to as a "say-on-pay" vote, should occur every year, every two years or every three years. At the 2011 Annual Meeting of Stockholders, the stockholders indicated their preference that Nanometrics solicit a "say-on-pay" vote every year. The Board of Directors adopted a policy that is consistent with that preference. However, pursuant to Section 14A of the Exchange Act, we are required to resolicit a stockholder advisory vote on whether our stockholders would prefer future "say-on-pay" votes to occur every year, every two years or every three years.

After careful consideration, our Board of Directors has determined that holding an advisory vote on executive compensation every year is the most appropriate policy for Nanometrics at this time, and recommends that stockholders vote for future advisory votes on executive compensation to occur every year. While our executive compensation programs are designed to promote a long-term correlation between pay and performance, the Board of Directors recognizes that executive compensation disclosures are made annually. Holding an annual advisory vote on executive compensation provides us with more direct and immediate feedback on our compensation disclosures. However, stockholders should note that because the advisory vote on executive compensation occurs well after the beginning of the compensation year, and because the different elements of our executive compensation programs are designed to operate in an integrated manner and to complement one another, in many cases it may not be appropriate or feasible to change our executive compensation programs in consideration of any one year's advisory vote on executive compensation by the time of the following year's annual meeting of stockholders. We believe that an annual advisory vote on executive compensation is consistent with our philosophy on good corporate governance practices and our executive compensation philosophy, policies and practices.

This advisory vote on the frequency of future advisory votes on executive compensation is non-binding on the Board of Directors. Stockholders will be able to specify one of four choices for this proposal on the proxy card: one year, two years, three years, or abstain. Stockholders are not voting to approve or disapprove the Board of Directors' recommendation. Although non-binding, our Board of Directors and the Compensation Committee will carefully review and consider the voting results. Notwithstanding the Board of Directors' recommendation and the outcome of the stockholder vote, the Board of Directors may, in the future, decide to conduct advisory votes on a less frequent basis and may vary its practice based on factors such as discussions with stockholders and the adoption of material changes to compensation programs.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE TO APPROVE THE FUTURE ADVISORY VOTES ON EXECUTIVE COMPENSATION EVERY YEAR

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PROPOSAL 4

APPROVAL OF THE NANOMETRICS 2017 EXECUTIVE PERFORMANCE BONUS PLAN

The Board of Directors is requesting that the stockholders approve the material terms of our 2017 Executive Performance Bonus Plan (the "2017 Plan"), which was established by our Compensation Committee to motivate our senior executives to achieve corporate objectives by providing a competitive bonus for achieving performance goals established by the Compensation Committee. Our 2017 Plan, if approved by our stockholders, will apply to incentives awarded to our covered executives for fiscal 2018 and future years.

Stockholder approval is not generally required for the Company to enact and maintain a bonus plan for our executives. However, under Section 162(m) of the Internal Revenue Code, the annual compensation paid to our Chief Executive Officer and to each of our other three most highly compensated executive officers, other than our chief financial officer, will not be deductible to the extent it exceeds $1,000,000 unless the conditions of Section 162(m) are met. These conditions include stockholder approval of the material terms of the 2017 Plan, including the performance criteria that the Compensation Committee may use to establish performance goals applicable to bonus awards under the 2017 Plan.

A copy of our 2017 Plan is attached to this proxy statement as Appendix A and is incorporated herein by reference. The following description of this Plan is a summary of certain important provisions and does not purport to be a complete description of this Plan. Please see Appendix A for more detailed information.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE "FOR" THE APPROVAL OF OUR 2017 PLAN

Description of the 2017 Plan

Administration. Our 2017 Plan will be administered by the Compensation Committee. Among other things, the Compensation Committee will have the authority to select participants in the 2017 Plan from among our executive officers and to determine the performance goals, award amounts and other terms and conditions of awards under the 2017 Plan. The Compensation Committee also will have the authority to establish and amend rules and regulations relating to the administration of the 2017 Plan. All decisions made by the Compensation Committee in connection with the 2017 Plan will be made in the Compensation Committee's sole discretion and will be final and conclusive.

Eligibility. Our executive officers are eligible to participate in the 2017Plan. The Compensation Committee has the sole authority to designate participants in the 2017 Plan.

Terms of Awards. Awards under the 2017 Plan will be payable upon the achievement during each performance period designated by the Compensation Committee of performance goals established by the Compensation Committee. At the beginning of each performance period, the Compensation Committee will establish the performance goals for each award and the target amount of the award that will be earned based on performance compared to the goals. After the end of the performance period, the Compensation Committee will certify the extent to which the performance goals are achieved and determine the amount of the award that is payable; provided that the Compensation Committee will

have the discretion to determine that the actual amount paid with respect to an award will be less than (but not greater than) the payout calculated for awards made under the 2017 Plan. The maximum payout for awards made under the 2017 Plan to any participant in any one calendar year is $6,000,000.

Performance Criteria. Pursuant to the terms of the 2017 Plan, the Compensation Committee will establish in writing one or more objective performance goals based on the attainment of specified levels of one of or any combination of the following "performance criteria" for the Company as a whole or any business unit of the Company, as reported or calculated by the Company: cash flows; operating cash flow; free cash flow; cash flow return on capital; working capital; earnings per share; net earnings; book value per share; operating income (including or excluding taxes, depreciation, amortization, extraordinary items, restructuring charges or other expenses); pre-tax profit; earnings before interest, taxes and depreciation; earnings before interest, taxes, depreciation and amortization; revenue; margins including gross margin or specific product margins; return on stockholder equity or average stockholder's equity; return on assets; return on net assets; debt; debt reduction; debt levels; expenditures; debt plus equity; market or economic value added; stock price appreciation; expenses; cost control; strategic initiatives; market share; return on invested capital; improvements in capital structure; customer satisfaction; employee satisfaction; customer satisfaction; services performance; cash management; or asset management metrics; and, only to the extent that an award is not intended to comply with Section 162(m), other measures of performance selected by the Compensation Committee.

Such performance goals also may be based on the achievement of specified levels of Company performance (or performance of an applicable affiliate or business unit of the Company) under one or more of the performance criteria described above or relative to the performance of other companies, the industry or a sector of the industry. Performance may be measured by adjusting the evaluation of performance either in accordance with U.S. generally accepted accounting principles ("GAAP") or on a non-GAAP basis as specified in the performance goal.

The Compensation Committee may provide in any award that any evaluation of performance may include or exclude any of the following events that occurs during a performance period: (i) asset write-downs, (ii) litigation or claim judgments or settlements, (iii) the effect of changes in tax laws, accounting principles, or other laws or provisions affecting reported results, (iv) any reorganization and restructuring programs, (v) extraordinary nonrecurring items as described in Accounting Standards Codification 225-20 (or any successor provision thereof) and/or in Management's Discussion and Analysis of Financial Condition and Results of Operations appearing in the Company's annual report to stockholders for the applicable year, (vi) mergers, acquisitions or divestitures, (vii) foreign exchange gains and losses, (viii) gains and losses on asset sales and (ix) the effects of items that are "unusual" in nature or occur "infrequently" as determined under GAAP. These inclusions or exclusions will be prescribed in a form that satisfies the requirements for "performance-based compensation" within the meaning of Section 162(m)(4)(C) of the Internal Revenue Code.

The performance goals may be based on (i) absolute target values, (ii) growth, maintenance or limiting losses (iii) values relative to peers or indices, or (iv) one or more goal categories compared to a prior period, and may include goals for interim periods within the performance period designated by the Compensation Committee. Goals may differ for each participant.

Award Amounts. The Compensation Committee will determine within the timeframe specified in the 2017 Plan the amount of the awards that will be paid to each plan participant if the specified performance goals are met and the method by which such amounts will be calculated.

Program Payments. Bonus payments, if any will be paid as soon as administratively feasible after the Compensation Committee certifies the extent to which the performance goals were achieved during the applicable performance period and determines the amount of the awards payable, but in no event, later than March 15 immediately following the last day of the performance period to which such payments relate. The Compensation Committee will determine within the timeframe specified the amount of the awards that will be paid to each plan participant if the specified performance goals are met and the method by which such amounts will be calculated. No amount will be due and owing to any participant until the Compensation Committee has approved the bonus payment, and no bonus payment will be made unless and until the Compensation Committee has certified in writing regarding the achievement of the performance goals as required by Section 162(m).

Term of the 2017 Plan. The 2017 Plan shall first apply with respect to the 2018 plan year should our stockholders approve the 2017 Plan and will continue until the date as of which the Compensation Committee terminates the 2017 Plan.

Amendment and Termination. The Compensation Committee may amend, modify suspend or terminate the 2017 Plan, in whole or in part, at any time and in any respect, including the adoption of amendments deemed necessary. However, in no event may any such amendment, modification, suspension or termination result in an increase in the amount of compensation payable as identified for the performance period or cause compensation that is, or may

become, payable under the 2017 Plan to fail to qualify as deductible “performance-based compensation” within the meaning of Section 162(m) of the Internal Revenue Code.

New Plan Benefits

All Awards under the 2017 Plan, as amended, are made at the discretion of the Compensation Committee. Therefore, the benefits and amounts that will be received or allocated under the 2017 Plan, as amended, are not determinable at this time.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE “FOR” THE APPROVAL OF THE NANOMETRIC INCORPORATED 2017 EXECUTIVE PERFORMANCE BONUS PLAN

PROPOSAL 5

APPROVAL OF THE NANOMETRICS AMENDED AND RESTATED EQUITY INCENTIVE PLAN

The Board of Directors is requesting that the stockholders approve our 2005 Equity Incentive Plan, as amended. The 2005 Equity Incentive Plan was originally approved by our stockholders on August 26, 2005. On April 13, 2009, our Board of Directors approved the amendment and restatement of the 2005 Equity Incentive Plan to allow in 2009 for a one-time stock option exchange program for eligible employees and executive officers and to clarify the plan term, which was approved by the stockholders on May 27, 2009. On February 23, 2011, our Board of Directors approved the amendment of the 2005 Equity Incentive Plan to increase the shares of Nanometrics' common stock authorized for issuance under the 2005 Equity Incentive Plan by 2,000,000, which was subsequently approved by the stockholders on May 26, 2011. On April 5, 2013, our Board of Directors approved the amendment of the 2005 Equity Incentive Plan to increase the shares of Nanometrics' common stock authorized for issuance under the 2005 Equity Incentive Plan by 2,600,000, which was subsequently approved by the stockholders on May 23, 2013.

The proposed amendment of the 2005 Equity Incentive Plan includes the following material changes:

- increases the aggregate number of shares of Nanometrics' common stock authorized for issuance under the 2005 Equity Incentive Plan by 1,000,000 (from 7,292,594 shares to a total of 8,292,594 shares);

- provides for an annual limit on director compensation of $500,000, as described in more detail below;

- for purposes of Section 162(m) of the Internal Revenue Code (i) confirms the applicable award limits for purposes of compliance with Section 162(m), (ii) confirms the performance criteria upon which performance goals may be based with respect to performance awards under the 2005 Equity Incentive Plan, and (iii) confirms the means of adjustment when calculating the attainment of performance goals for performance awards granted under the 2005 Equity Incentive Plan; and

- extends the term of the 2005 Equity Incentive Plan through 2027.

We believe that the 2005 Equity Incentive Plan provides a valuable opportunity for employees to acquire an ownership interest in Nanometrics and provides stockholder value by aligning employee and stockholder interests. We rely on equity incentives to attract and retain key employees, and we believe that such incentives are essential to our long-term growth and future success. The proposed authorized share increase will ensure that a sufficient reserve of common stock remains available under the 2005 Equity Incentive Plan to allow us to continue to provide equity incentives to our key employees on a competitive level determined appropriate by our Compensation Committee. The 2005 Equity Incentive Plan, as amended, will also allow us to utilize a broad array of equity incentives and performance cash incentives to secure and retain the services of our employees, consultants and directors, and to provide long term incentives that align the interests of our employees, consultants and directors with the interests of

our stockholders.

After carefully forecasting our anticipated growth, hiring plans and retention needs and considering our historical grant and forfeitures rates, we anticipate that the 1,000,000 shares we seek to add to the 2005 Equity Incentive Plan, combined with the 1,334,581 shares currently available for grant under the 2005 Equity Incentive Plan, will be sufficient to attract and retain employees for the next one to two years. However, a change in business conditions or our strategy could alter this projection.

Our Compensation Committee reviewed the average volume of equity awards granted over the past three years and the resulting burn rate. Burn rate generally demonstrates how quickly a company uses available shares. The table below provides our average aggregate three-year burn rate, calculated as the adjusted number of shares granted as a percent of weighted average shares outstanding (consistent with ISS methodology and full value shares converted on a 2.5-for-1 basis tied to our 3-year historical volatility rate). Our 5.2% three-year average adjusted gross burn rate is less than the Institutional Shareholder Services 2017 benchmark of 7.66% for Russell 3000 Semiconductors & Semiconductor Equipment industry companies. We believe that our recent annual burn rates, and our burn rate as compared to the ISS benchmark rate for 2017, demonstrate our commitment to sound equity compensation grant practices.

Fiscal Year	Options Granted	RSUs Granted	PSUs Earned	Unadjusted Gross Burn Rate	ISS Adjusted Gross Burn Rate (RSUs/PSUs at 2.5-for-1)
2016	0	476,667	13,333	2.00%	5.00%
2015	0	506,459	0	2.10%	5.30%
2014	74,300	473,600	0	2.30%	5.30%
Three-Year Average				2.10%	5.20%

As of December 31, 2016, options to purchase 440,545 shares with a weighted average exercise price of $15.06 and a weighted average remaining term of 2.12 years, and full value awards covering 927,285 shares, were outstanding under all of our equity plans. The 1,367,830 shares subject to outstanding awards (commonly referred to as the "overhang") represent approximately 5.5% of our outstanding shares as of December 31, 2016. Our total overhang as of December 31, 2016, which includes the 1,000,000 shares being reserved for grant pursuant to this Amendment and the 1,334,581 shares currently available for grant under the 2005 Equity Incentive Plan, is 10.8%. This total overhang is below the 25th percentile of our peer group as of December 31, 2016 and we believe the increase we are requesting would not result in excessive overhang for our stockholders.

As of March 27, 2017, the closing price of our common stock as reported on the NASDAQ Global Market was $29.82 per share, and a total of 25,226,960 shares of our common stock were outstanding.

In addition, the 2005 Equity Incentive Plan includes the following features demonstrating good corporate governance:

•Repricing or exchange of underwater options is prohibited without stockholder approval under the 2005 Equity Incentive Plan.

•The 2005 Equity Incentive Plan does not require automatic acceleration on a change in control, and allows the Board to provide for the continuation of outstanding awards.

•The 2005 Equity Incentive Plan does not contain a liberal change in control definition.

•The 2005 Equity Incentive Plan provides that the exercise price of stock options will be no less than the fair market value of our shares of common stock on the date of grant.

•The 2005 Equity Incentive Plan does not provide for tax gross ups.

•As noted above, the amended 2005 Equity Incentive Plan contains an annual limit on director compensation (both cash and equity-based) to reflect our commitment to current best practices in corporate governance

Approval of the amended 2005 Equity Incentive Plan by our stockholders will also constitute approval of the terms and conditions set forth therein that will permit us to grant stock options and performance awards under the 2005 Equity Incentive Plan that may qualify as "performance-based compensation" within the meaning of Section 162(m) of the Internal Revenue Code. Section 162(m) of the Internal Revenue Code denies a deduction to any publicly held corporation and its affiliates for certain compensation paid to "covered employees" in a taxable year to the extent that compensation to a covered employee exceeds $1 million. However, some kinds of compensation, including qualified "performance-based compensation," are not subject to this deduction limitation. We believe it is in the best interests of Nanometrics and our stockholders to preserve the ability to grant "performance-based compensation" under Section 162(m) of the Code. For the grant of awards under a plan to qualify as "performance-based compensation" under Section 162(m) of the Code, among other things, the plan must (i) describe the employees eligible to receive such awards, (ii) provide a per-person limit on the number of shares subject to stock options and performance stock awards granted to any employee under the plan in any year, and (iii) include one or more pre-established business criteria upon which the performance goals for performance awards may be granted (or become vested or exercisable). These terms must be approved by the stockholders and, accordingly, our stockholders are requested to approve the 2005 Equity Incentive Plan, as amended, which includes terms regarding eligibility for awards, per-person limits on awards and the business criteria for performance awards granted under the 2005 Equity Incentive Plan (as described in the summary below).

The 2005 Equity Incentive Plan, as amended, is attached to this proxy statement as Appendix B and is incorporated herein by reference. The following description of the 2005 Equity Incentive Plan, as amended, is a summary of certain important provisions and does not purport to be a complete description of the 2005 Equity Incentive Plan. Please see Appendix B for more detailed information. If this Proposal 5 is approved by our stockholders, the 2005 Equity Incentive Plan, as amended, will become effective upon the date of the 2017 Annual Meeting. In the event that our stockholders do not approve this Proposal 5, the 2005 Equity Incentive Plan, as amended, will not become effective and the 2005 Equity Incentive Plan will continue in its current form.

Description of the 2005 Equity Incentive Plan, as Amended

A total of 1,200,000 shares of common stock were initially authorized for issuance under the 2005 Equity Incentive Plan, plus an annual increase to be added on the first day of our fiscal year for three years (beginning in 2006 and ending after the 2008 increase), equal to the least of (i) 3% of our outstanding common stock on that date or (ii) an amount determined by the board of directors. In 2011 the Board of Directors adopted, and the stockholders approved, the amendment of the 2005 Equity Incentive Plan to increase the shares of common stock authorized for issuance under the 2005 Equity Incentive Plan by 2,000,000 shares. In 2013 the Board of Directors adopted and the stockholders approved, the amendment of the 2005 Equity Incentive Plan to increase the shares of common stock authorized for issuance under the Equity Incentive Plan by 2,600,000 shares. As a result of these increases and the amendment to add an additional 1.000,000 shares for which we are seeking shareholder approval, a total of 8,292,594 shares of

common stock would be authorized. The number of Incentive Stock Options that may be granted under the Plan is 8,292,594 Incentive Stock Options.

The (i) maximum number of shares subject to awards granted under the 2005 Equity Incentive Plan or otherwise during any one calendar year (beginning with the 2018 calendar year) to any non-employee director, taken together with the (ii) cash fees paid to such non-employee director during such calendar year, and in both cases for service on the Board or any committee thereof, will not exceed $500,000 in total value (calculating the value of any such awards based on the grant date fair value of such awards for financial reporting purposes).

Background and Purpose of the 2005 Equity Incentive Plan

The 2005 Equity Incentive Plan permits the grant of stock options, stock appreciation rights, restricted stock, restricted stock units and performance shares (each individually, an “Award”). The 2005 Equity Incentive Plan is intended to attract and retain the best available personnel for positions of substantial responsibility, including (1) employees of Nanometrics and any parent or subsidiary, (2) consultants who provide services to Nanometrics and any parent or subsidiary, and (3) directors of Nanometrics. The 2005 Equity Incentive Plan also is designed to provide additional incentive to these services providers, to promote the success of our business and to permit the payment of compensation that qualifies as performance-based compensation under Section 162(m) of the Internal Revenue Code.

Administration of the 2005 Equity Incentive Plan

A committee (the “Committee”) of the Board of Directors administers the 2005 Equity Incentive Plan. The Committee generally is the compensation/stock option committee, which consists of two or more directors who qualify as “non-employee directors” under Rule 16b-3 of the Securities Exchange Act of 1934, and as “outside directors” under Section 162(m) (so that Nanometrics is entitled to a federal tax deduction for certain compensation paid under the 2005 Equity Incentive Plan). Notwithstanding the foregoing, the Board of Directors may itself administer the 2005 Equity Incentive Plan or one or more committees may be appointed to administer the 2005 Equity Incentive Plan with respect to different groups of service providers. The Board of Directors, the compensation committee or other committee administering the 2005 Equity Incentive Plan is referred to herein as the “Administrator.”

Subject to the terms of the 2005 Equity Incentive Plan, the Administrator has the sole discretion to select the employees, consultants, and directors who will receive Awards, determine the terms and conditions of Awards (for example, the exercise price and vesting schedule), and interpret the provisions of the 2005 Equity Incentive Plan and outstanding Awards. The Administrator may not, however, reprice Awards or exchange Awards for other Awards, cash or a combination thereof, without the approval of the stockholders.

If an Award is cancelled, expires, or is forfeited or repurchased by Nanometrics for any reason without having been fully exercised or vested, the unvested, cancelled, forfeited or repurchased number of shares of our common stock (“Shares”) generally will be returned to the available pool of Shares authorized for issuance under the 2005 Equity Incentive Plan. Any Shares subject to options or stock appreciation rights generally will be counted against the available pool as one Share for every Share subject to the option or stock appreciation rights. Any Shares of restricted stock or Shares subject to performance shares or restricted stock units with a per share or unit purchase price lower than 100% of fair market value on the date of grant generally will be counted against the available pool as 1.7 Shares for every one Share subject thereto. Shares actually issued under the 2005 Equity Incentive Plan or withheld to pay the exercise price of a stock option or stock appreciation right or to satisfy tax withholding obligations with respect to a stock option or stock appreciation right will not be returned to the 2005 Equity Incentive Plan and will not be available for future issuance under the 2005 Equity Incentive Plan. Shares withheld to pay the exercise price of a Full Value Award or to satisfy tax withholding obligations with respect to a Full Value Award will be returned to the 2005 Equity Incentive Plan and will be available for future issuance under the 2005 Equity Incentive Plan. Also, if we

experience any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of Nanometrics, or other change in the corporate structure of Nanometrics affecting the Shares, a proportional adjustment will be made to the number of Shares available for issuance under the 2005 Equity Incentive Plan, the number and price of Shares subject to outstanding Awards and the per-person limits on Awards, as appropriate to reflect the stock dividend or other change, should the Administrator determine that such an adjustment is appropriate to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the 2005 Equity Incentive Plan.

Eligibility to Receive Awards

The Administrator selects the employees, consultants, and directors who will be granted Awards under the 2005 Equity Incentive Plan. The actual number of individuals who will receive Awards cannot be determined in advance because the Administrator

has the discretion to select the participants. As of March 27, 2017, Nanometrics has 504 employees and consultants and seven directors who could be selected to receive Awards.

Stock Options

A stock option is the right to acquire Shares at a fixed exercise price for a fixed period of time. Under the 2005 Equity Incentive Plan, the Administrator may grant nonstatutory stock options and/or incentive stock options (which entitle employees, but not Nanometrics, to more favorable tax treatment than nonstatutory stock options). The Administrator will determine the number of Shares covered by each option, but during any fiscal year of Nanometrics, no participant may be granted options and stock appreciation rights together covering more than 500,000 Shares (250,000 Shares in a participant's first fiscal year of service with Nanometrics).

The exercise price of the Shares subject to each option is set by the Administrator but cannot be less than 100% of the fair market value (on the date of grant) of the Shares covered by the option. In addition, the exercise price of an incentive stock option must be at least 110% of fair market value if (on the grant date) the participant owns stock possessing more than 10% of the total combined voting power of all classes of stock of Nanometrics or any of its subsidiaries. The aggregate fair market value of the Shares (determined on the grant date) covered by incentive stock options which first become exercisable by any participant during any calendar year also may not exceed $100,000.

Options issued under the 2005 Equity Incentive Plan become exercisable at the times and on the terms established by the Administrator. The Administrator also establishes the time at which options expire, but the expiration of an incentive stock option may not be later than seven years after the grant date (such term to be limited to 5 years in the case of an incentive stock option granted to a participant who owns stock possessing more than 10% of the total combined voting power of all classes of stock of Nanometrics or any of parent or subsidiary of Nanometrics).

The exercise price of each option must be paid in full at the time of exercise. The exercise price may be paid in any form as determined by the Administrator, including, but not limited to, cash, check, surrender of Shares that have a fair market value on the date of surrender equal to the aggregate exercise price of the Shares as to which the option is being exercised, consideration received pursuant to a cashless exercise program, promissory note, through a reduction in the amount of company liability to the participant, or other legal methods of consideration.

If a participant's service relationship with us terminates for any reason (excluding death or disability), then the participant may exercise the option within a period of time as determined by the Administrator and specified in the Award agreement to the extent that the Award is vested on the date of termination (but in no event later than the expiration of the term of such Award). In the absence of a specified time set forth in the Award agreement, the option will remain exercisable for three months following the termination of the participant's service relationship. If a participant's service relationship terminates due to the participant's disability or death, the participant (or his or her estate or beneficiary) may exercise the option within a period of time as determined by the Administrator and specified in the Award agreement to the extent the Award was vested on the date of termination of the service relationship (but in no event later than the expiration of the term of such Award). In the absence of a specified time in the Award agreement, the option will remain exercisable for the twelve months following the termination of the participant's service due to disability or death.

Stock Appreciation Rights

Stock appreciation rights are Awards that grant the participant the right to receive an amount equal to (1) the number of Shares exercised, times (2) the amount by which Nanometrics' stock price exceeds the exercise price. The Administrator sets the exercise price. An individual will be able to profit from a stock appreciation right only if the fair market value of the stock increases above the exercise price. Nanometrics' obligation arising upon the exercise of a

stock appreciation right may be paid in Shares or in cash, or any combination thereof, as the Administrator may determine.

Awards of stock appreciation rights may be granted in connection with all or any part of an option or may be granted independently of options. No participant may be granted stock appreciation rights and options together covering more than 500,000 shares in any fiscal year of Nanometrics (250,000 Shares in a participant's first fiscal year of service with Nanometrics).

The Administrator determines the terms of stock appreciation rights. A stock appreciation right will be exercisable, in whole or in part, at such time as the Administrator will specify in the Award agreement, but will expire no later than ten (10) years after the date of grant.

If a participant's service relationship with us terminates for any reason (excluding death or disability), then the participant may exercise the stock appreciation right within a period of time as determined by the Administrator and specified in the Award agreement

to the extent that the Award is vested on the date of termination (but in no event later than the expiration of the term of such Award). In the absence of a specified time set forth in the Award agreement, the stock appreciation right will remain exercisable for three months following the termination of the participant's service relationship. If a participant's service relationship terminates due to the participant's disability or death, the participant (or his or her estate or beneficiary) may exercise the stock appreciation right within a period of time as determined by the Administrator and specified in the Award agreement to the extent the Award was vested on the date of termination of the service relationship (but in no event later than the expiration of the term of such Award). In the absence of a specified time in the Award agreement, the stock appreciation right will remain exercisable for the twelve months following the termination of the participant's service due to disability or death.

Restricted Stock

Awards of restricted stock are Shares that vest in accordance with the terms and conditions established by the Administrator. The Administrator may set vesting criteria based upon the achievement of company-wide, departmental, business unit or individual goals, which may include continued employment or service, applicable federal or state securities laws or any other basis determined by the Committee. If the Administrator desires that the Award qualify as performance-based compensation under Section 162(m), any restrictions will be based on a specified list of performance goals (see "Performance Goals" below for more information). The Administrator will determine the number of Shares of restricted stock granted to any employee, consultant or director, but during any fiscal year of Nanometrics, no participant may be granted more than 250,000 Shares in the aggregate of restricted stock, performance shares or restricted stock units (125,000 Shares in a participant's first fiscal year of service with Nanometrics).

Unless the Administrator determines otherwise, Shares of restricted stock will be held by Nanometrics as escrow agent until any restrictions on the Shares have lapsed. The Administrator may accelerate the time at which any restriction may lapse or be removed. On the date set forth in the Award agreement, all unvested restricted stock will be forfeited to Nanometrics.

Restricted Stock Units

Awards of restricted stock units are Shares that vest in accordance with terms and conditions established by the Administrator. The Administrator determines the number of restricted stock units granted to any employee, consultant or director, but during any fiscal year of Nanometrics, no participant may be granted more than 250,000 Shares in the aggregate subject to restricted stock units, performance shares or restricted stock (125,000 Shares in a participant's first fiscal year of service with Nanometrics).

In determining whether an Award of restricted stock units should be made, and/or the vesting schedule for any such Award, the Administrator may impose whatever conditions to vesting it determines to be appropriate. The number of restricted stock units paid out to the participant will vary depending on the extent to which the vesting criteria are met. The Administrator may set vesting criteria based upon the achievement of company-wide, departmental, business unit or individual goals, which may include continued employment or service, applicable federal or state securities laws or any other basis determined by the Committee. Notwithstanding the foregoing, if the Administrator desires that the Award qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code, any restrictions will be based on a specified list of performance goals (see "Performance Goals" below for more information).

Upon satisfying the applicable vesting criteria, the participant shall be entitled to the payout specified in the Award agreement. Notwithstanding the foregoing, at any time after the grant of restricted stock units, the Administrator may reduce or waive any vesting criteria that must be met to receive a payout. The Administrator, in its sole discretion,

may pay earned restricted stock units in cash, Shares, or a combination thereof. Shares represented by restricted stock units that are fully paid in cash will again be available for grant under the Plan. An Award agreement may provide that all unearned restricted stock units may be cancelled and will be forfeited to Nanometrics on the date set forth in the Award agreement.

Performance Shares

Performance shares are Awards that will result in a payment to a participant only if performance objectives established by the Administrator are achieved or the Awards otherwise vest. The Administrator may set vesting criteria based upon the achievement of company-wide, departmental, business unit or individual goals, which may include continued employment or service, applicable federal or state securities laws or any other basis determined by the Committee. Notwithstanding the foregoing, if the Administrator desires that the Award qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code, any restrictions will be based on a specified list of performance goals (see “Performance Goals” below for more information).

Performance shares have an initial value equal to the fair market value of a share on the date of grant. Performance shares may be granted to employees, consultants or directors at any time as shall be determined by the Administrator in its sole discretion. Subject to the terms of the 2005 Equity Incentive Plan, the Administrator will have complete discretion to determine the number of shares subject to a performance share award and the conditions that must be satisfied, which conditions typically will be based principally or

solely on achievement of performance milestones but may include a service based component. Subject to the terms of the Plan, the Administrator will determine the number of performance shares granted to a service provider and, during any fiscal year of Nanometrics, no participant may be granted more than 250,000 Shares in the aggregate subject to performance shares, restricted stock units, or restricted stock (125,000 Shares in a participant's first fiscal year of service with Nanometrics).

On the date set forth in the Award agreement, all unearned or unvested performance shares will be forfeited to Nanometrics.

Performance Goals

Under Section 162(m) of the Internal Revenue Code, the annual compensation paid to our Chief Executive Officer and to each of our other four most highly compensated executive officers may not be deductible to the extent it exceeds $1,000,000. However, we are able to preserve the deductibility of compensation in excess of $1,000,000 if the conditions of Section 162(m) are met. These conditions include stockholder approval of the 2005 Equity Incentive Plan, setting limits on the number of awards that any individual may receive and for awards other than options, establishing performance criteria that must be met before the award actually will vest or be paid.

We have designed the Plan so that it permits us to pay compensation that qualifies as performance-based under Section 162(m) of the Internal Revenue Code. Thus, the Administrator (in its discretion) may make performance goals applicable to a participant with respect to an award. At the Administrator's discretion, one or more of the following performance goals may apply (all of which are defined in the Plan): annual revenue, cash position, earnings per share, individual performance objectives, marketing and sales expenses as a percentage of sales, net income as a percentage of sales, net income, operating cash flow, operating income, return on assets, return on equity, return on sales, and total stockholder return. The Performance Goals may differ from participant to participant and from Award to Award.

Any criteria used may be measured, as applicable (1) in absolute terms, (2) in relative terms (including, but not limited to, passage of time and/or against another company or companies), (3) on a per-share basis, (4) against the performance of Nanometrics as a whole or a business unit of Nanometrics, and/or (5) on a pre-tax or after-tax basis. The Administrator also will adjust any evaluation of performance under a performance goal to exclude (i) any extraordinary non-recurring items and/or in management's discussion and analysis of financial conditions and results of operations appearing in the Company's annual report to shareholders for the applicable year, (ii) the effect of any changes in accounting principles affecting Nanometrics or a business units' reported results or (iii) the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles.

Merger or Change in Control

In the event of a merger or "change in control" of Nanometrics, the successor corporation will either assume or provide a substitute award for each outstanding Award. In the event the successor corporation refuses to assume or provide a substitute award, the Award will immediately vest and become exercisable as to all of the Shares subject to such Award, or, if applicable, the Award will be deemed fully earned and will be paid out prior to the merger or change in control. In addition, if an option, stock appreciation right or right to purchase restricted stock has become fully vested and exercisable in lieu of assumption or substitution, the Committee will provide at least 15 days' notice that the option, stock appreciation right or right to purchase restricted stock will immediately vest and become exercisable as to all of the Shares subject to such Award and all outstanding options, stock appreciation rights and rights to purchase restricted stock will terminate upon the expiration of such notice period.

Awards to be Granted to Certain Individuals and Groups

The number of Awards (if any) that an employee, consultant, or director may receive under the 2005 Equity Incentive Plan is in the discretion of the Administrator and therefore cannot be determined in advance.

Limited Transferability of Awards

Awards granted under the 2005 Equity Incentive Plan generally may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will or by the applicable laws of descent and distribution and may be exercised during the lifetime of the participant, only by the participant. Notwithstanding the foregoing, the Administrator may permit an individual to transfer an Award. Any transfer shall be made in accordance with procedures established by the Administrator.

Amendment and Termination of the Plan

The Board of Directors generally may amend, alter, suspend or terminate the 2005 Equity Incentive Plan at any time and for any reason. However, no amendment, alteration, suspension, or termination may impair the rights of any participant in the 2005 Equity

Incentive Plan without his or her consent. Amendments will be contingent on stockholder approval if required by applicable law. Unless terminated earlier by the Board of Directors, the 2005 Equity Incentive Plan will continue in effect until ten (10) years following this 2017 amendment by the stockholders.

Federal Tax Aspects

The following paragraphs are a summary of the general federal income tax consequences to U.S. taxpayers and Nanometrics of Awards granted under the 2005 Equity Incentive Plan. Tax consequences for any particular individual may be different.

Nonstatutory Stock Options. No taxable income is recognized when a nonqualified stock option is granted to a participant. Upon exercise, the participant will recognize ordinary income in an amount equal to the excess of the fair market value of the Shares on the exercise date over the exercise price. Any additional gain or loss recognized upon later disposition of the Shares is capital gain or loss.

Incentive Stock Options. No taxable income is recognized when an incentive stock option is granted or exercised (except for purposes of the alternative minimum tax, in which case taxation is the same as for nonstatutory stock options). If the participant exercises the option and then later sells or otherwise disposes of the Shares more than two years after the grant date and more than one year after the exercise date, the difference between the sale price and the exercise price will be taxed as capital gain or loss. If the participant exercises the option and then later sells or otherwise disposes of the Shares before the end of the two- or one-year holding periods described above, he or she generally will have ordinary income at the time of the sale equal to the fair market value of the Shares on the exercise date (or the sale price, if less) minus the exercise price of the option. Any additional gain or loss will be capital gain or loss.

Stock Appreciation Rights. No taxable income is reportable when a stock appreciation right is granted to a participant. Upon exercise, the participant generally will recognize ordinary income in an amount equal to the amount of cash received and the fair market value of any Shares received. Any additional gain or loss recognized upon any later disposition of the Shares would be capital gain or loss.

Restricted Stock and Performance Shares. A participant will not have taxable income upon grant unless he or she elects to be taxed at that time. Instead, he or she generally will recognize ordinary income at the time of vesting equal to the fair market value (on the vesting date) of the Shares or cash received minus any amount paid for the Shares.

Restricted Stock Units. A participant receiving a restricted stock unit structured to conform to the requirements of Section 409A of the Internal Revenue Code, or an exception from Section 409A of the Internal Revenue Code, will have taxable income at the time the restricted stock unit is settled and the cash or the shares of Nanometrics' common stock is delivered equal to the excess, if any, of the cash or the fair market value of the shares of Nanometrics' common stock received over any amount paid by the participant in exchange for the cash or shares of Nanometrics' common stock.

Section 280G and Parachute Payments. Acceleration of vesting or payment of Awards under the 2005 Equity Incentive Plan in the event of a change of control may cause part or all of the amount involved to be treated as an "excess parachute payment" under Section 280G of the Internal Revenue Code. Such treatment may subject the participant to a 20% excise tax and preclude deduction of such amounts by Nanometrics.

Section 409A and Deferred Compensation. Under Section 409A of the Internal Revenue Code, certain Awards granted under the 2005 Equity Incentive Plan may be treated as nonqualified deferred compensation. Section 409A of the Internal Revenue Code imposes on persons with nonqualified deferred compensation that does not meet the requirements of Section 409A of the Code (i) taxation immediately upon vesting of the nonqualified deferred compensation and earnings thereon (regardless of whether the compensation is then paid); (ii) interest at the underpayment rate plus 1%; and (iii) an additional 20% tax.

Tax Effect for the Company. Nanometrics generally will be entitled to a tax deduction in connection with an Award under the 2005 Equity Incentive Plan in an amount equal to the ordinary income realized by a participant and at the time the participant recognizes such income (for example, the exercise of a nonqualified stock option). As discussed above, special rules limit the deductibility of compensation paid to our Chief Executive Officer and to certain other named executive officers.

However, the 2005 Equity Incentive Plan has been designed to permit the Administrator to grant Awards that qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code, thereby permitting Nanometrics to receive a federal income tax deduction in connection with such Awards.

Also as discussed above, certain amounts paid in connection with a change of control could be treated as an “excess parachute payment” and preclude Nanometrics from taking a tax deduction for such amounts.

New Plan Benefits

All Awards under the 2005 Equity Incentive Plan, as amended, are made at the discretion of the Administrator. Therefore, the benefits and amounts that will be received or allocated under the 2005 Equity Incentive Plan, as amended, are not determinable at this time. However, please refer to the description of grants made to our named executive officers in the last fiscal year described in the “2016 Grants of Plan-Based Awards” table. Grants made to our non-employee directors in the last fiscal year are described in “Director Compensation For Fiscal Year 2016.” Also, refer to “Compensation of Directors” for information regarding grants to directors.

2005 Equity Incentive Plan Benefits

The following table shows, for each of the named executive officers and the various groups indicated, the number of stock options underlying shares of Nanometrics common stock that have been granted (even if not currently outstanding) under the 2005 Equity Incentive Plan since its approval by the stockholders in 2005 and through March 27, 2017.

2005 Equity Incentive Plan, as Amended

Name and position	Number of shares subject to grant (#)
Chief Executive Officer	480,000
Chief Financial Officer	-
General Counsel	-
All Current Executive Officers as a Group	505,000
All Current Non-Executive Directors as a Group	41,146
All Current Employees as a Group (including all current non-executive officers)	807,840
Nominee for Director	
Bruce C. Rhine	27,080
J. Thomas Bentley	14,066
Edward Brown Jr.	-
Christine A. Tsingos	-
Christopher A. Seams	-
Robert Deuster	-
Timothy J. Stultz	480,000
Each Associate of any Director, Executive Officer or Nominee	-
Each Other Current 5% Holder or Future 5% Recipient	-

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE “FOR” THE APPROVAL OF THE AMENDED AND RESTATED NANOMETRIC INCORPORATED 2005 EQUITY INCENTIVE PLAN.

PROPOSAL 6

RATIFICATION OF APPOINTMENT OF

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has appointed PricewaterhouseCoopers LLP as our independent registered public accounting firm to audit the consolidated financial statements of Nanometrics for the fiscal year ending December 30, 2017.

Approval by the stockholders of the selection of the independent registered public accounting firm is not required, but the Audit Committee believes it is desirable as a matter of good corporate governance to submit this matter to the stockholders. If the holders of a majority of the shares present in person or by proxy at the meeting and entitled to vote on the matter at the annual meeting do not ratify the appointment of PricewaterhouseCoopers LLP as Nanometrics' independent registered public accounting firm for the fiscal year ending December 30, 2017, the Audit Committee will consider whether it should select another independent registered public accounting firm. Representatives of PricewaterhouseCoopers LLP are expected to attend the annual meeting and will have an opportunity to make a statement and respond to appropriate questions from stockholders.

Audit Fees

The following table summarizes the aggregate fees that we paid or expect to pay our independent registered public accounting firm, PricewaterhouseCoopers LLP, for the 2016 and 2015 fiscal years.

	Fiscal 2016	Fiscal 2015
Audit Fees [1]	$1,041,858	$993,000
Tax Fees [2]	9,441	17,900
All Other Fees [3]	1,800	1,800
Total	$1,053,099	$1,012,700

(1) Fees to PricewaterhouseCoopers LLP in 2016 and 2015 for audit services consist of:
- Audit of our annual financial statements including management's assessment of internal controls over financial reporting;
- Reviews of our quarterly financial statements; and
- Statutory and regulatory audits, consents and other services.

(2) These fees comprised tax services for UK tax filings.
(3) Paid to PricewaterhouseCoopers LLP for accounting research and database tool.

In considering the nature of the services provided by the independent registered public accounting firm, the Audit Committee determined that such services are compatible with the provision of independent audit services. The Audit Committee discussed these services with the independent registered public accountants and our management to determine that they are permitted under the rules and regulations concerning auditors' independence promulgated by the Securities and Exchange Commission to implement the Sarbanes-Oxley Act of 2002, as well as the American Institute of Certified Public Accountants.

Audit Committee Pre-Approval Policy

Pursuant to our Audit Committee charter, our Audit Committee must pre-approve all audit and permissible non-audit services, and the related fees, provided to us by our independent registered public accounting firm, or subsequently

approve permissible non-audit services in those circumstances where a subsequent approval is necessary and permissible under the Exchange Act or the rules of the Securities and Exchange Commission. The policy generally pre-approves specified services in the defined categories of audit services, audit-related services and tax services up to specified amounts. Pre-approval may also be given as part of the Audit Committee's approval of the scope of the engagement of the independent auditor or on an individual, explicit, case-by-case basis before the independent auditor is engaged to provide each service. The pre-approval of services may be delegated to one or more of the Audit Committee's members. Accordingly, the Audit Committee pre-approved all services and fees provided by PricewaterhouseCoopers LLP, during the year ended December 31, 2016, and has concluded that the provision of these services is compatible with the accountants' independence.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" THE RATIFICATION OF THE APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP, AS NANOMETRICS' INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 30, 2017.

EQUITY COMPENSATION PLAN INFORMATION

The following table gives information about the common stock that may be issued under all of our existing equity compensation plans as of December 31, 2016.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights [1]	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column)
Equity Compensation plans approved by security holders	431,135	$ 15.15	1,334,581
Equity compensation plans not approved by security holders [2]	9,410	$ 10.45	-
Total	440,545	$ 15.06	1,334,581

[1] The weighted average exercise price does not take into account the shares subject to outstanding restricted stock units and performance stock units, which have no exercise price

[2] Represents the 2002 Non-Statutory Stock Plan, which was adopted without the approval of security holders. This Plan provides for the grant of non-statutory stock options to employees and service providers at grant prices equal to the fair market value on the date of grant, with an expiration date not to exceed 10 years from the grant date.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for Notices of Internet Availability of Proxy Materials or other Annual Meeting materials with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or other Annual Meeting materials addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Nanometrics stockholders will be “householding” Nanometrics’ proxy materials. A single Notice of Internet Availability of Proxy Materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be “householding” communications to your address, “householding” will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in “householding” and would prefer to receive a separate Notice of Internet Availability of Proxy Materials, please notify your broker or Nanometrics. Direct your written request to Investor Relations Department, Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035 or contact Investor Relations at 408-545-6000. Stockholders who currently receive multiple copies of the Notice of Internet Availability of Proxy Materials at their addresses and would like to request “householding” of their communications should contact their brokers.

OTHER MATTERS

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

BY ORDER OF THE BOARD OF DIRECTORS

/s/ Bruce C. Rhine
Bruce C. Rhine
Chairman of the Board of Directors

Milpitas, California

April 3, 2017

A copy of Nanometrics' Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended December 31, 2016, is available without charge upon written request to: Investor Relations Department, Nanometrics, Incorporated, 1550 Buckeye Drive, Milpitas, California 95035.

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APPENDIX A

NANOMETRICS INCORPORATED

2017 EXECUTIVE PERFORMANCE BONUS PLAN

General

The 2017 Executive Performance Bonus Plan (the "Plan") is intended to motivate senior executives to achieve short-term and long-term corporate objectives relating to the performance of Nanometrics or one of our business units, and to reward them when those objectives are achieved, thereby tying pay to performance. Awards are intended to qualify as deductible "performance-based compensation" within the meaning of Section 162(m) of the Internal Revenue Code.

Administration

The Plan is administered by the Compensation Committee of the Board of Directors ("Plan Administrator"). Among other things, the Plan Administrator will have the authority to select participants in this Plan, and to determine the performance goals, award amounts and other terms and conditions of awards under this Plan. The Plan Administrator also will have the authority to establish and amend rules and regulations relating to the administration of this Plan. All decisions made by the Plan Administrator in connection with this Plan will be made in the Plan Administrator's sole discretion and will be final and conclusive. The Plan Administrator will administer the Plan in a manner intended to comply with the requirements for "performance-based compensation" under Section 162(m) of the Internal Revenue Code and applicable Treasury Regulations thereunder.

Eligibility

Only executives designated by the Plan Administrator are eligible to participate in this Plan. The Plan Administrator has the sole authority to designate participants in this Plan. No executive is automatically entitled to participate in the Plan.

Terms of Awards

Awards under this Plan will be payable following the end of the applicable performance period, based upon the achievement of performance goals established by the Plan Administrator for such performance period. The Plan Administrator will establish performance goals based on some or all of the performance criteria set forth in this Plan. Prior to the earlier of (i) 90 days following the commencement of the applicable performance period or (ii) the passage of 25% of the duration of such performance period and while the outcome is substantially uncertain, the Plan Administrator will establish in writing the performance goals for each award and the threshold, target and maximum amount of the award, as applicable, that will be earned if the performance goals are achieved at the corresponding level.

The total incentive opportunity is expressed as a percentage of the participant's base salary as approved by the Plan Administrator. Base salary does not include relocation allowances and reimbursements, tuition reimbursements, car/transportation allowances, expatriate allowances, commissions, long-term disability payments, or bonuses paid during the fiscal year.

After the end of the performance period, the Plan Administrator will certify in writing the extent to which the performance goals were achieved during the performance period and determine the amount of the award that is payable. The Plan Administrator will have the discretion to determine that the actual amount paid with respect to an award will be equal to or less than (but not greater than) the applicable calculated payout. The maximum payout for awards made under this Plan to any participant in any one calendar year is $6,000,000.

A participant must be a regular employee of the Company on the last day of the performance period to earn any bonus under the Plan; provided, however that if the regular employment of a participant ends before the end of the performance period because of death, disability or termination of employment without cause, the participant will be paid a pro-rata portion of the bonus, if any, that otherwise would have been payable under this Plan based upon the actual achievement of the performance goals applicable during the performance period in which such termination of employment occurs, unless the Plan Administrator determines in its sole discretion that payment is not appropriate. Any such pro-rated bonus payment will be paid at the same time as other bonus payments with respect to the applicable performance period.

Performance Criteria

Pursuant to the terms of this Plan, the Plan Administrator will establish in writing one or more objective performance goals based on the attainment of specified levels of one of or any combination of the following "performance criteria" for the Company as a whole or any business unit of the Company, as reported or calculated by the Company: cash flows: operating cash flow; free cash flow or cash flow return on capital; working capital; earnings per share; net earnings; book value per share; operating income (including or excluding taxes, depreciation, amortization, extraordinary items, restructuring charges or other expenses); pre-tax profit; earnings before interest, taxes and depreciation; earnings before interest, taxes, depreciation and amortization; revenue; margins including gross margin or specific product margins; return on stockholder equity or average stockholder's equity; return on assets; return on net assets; debt; debt reduction; debt levels; expenditures; debt plus equity; market or economic value added; stock price appreciation; expenses; cost control; strategic initiatives; market share; return on invested capital; improvements in capital structure; customer satisfaction; employee satisfaction; services performance; cash management or asset management metrics; and, only to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Plan Administrator.

Such performance goals also may be based on the achievement of specified levels of Company performance (or performance of an applicable affiliate or business unit of the Company) under one or more of the performance criteria described above or relative to the performance of other companies, the industry or a sector of the industry. Performance may be measured by adjusting the evaluation of performance either in accordance with U.S. generally accepted accounting principles ("GAAP") or on a non-GAAP basis as specified in the performance goal.

The Plan Administrator may provide in any award that any evaluation of performance may include or exclude any of the following events that occurs during a performance period: (i) asset write-downs, (ii) litigation or claim judgments or settlements, (iii) the effect of changes in tax laws, accounting principles, or other laws or provisions affecting reported results, (iv) any reorganization and restructuring programs, (v) extraordinary nonrecurring items as described in Accounting Standards Codification 225-20 (or any successor provision thereto) and/or in Management's Discussion and Analysis of Financial Condition and Results of Operations appearing in the Company's annual report to stockholders for the applicable year, (vi) mergers, acquisitions or divestitures, (vii) foreign exchange gains and losses, (viii) gains and losses on asset sales and (ix) the effects of items that are "unusual" in nature or occur "infrequently" as determined under GAAP. These inclusions or exclusions will be prescribed in a form that satisfies the requirements for "performance-based compensation" within the meaning of Section 162(m)(4)(C) of the Internal Revenue Code.

The performance goals may be based on (i) absolute target values, (ii) growth, maintenance or limiting losses, (iii) values relative to peers or indices or (iv) one or more goal categories compared to a prior period, and may include goals for interim periods within the performance period designated by the Plan Administrator. Goals may differ for each participant.

Program Payments

Bonus payments, if any, under the Plan will be paid as soon as administratively feasible after the Plan Administrator certifies the extent to which the performance goals were achieved during the applicable performance period and determines the amount of the awards payable, but in no event later than March 15 immediately following the last day of the performance period to which such payments relate. The Plan Administrator will determine within the timeframe specified in this Plan the amount of the awards that will be paid to each plan participant if the specified performance goals are met and the method by which such amounts will be calculated. No amount will be due and owing to any participant until the Plan Administrator has approved the bonus payment, and no bonus payment will be made unless and until the Plan Administrator has certified in writing regarding the achievement of the performance goals as required by Section 162(m) of the Internal Revenue Code.

Term of the Plan

The Plan shall first apply with respect to the 2018 plan year should our stockholders approve the Plan and will continue until the date as of which the Plan Administrator terminates the Plan.

Amendment and Termination

The Plan Administrator may amend, modify suspend or terminate the Plan, in whole or in part, at any time and in any respect, including the adoption of amendments deemed necessary. However, in no event may any such amendment, modification, suspension or termination result in an increase in the amount of compensation payable as identified for the performance period or cause compensation that is, or may become, payable under the Plan to fail to qualify as deductible “performance-based compensation” within the meaning of Section 162(m) of the Internal Revenue Code.

Section 409A of the Internal Revenue Code

It is intended that this Plan and any awards granted under this Plan either be exempt from the requirements of, or else comply with the requirements of, Section 409A of the Internal Revenue Code and any related regulations or other guidance promulgated with respect to such section by the U.S. Department of the Treasury or the Internal Revenue Service. Any provision that would cause any award granted under this Plan to incur additional taxes under Section 409A of the Internal Revenue Code shall have no force or effect until amended by the Plan Administrator to comply with Section 409A of the Internal Revenue Code, and such amendment may be retroactive to the extent permitted by Section 409A of the Internal Revenue Code.

Unfunded Obligation

The Company's obligations under this Plan will, in every case, be an unfunded and unsecured promise. Participants' rights as to the benefit under this Plan shall be no greater than those of general, unsecured creditors of the Company. The Company will not be obligated to fund its financial obligations under this Plan.

APPENDIX B

NANOMETRICS INCORPORATED

2005 EQUITY INCENTIVE PLAN

AS AMENDED AND RESTATED AS OF _____, 2017

1. PURPOSES OF THE PLAN. The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide additional incentive to Service Providers, and
- to promote the success of the Company's business.

Awards granted under the Plan may be Incentive Stock Options, Nonstatutory Stock Options, Restricted Stock, Stock Appreciation Rights, Performance Shares and Restricted Stock Units, as determined by the Administrator at the time of grant.

2. DEFINITIONS. As used herein, the following definitions shall apply:

(a) "Administrator" means the Board or any of its Committees as shall be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Annual Revenue" means the Company's or a business unit's net sales for the Fiscal Year, determined in accordance with generally accepted accounting principles.

(c) "Applicable Laws" means the requirements relating to the administration of equity compensation plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any other country or jurisdiction where Awards are, or will be, granted under the Plan.

(d) "Award" means, individually or collectively, a grant under the Plan of Options, Restricted Stock, Stock Appreciation Rights, Performance Shares or Restricted Stock Units.

(e) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(f) "Awarded Stock" means the Common Stock subject to an Award.

(g) "Board" means the Board of Directors of the Company.

(h) "Cash Position" means the Company's level of cash and cash equivalents.

(i) "Change in Control" means the occurrence of any of the following events, in one or a series of related transactions:

(i) any "person," as such term is used in Sections 13(d) and 14(d) of the Exchange Act, other than the Company, a subsidiary of the Company or a Company employee benefit plan, including any trustee of such plan acting as trustee, is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the combined voting power of the Company's then outstanding securities entitled to vote generally in the election of directors; or

(ii) the consummation of a merger or consolidation of the Company or any direct or indirect subsidiary of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty

percent (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

(iii) the sale or disposition by the Company of all or substantially all the Company's assets; or

(iv) a change in the composition of the Board, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" shall mean directors who either (A) are Directors as of the date this Plan is approved by the Board, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors and whose election or nomination was not in connection with any transaction described in (i) or (ii) above or in connection with an actual or threatened proxy contest relating to the election of directors of the Company.

(j) "Code" means the Internal Revenue Code of 1986, as amended.

(k) "Committee" means a committee of Directors or officers appointed by the Board in accordance with Section 4 of the Plan.

(l) "Common Stock" means the common stock of the Company.

(m) "Company" means Nanometrics Incorporated, a Delaware corporation.

(n) "Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services and who is compensated for such services.

(o) "Continuous Status as a Service Provider" means the absence of any interruption or termination of the employment or service relationship with the Company or any Subsidiary. Continuous Status as a Service Provider shall not be considered interrupted in the case of (i) medical leave, military leave, family leave, or any other leave of absence approved by the Administrator, provided, in each case, that such leave does not result in termination of the employment and service relationship with the Company or any Subsidiary, as the case may be, under the terms of the respective Company policy for such leave; however, vesting may be tolled while a Service Provider is on an approved leave of absence under the terms of the respective Company policy for such leave; or (ii) in the case of transfers between locations of the Company or between the Company, its Parent or any Subsidiary, or any successor. For purposes of Incentive Stock Options, no such leave may exceed ninety days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then three (3) months following the 91st day of such leave any Incentive Stock Option held by the Participant shall cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Nonstatutory Stock Option.

(p) "Director" means a member of the Board.

(q) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code.

(r) "Dividend Equivalent" means a credit, payable in cash, made at the discretion of the Administrator, to the account of a Participant in an amount equal to the cash dividends paid on one Share for each Share represented by an Award held by such Participant.

(s) "Earnings Per Share" means as to any Performance Period, the Company's or a business unit's Net Income, divided by a weighted average number of common shares outstanding and dilutive common equivalent shares deemed outstanding, determined in accordance with generally accepted accounting principles.

(t) "Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Chairman nor as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

(u) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(v) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have lower exercise prices and different terms), Awards of a different type, and/or cash, and/or (ii) the exercise price of an outstanding Award is reduced. The terms and conditions of any Exchange Program will be determined by the Administrator in its sole discretion.

(w) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the NASDAQ Global Market or The NASDAQ Capital Market of The NASDAQ Stock Market, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system, on the date of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share of Common Stock shall be the mean between the high bid and low asked prices for the Common Stock on the date of determination; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value shall be determined in good faith by the Administrator.

(x) "Fiscal Year" means a fiscal year of the Company.

(y) "Individual Performance Objective" means as to a Participant, the objective and measurable goals set by a "management by objectives" process and approved by the Committee (in its discretion).

(z) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder and is expressly designated by the Administrator at the time of grant as an incentive stock option.

(aa) "Marketing and Sales Expenses as a Percentage of Sales" means as to any Performance Period, the Company's or a business unit's marketing and sales expenses stated as a percentage of sales, determined in accordance with generally accepted accounting principles.

(bb) "Net Income as a Percentage of Sales" means as to any Performance Period, the Company's or a business unit's Net Income stated as a percentage of sales, determined in accordance with generally accepted accounting principles.

(cc) "Net Income" means as to any Performance Period, the income after taxes of the Company or a business unit determined in accordance with generally accepted accounting principles, provided that prior to the beginning of the Performance Period, the Committee shall determine whether any significant item(s) shall be included or excluded from the calculation of Net Income with respect to one or more Participants.

(dd) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(ee) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(ff) "Operating Cash Flow" means the Company's or a business unit's sum of Net Income plus depreciation and amortization less capital expenditures plus changes in working capital comprised of accounts receivable, inventories, other current assets, trade accounts payable, accrued expenses, product warranty, advance payments from customers and long-term accrued expenses, determined in accordance with generally acceptable accounting principles.

(gg) "Operating Income" means the Company's or a business unit's income from operations determined in accordance with generally accepted accounting principles.

(hh) "Outside Director" means a Director who is not an Employee.

(ii) "Option" means a stock option granted pursuant to the Plan.

(jj) "Participant" means the holder of an outstanding Award granted under the Plan.

(kk) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(ll) "Performance Goals" means the goal(s) (or combined goal(s)) determined by the Committee (in its discretion) to be applicable to a Participant with respect to an Award. As determined by the Committee, the Performance Goals applicable to an Award may provide for a targeted level or levels of achievement using one or more of the following measures: (a) Annual Revenue, (b) Cash Position, (c) Earnings Per Share, (d) Individual Performance Objectives, (e) Marketing and Sales Expenses as a Percentage of Sales, (f) Net Income as a Percentage of Sales, (g) Net Income, (h) Operating Cash Flow, (i) Operating Income, (j) Return on Assets, (k) Return on Equity, (l) Return on Sales, and (m) Total Shareholder Return. The Performance Goals may differ from Participant to Participant and from Award to Award. The Committee shall appropriately adjust any evaluation of performance under a Performance Goal to exclude (i) any extraordinary non-recurring items as described in Accounting Principles Board Opinion No. 30 (or any successor provision thereto) and/or in management's discussion and analysis of financial conditions and results of operations appearing in the Company's annual report to shareholders for the applicable year; (ii) the effect of any changes in accounting principles affecting the Company's or a business units' reported results; or (iii) the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles. Any criteria used may be measured, as applicable, (i) in absolute terms, (ii) in relative terms (including, but not limited to, passage of time and/or against another company or companies), (iii) on a per-share basis, (iv) against the performance of the Company as a whole or of a business unit of the Company, and/or (v) to the extent not otherwise specified by the definition of the Performance Goal, on a pre-tax or after-tax basis.

(mm) "Performance Period" means the time period of any Fiscal Year or such longer period as determined by the Committee in its sole discretion during which the performance objectives must be met.

(nn) "Performance Share" means a performance share Award granted to a Participant pursuant to Section 14.

(oo) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time (including the continuation of employment or service), the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(pp) "Plan" means this 2005 Equity Incentive Plan, as amended and restated as of _____, 2017.

(qq) "Restricted Stock" means shares of Common Stock granted pursuant to Section 12 of the Plan, as evidenced by an Award Agreement.

(rr) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 13. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(ss) "Return on Assets" means the percentage equal to the Company's or a business unit's Operating Income before incentive compensation, divided by average net Company or business unit, as applicable, assets, determined in accordance with generally accepted accounting principles.

(tt) "Return on Equity" means the percentage equal to the Company's Net Income divided by average shareholder's equity, determined in accordance with generally accepted accounting principles.

(uu) "Return on Sales" means the percentage equal to the Company's or a business unit's Operating Income before incentive compensation, divided by the Company's or the business unit's, as applicable, revenue, determined in accordance with generally accepted accounting principles.

(vv) "Rule 16b-3" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(ww) "Section 16(b)" means Section 16(b) of the Exchange Act.

(xx) "Service Provider" means an Employee, Director or Consultant.

(yy) "Share" means a share of the Common Stock, as adjusted in accordance with Section 17 of the Plan.

(zz) "Stock Appreciation Right" or "SAR" means a stock appreciation right granted pursuant to Section 10 below.

(aaa) "Subsidiary" means a "subsidiary corporation", whether now or hereafter existing, as defined in Section 424(f) of the Code.

(bbb) "Total Shareholder Return" means the total return (change in share price plus reinvestment of any dividends) of a share of the Company's common stock.

3. STOCK SUBJECT TO THE PLAN. Subject to the provisions of Section 17 of the Plan, the maximum aggregate number of Shares which may be issued under the Plan is 8,292,594 Shares. The number of Incentive Stock Options that may be granted under the Plan is 8,292,594 Incentive Stock Options. Any Shares subject to Options or SARs shall be counted against the numerical limits of this Section 3 as one Share for every Share subject thereto. Any Shares of Restricted Stock or Shares subject to Performance Shares or Restricted Stock Units with a per share or unit purchase price lower than 100% of Fair Market Value on the date of grant ("Full Value Awards") shall be counted against the numerical limits of this Section 3 as one and seven-tenths (1.7) Shares for every one Share subject thereto. To the extent that a Share that was subject to a Full Value Award is recycled back into the Plan under the next paragraph of this Section 3, the Plan shall be credited with one and seven-tenths (1.7) Shares.

If an Award expires or becomes unexercisable without having been exercised in full or is surrendered pursuant to an Exchange Program, or, with respect to Options, Restricted Stock, Performance Shares or Restricted Stock Units, is forfeited to or repurchased by the Company, the unpurchased Shares (or for Awards other than Options and SARs, the forfeited or repurchased shares) which were subject thereto shall become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to SARs, the full number of Shares subject to each SAR, including any Shares withheld to pay the exercise price or satisfy tax withholding obligations shall cease to be available under the Plan regardless of the number of shares actually delivered. Shares that have actually been issued under the Plan under any Award shall not be returned to the Plan and shall not become available for future distribution under the Plan; provided, however, that if Shares of Restricted Stock, Performance Shares or Restricted Stock Units are repurchased by the Company at their original purchase price or are forfeited to the Company, such Shares shall become available for future grant under the Plan. Shares used to pay the exercise price of an Option or the purchase price of Restricted Stock shall not become available for future grant or sale under the Plan. Shares used to satisfy tax withholding obligations on Options and SARs shall not become available for future grant or sale under the Plan. Shares used to satisfy tax withholding obligations on Full Value Awards will again become available for issuance under the Plan. To the extent an Award under the Plan is paid out in cash rather than stock, such cash payment shall not reduce the number of Shares available for issuance under the Plan. Any payout of Dividend Equivalents, because they are payable only in cash, shall not reduce the number of Shares available for issuance under the Plan. Conversely, any forfeiture of Dividend Equivalents shall not increase the number of Shares available for issuance under the Plan.

4. ADMINISTRATION OF THE PLAN.

(a) Procedure.

(i) Multiple Administrative Bodies. The Board or different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Section 162(m). To the extent that the Administrator determines it to be desirable to qualify Awards granted hereunder as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Plan shall be administered by a Committee of two or more "outside directors" within the meaning of Section 162(m) of the Code.

(iii) Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder shall be structured to satisfy the requirements for exemption under Rule 16b-3.

(iv) Other Administration. Other than as provided above, the Plan shall be administered by (a) the Board or (b) a Committee, which committee shall be constituted to satisfy Applicable Laws. Notwithstanding the foregoing, to the extent consistent with Applicable Laws, the Board or the Committee may authorize one or more officers of the Company to grant Awards to non-executive officers of the Company and act as the Administrator with respect to such Awards.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator shall have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the number of shares of Common Stock or equivalent units to be covered by each Award granted hereunder;

(iv) to approve forms of Award Agreement for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the date of grant, the time or times when Awards may be exercised (or are earned) (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine;

(vi) to institute an Exchange Program; however, the Administrator may not institute an Exchange Program without shareholder approval.

(vii) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(viii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws and/or qualifying for preferred tax treatment under foreign tax laws;

(ix) to modify or amend each Award (subject to Section 19(c) of the Plan), including the discretionary authority to extend the post-termination exercisability period of Options and SARs longer than is otherwise provided for in the Plan;

(x) to allow Participants to satisfy withholding tax obligations by electing to have the Company withhold from the Shares or cash to be issued upon exercise of an Option, SAR or right to purchase Restricted Stock or upon vesting or payout of another Award, that number of Shares or cash having a Fair Market Value equal to the minimum amount required to be withheld. The Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined. All elections by a Participant to have Shares or cash withheld for this purpose shall be made in such form and under such conditions as the Administrator may deem necessary or advisable;

(xi) to determine whether Awards will be adjusted for Dividend Equivalents;

(xii) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator; and

(xiii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations shall be final and binding on all Participants and any other holders of Awards.

(d) Limitation on Grants to Non-Employee Directors. The (i) maximum number of Shares subject to Awards granted under the Plan or otherwise during any one calendar year (beginning with the 2018 calendar year) to any non-employee Director, taken together with the (ii) cash fees paid by the Company to such non-employee Director during such calendar year, and in both cases for service on the Board or any committee thereof, will not exceed $500,000 in total value (calculating the value of any such Awards based on the grant date fair value of such Awards for financial reporting purposes).

5. ELIGIBILITY. Awards may be granted to Service Providers; provided, however, that Incentive Stock Options may be granted only to Employees.

6. NO EMPLOYMENT RIGHTS. Neither the Plan nor any Award shall confer upon a Participant any right with respect to continuing the Participant's relationship as an Employee or other Service Provider with the Company or its Subsidiaries, nor shall they interfere in any way with the Participant's right or the Company's or Subsidiary's right, as the case may be, to terminate such relationship at any time, with or without cause.

7. CODE SECTION 162(m) PROVISIONS.

(a) Option and SAR Annual Share Limit. No Participant shall be granted, in any Fiscal Year, Options and Stock Appreciation Rights to purchase more than 500,000 Shares; provided, however, that such limit shall be 250,000 Shares in the Participant's first Fiscal Year of Company service.

(b) Restricted Stock, Performance Share and Restricted Stock Unit Annual Limit. No Participant shall be granted, in any Fiscal Year, more than 250,000 Shares in the aggregate of the following: (i) Restricted Stock, (ii) Performance Shares, or (iii) Restricted Stock Units; provided, however, that such limit shall be 125,000 Shares in the Participant's first Fiscal Year of Company service.

(c) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Restricted Stock, Performance Shares or Restricted Stock Units as "performance-based compensation" under Section 162(m) of the Code, the Administrator, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals shall be set by the Administrator on or before the latest date permissible to enable the Restricted Stock, Performance Shares or Restricted Stock Units to qualify as "performance-based compensation" under Section 162(m) of the Code. In granting Restricted Stock, Performance Shares or Restricted Stock Units which are intended to qualify under Section 162(m) of the Code, the Administrator shall follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Award under Section 162(m) of the Code (e.g., in determining the Performance Goals).

(d) Changes in Capitalization. The numerical limitations in Sections 7(b) and (b) shall be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 17(a).

(e) If an Award is cancelled in the same Fiscal Year in which it was granted (other than in connection with a transaction described in Section 17 of the Plan), the cancelled Award will be counted against the limits set forth in subsections (a) and (b) above. For this purpose, if the exercise price of an Option is reduced, the transaction will be treated as a cancellation of the Option and the grant of a new Option.

8. TERM OF PLAN. Subject to Section 19 of the Plan, the Plan will become effective upon its adoption by the Board. It will continue in effect for a term of ten (10) years unless terminated earlier under Section 19 of the Plan.

9. STOCK OPTIONS.

(a) Type of Option. Each Option shall be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock

Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds $100,000, such Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 9(a), Incentive Stock Options shall be taken into account in the order in which they were

granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

(b) Term. The term of each Option shall be stated in the Award Agreement and shall be seven (7) years from the date of grant or such shorter term as may be provided in the Award Agreement. Moreover, in the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option shall be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(c) Option Exercise Price and Consideration.

(i) Exercise Price. The per Share exercise price for the Shares to be issued pursuant to exercise of an Option will be determined by the Administrator, subject to the following:

(1) In the case of an Incentive Stock Option granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than 110% of the Fair Market Value per Share on the date of grant.

(2) In the case of all other Options, the per Share exercise price will be no less than 100% of the Fair Market Value per Share on the date of grant.

(3) Notwithstanding the foregoing, Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a merger or other corporate transaction.

(ii) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator shall fix the period within which the Option may be exercised and shall determine any conditions which must be satisfied before the Option may be exercised.

(iii) Form of Consideration. The Administrator shall determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator shall determine the acceptable form of consideration at the time of grant. Subject to Applicable Laws, such consideration may consist entirely of:

(1) cash;

(2) check;

(3) promissory note;

(4) other Shares which have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option shall be exercised and which meet the conditions established by the Administrator to avoid adverse accounting consequences (as determined by the Administrator);

(5) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan;

(6) a reduction in the amount of any Company liability to the Participant, including any liability attributable to the Participant's participation in any Company-sponsored deferred compensation program or arrangement;

(7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws; or

(8) any combination of the foregoing methods of payment.

10. STOCK APPRECIATION RIGHTS.

(a) Grant of SARs. Subject to the terms and conditions of the Plan, a SAR may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.

(b) Number of Shares. The Administrator will have complete discretion to determine the number of SARs granted to any Service Provider, subject to the limits set forth in Section 7.

(c) Exercise Price and Other Terms. The Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of SARs granted under the Plan.

(d) Exercise of SARs. SARs will be exercisable on such terms and conditions as the Administrator, in its sole discretion, will determine.

(e) SAR Agreement. Each SAR grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the SAR, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(f) Expiration of SARs. An SAR granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement; provided, however, that no SAR will have a term of more than ten (10) years from the date of grant.

(g) Payment of SAR Amount. Upon exercise of an SAR, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

(i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times

(ii) The number of Shares with respect to which the SAR is exercised.

(h) Form of Payment. The Company's obligation arising upon the exercise of a SAR may be paid in Common Stock or in cash, or in any combination of Common Stock and cash, as the Administrator, in its sole discretion, may determine. Shares issued upon the exercise of a SAR shall be valued at their Fair Market Value as of the date of exercise.

11. EXERCISE OF OPTION OR SAR.

(a) Procedure for Exercise; Rights as a Shareholder. Any Option or SAR granted hereunder shall be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option or SAR shall be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the terms of the Option or SAR) from the person entitled to exercise the Option or SAR, and (ii) full payment for the Shares with respect to which the Option is exercised. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option or SAR shall be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the Awarded Stock, notwithstanding the exercise of the Option. The Company shall issue or cause to be issued (and which issuance may be in electronic entry form) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 17 of the Plan.

Exercising an Option in any manner shall decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised. Exercise of a SAR in any manner shall, to the extent the SAR is exercised, result in a decrease in the number of Shares which thereafter shall be available for purposes of the Plan, and the SAR shall cease to be exercisable to the extent it has been exercised.

(b) Termination of Continuous Status as a Service Provider. Upon termination of a Participant's Continuous Status as a Service Provider (other than termination by reason of the Participant's death or Disability), the Participant may exercise his or her Option or SAR within such period of time as is specified in the Award Agreement to the extent that the Award is vested on the date of termination (but in no event later than the expiration of the term of such Award as set forth in the Award Agreement). In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for three (3) months following the Participant's termination. If the Option or SAR is not so exercised within the time specified herein, the Option or SAR shall terminate, and the Shares covered by such Option or SAR shall revert to the Plan. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option or SAR, the Shares covered by the unvested portion of the Option or SAR will revert to the Plan on the date one (1) month following the Participant's termination. Notwithstanding the foregoing, in no event shall an Option or SAR be exercisable after the expiration of the term of the Award as provided in the Award Agreement.

(c) Disability of Participant. If a Participant terminates his or her Continuous Status as a Service Provider as a result of his or her Disability, the Participant may exercise his or her Option or SAR within such period of time as is specified in the Award Agreement to the extent the Option or SAR is vested on the date of termination (but in no event later than the expiration of the term of such Option or SAR as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option or SAR shall remain exercisable for twelve (12) months following the Participant's termination. If, after termination, the Participant does not exercise his or her Option or SAR within the time specified herein, the Option or SAR shall terminate, and the Shares covered by such Option or SAR shall revert to the Plan. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option or SAR, the Shares covered by the unvested portion of the Option or SAR will revert to the Plan on the date one (1) month following the Participant's termination. Notwithstanding the foregoing, in no event shall an Option or SAR be exercisable after the expiration of the term of the Award as provided in the Award Agreement.

(d) Death of Participant. If a Participant dies while a Service Provider, the Option or SAR may be exercised following the Participant's death within such period of time as is specified in the Award Agreement (but in no event may the option be exercised later than the expiration of the term of such Option or SAR as set forth in the Award Agreement), by the Participant's designated beneficiary, provided such beneficiary has been designated prior to Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option or SAR is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the Award Agreement, the Option or SAR shall remain exercisable for twelve (12) months following Participant's death. If the Option or SAR is not so exercised within the time specified herein, the Option or SAR shall terminate, and the Shares covered by such Option or SAR shall revert to the Plan. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option or SAR, the Shares covered by the unvested portion of the Option or SAR will revert to the Plan on the date one (1) month following the Participant's termination. Notwithstanding the foregoing, in no event shall an Option or SAR be exercisable after the expiration of the term of the Award as provided in the Award Agreement.

12. RESTRICTED STOCK.

(a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan (including the limits set forth in Section 7), the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, Shares of Restricted Stock will be held by the Company as escrow agent until the restrictions on such Shares have lapsed.

(c) Transferability. Unless determined otherwise by the Administrator, Shares of Restricted Stock may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution until the end of the applicable Period of Restriction.

(d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(i) General Restrictions. The Administrator may set restrictions based upon the achievement of Company-wide, departmental, business unit, or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(ii) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Restricted Stock as "performance-based compensation" under Section 162(m) of the Code, the Committee, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals shall be set by the Committee on or before the latest date permissible to enable the Restricted Stock to qualify as "performance-based compensation" under Section 162(m) of the Code. In granting Restricted Stock which is intended to qualify under Section 162(m) of the Code, the Committee shall follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Restricted Stock under Section 162(m) of the Code (e.g., in determining the Performance Goals).

(e) Removal of Restrictions. Except as otherwise provided in this Section 12, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(f) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares unless otherwise provided in the Award Agreement. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

(h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

13. RESTRICTED STOCK UNITS.

(a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. Each Restricted Stock Unit grant shall be evidenced by an Award Agreement that shall specify such other terms and conditions as the Administrator, in its sole discretion, shall determine, including all terms, conditions, and restrictions related to the grant, the number of Restricted Stock Units (subject to the limitations set forth in Section 7) and the form of payout, which, subject to Section 13(d), may be left to the discretion of the Administrator.

(b) Vesting Criteria and Other Terms. The Administrator shall set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant.

(i) General Restrictions. The Administrator may set vesting criteria based upon the achievement of Company-wide, departmental, business unit, or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(ii) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Restricted Stock Units as "performance-based compensation" under Section 162(m) of the Code, the Committee, in its discretion, may set performance objectives based upon the achievement of Performance Goals. The Performance Goals shall be set by the Committee on or before the latest date permissible to enable the Restricted Stock Units to qualify as "performance-based compensation" under Section 162(m) of the Code. In granting Restricted Stock Units that are intended to qualify under Section 162(m) of the Code, the Committee shall follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Restricted Stock Units under Section 162(m) of the Code (e.g., in determining the Performance Goals).

(c) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant shall be entitled to receive a payout as specified in the Award Agreement. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units shall be made as soon as practicable after the date(s) set forth in the Award Agreement. The Administrator, in its sole discretion, may pay earned Restricted Stock Units in cash, Shares, or a combination thereof. Shares represented by Restricted Stock Units that are fully paid in cash again shall be available for grant under the Plan.

(e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units shall be forfeited to the Company.

14. PERFORMANCE SHARES.

(a) Grant of Performance Shares. Subject to the terms and conditions of the Plan, Performance Shares may be granted to Service Providers at any time as shall be determined by the Administrator, in its sole discretion. Subject to Section 7 hereof, the Administrator shall have complete discretion to determine the number of Shares subject to a Performance Share Award granted to any Service Provider.

(b) Value of Performance Shares. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the date of grant.

(c) Performance Objectives and Other Terms. The Administrator will set performance objectives in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Shares that will be paid out to the Service Providers. Each Award of Performance Shares will be evidenced by an Award Agreement that will specify the performance period during which the applicable objectives must be met, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(i) General Restrictions. The Administrator may set performance objective based upon the achievement of Company-wide, departmental, business unit, or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(ii) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Performance Shares as "performance-based compensation" under Section 162(m) of the Code, the Committee, in its discretion, may set performance objectives based upon the achievement of Performance Goals. The Performance Goals shall be set by the Committee on or before the latest date permissible to enable the Performance Shares to qualify as "performance-based compensation" under Section 162(m) of the Code. In granting Performance Shares that are intended to qualify under Section 162(m) of the Code, the Committee shall follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Performance Shares under Section 162(m) of the Code (e.g., in determining the Performance Goals).

(d) Earning of Performance Shares. After the applicable Performance Period has ended, the holder of Performance Shares will be entitled to receive a payout of the number of Performance Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives

have been achieved. After the grant of a Performance Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives for such Performance Share.

(e) Form and Timing of Payment of Performance Shares. Payment of earned Performance Shares will be made as soon as practicable after the expiration of the applicable Performance Period. The Administrator, in its sole discretion, may pay earned Performance Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Shares at the close of the applicable performance period) or in a combination thereof.

(f) Cancellation of Performance Shares. On the date set forth in the Award Agreement, all unearned or unvested Performance Shares will be forfeited to the Company, and again will be available for grant under the Plan.

15. LEAVES OF ABSENCE. Unless the Administrator provides otherwise or except as otherwise required by Applicable Laws, vesting of Awards granted hereunder shall cease commencing on the first day of any unpaid leave of absence and shall only recommence upon return to active service.

16. TRANSFERABILITY OF AWARDS. Unless determined otherwise by the Administrator or as otherwise provided in the Plan, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution, and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award shall contain such additional terms and conditions as the Administrator deems appropriate.

17. ADJUSTMENTS UPON CHANGES IN CAPITALIZATION, DISSOLUTION, MERGER OR CHANGE IN CONTROL.

(a) Changes in Capitalization. Subject to any required action by the shareholders of the Company, the number of shares of Common Stock covered by each outstanding Award and the number of shares of Common Stock which have been authorized for issuance under the Plan but as to which no Awards have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Award, as well as the price per share, if any, of Common Stock covered by each such outstanding Award and the 162(m) fiscal year share issuance limits under Sections 7(a) and (b) hereof shall, shall be proportionately adjusted for any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares should the Committee (in its sole discretion) determine such an adjustment to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan. Such adjustment shall be made by the Board or the Committee, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Award.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, all outstanding Awards will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Administrator. The Administrator in its discretion may provide for a Participant to have the right to exercise his or her Option, SAR or right to purchase Restricted Stock until ten (10) days prior to such transaction as to all of the Awarded Stock covered thereby, including Shares as to which the Award would not otherwise be exercisable. In addition, the Administrator may provide that any Company repurchase option or forfeiture rights applicable to any Award shall lapse 100%, and that any Award vesting shall accelerate 100%, provided the proposed dissolution or liquidation takes place at the time and in the manner contemplated. To the extent it has not been previously exercised (with respect to Options, SARs and right to purchase Restricted Stock) or vested (with respect to other Awards), an Award will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Change in Control. In the event of a merger or Change in Control, each outstanding Award shall be assumed or an equivalent award substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the Award, the Participant shall (i) fully vest in and have the right to exercise the Option, SAR or right to purchase Restricted

Stock as to all of the Awarded Stock, including Shares as to which it would not otherwise be vested or exercisable, and (ii) fully earn

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and receive a payout with respect to other Awards. If an Award is not assumed or substituted for in the event of a merger or Change in Control, the Administrator shall notify the Participant in writing or electronically that (i) the Option, SAR or right to purchase Restricted Stock shall be fully vested and exercisable for a period of fifteen (15) days from the date of such notice, and (ii) all outstanding Options, SARs and rights to purchase Restricted Stock shall terminate upon the expiration of such period and (iii) all other outstanding Awards shall be paid out immediately prior to the merger or Change in Control. For the purposes of this paragraph, the Award shall be considered assumed if, following the merger or Change in Control, the assumed Award confers the right to purchase or receive, for each Share of Awarded Stock subject to the Award immediately prior to the merger or Change in Control, the consideration (whether stock, cash, or other securities or property) received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise (or payout or vesting, as applicable) of the Award, for each Share of Awarded Stock subject to the Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or Change in Control.

18. DATE OF GRANT. The date of grant of an Award shall be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination shall be provided to each Participant within a reasonable time after the date of such grant.

19. AMENDMENT AND TERMINATION OF THE PLAN.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan. Unless terminated sooner by the Board, the Plan shall automatically terminate on the day before _____, 2027.

(b) Shareholder Approval. The Plan will be subject to approval by the shareholders of the Company within twelve (12) months after the date the Plan is adopted. Such shareholder approval will be obtained in the manner and to the degree required under Applicable Laws. The Company shall obtain shareholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan shall impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing (or electronic format) and signed by the Participant and the Company. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

20. CONDITIONS UPON ISSUANCE OF SHARES.

(a) Legal Compliance. Shares shall not be issued pursuant to the exercise or payout, as applicable, of an Award unless the exercise or payout, as applicable, of such Award and the issuance and delivery of such Shares shall comply with Applicable Laws and shall be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise or payout, as applicable, of an Award, the Company may require the person exercising such Option, SAR or right to purchase Restricted Stock, or in the case of another Award, the person receiving the payout, to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

21. INABILITY TO OBTAIN AUTHORITY. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

22. SEVERABILITY. Notwithstanding any contrary provision of the Plan or an Award to the contrary, if any one or more of the provisions (or any part thereof) of this Plan or the Awards shall be held invalid, illegal or unenforceable in any respect, such provision shall be modified so as to make it valid, legal and enforceable, and the validity, legality and enforceability of the remaining provisions (or any part thereof) of the Plan or Award, as applicable, shall not in any way be affected or impaired thereby.
23. NON-U.S. EMPLOYEES. Notwithstanding anything in the Plan to the contrary, with respect to any employee who is resident outside of the United States, the Administrator may, in its sole discretion, amend the terms of the Plan in order to conform such terms to the requirements of local law or to meet the objectives of the Plan. The Administrator may, where appropriate, establish one or more sub-plans for this purpose.
24. 2009 EXCHANGE PROGRAM. Notwithstanding any other provision of the Plan to the contrary, upon approval of the Company's shareholders, the Administrator may provide for, and the Company may implement, an Exchange Program, pursuant to which certain outstanding Options under the Plan as well as options under the 2002 Nonstatutory Stock Option Plan, the 2000 Employee Stock Option Plan and the Accent Optical Technologies, Inc. Stock Incentive Plan could, at the election of the Participant holding such Option, be tendered to the Company for cancellation in exchange for the issuance of a lesser amount of Options with a lower exercise price, provided that such Exchange Program is commenced within 2009.