

RUDOLPH TECHNOLOGIES INC

Form DEF 14A

April 19, 2011

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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE SECURITIES
EXCHANGE ACT OF 1934

Filed by the Registrant S

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))

S Definitive Proxy Statement

£ Definitive Additional Materials

£ Soliciting Material Pursuant to (S) 240.11 or (S) 240.14a-12

Rudolph Technologies, Inc.

(Exact 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):

S No fee required.

£ Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

£ Fee paid previously with preliminary materials.

£ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

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NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To be held May 25, 2011

TO THE STOCKHOLDERS:

NOTICE IS HEREBY GIVEN that the 2011 Annual Meeting of Stockholders of Rudolph Technologies, Inc. (the “Company”), a Delaware corporation, will be held on May 25, 2011 at 1:00 p.m., local time, near the Company’s Taiwan facility, at the Ambassador Hotel Taipei, 63 Chung Shan North Road, Section 2, Taipei 104, Taiwan ROC, for the following purposes:

1. To elect the two Class III directors named herein to serve for three-year terms expiring upon the 2014 Annual Meeting of Stockholders or until their successors are elected;
2. To cast an advisory (non-binding) vote to approve the compensation of our named executive officers as disclosed in our Compensation Discussion and Analysis and in the tabular and accompanying narrative disclosure regarding named executive officer compensation in this proxy statement.
3. To cast an advisory (non-binding) vote regarding how frequently the Company should conduct the type of advisory vote on executive compensation set forth above under “Proposal 2 - Advisory Vote on Executive Compensation.”
4. To ratify the appointment of Ernst & Young LLP as our independent registered public accountants for the year ending December 31, 2011; and
5. To transact such other business as may properly come before the meeting and any adjournment or postponement thereof.

The foregoing items of business are more fully described in the Proxy Statement accompanying this Notice. Included in the mailing of this Proxy Statement is a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2010.

Only stockholders of record at the close of business on March 31, 2011 are entitled to notice of and to vote at the meeting and any adjournment thereof.

All stockholders as of the record date are cordially invited to attend the meeting in person. However, to ensure your representation at the meeting, you are urged to mark, sign, date and return the enclosed proxy card as promptly as possible in the postage-prepaid envelope enclosed for that purpose.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD MAY 25, 2011:

The enclosed proxy statement and 2010 Annual Report to Stockholders are available at <http://www.rudolphtech.com/resources/images/6169.pdf>.

FOR THE BOARD OF DIRECTORS

Steven R. Roth
Secretary
Flanders, New Jersey
April 19, 2011

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RUDOLPH TECHNOLOGIES, INC.

PROXY STATEMENT

INFORMATION CONCERNING SOLICITATION AND VOTING

General

The enclosed Proxy is solicited on behalf of the Board of Directors of Rudolph Technologies, Inc. (the “Company”) for use at the 2011 Annual Meeting of Stockholders to be held May 25, 2011 at 1:00 p.m. local time (the “Annual Meeting”), or at any adjournment thereof, for the purposes set forth herein and in the accompanying Notice of Annual Meeting of Stockholders. The Annual Meeting will be held near the Company’s Taiwan facility, at the Ambassador Hotel Taipei, 63 Chung Shan North Road, Section 2, Taipei 104, Taiwan ROC. The Company’s telephone number is (973) 691-1300.

These proxy solicitation materials and the Company’s Annual Report to Stockholders for the year ended December 31, 2010, including financial statements, were mailed on or about April 19, 2011 to stockholders entitled to vote at the meeting.

Record Date and Voting Securities

Stockholders of record at the close of business on March 31, 2011 (the “Record Date”) are entitled to notice of and to vote at the meeting. At the Record Date, 31,551,458 shares of the Company’s Common Stock, \$0.001 par value, were issued and outstanding.

Revocability of Proxies

Any proxy given pursuant to this solicitation may be revoked by the person giving it at any time before it is voted. If you are a stockholder of record, you may change your vote after submitting your proxy, by delivering to the Secretary of the Company at the Company’s principal executive offices, a written notice of revocation or a duly executed proxy bearing a later date or by attending the meeting and voting in person. If you are a beneficial owner of shares, please contact your bank, broker or other holder of record for specific instructions on how to change or revoke your vote.

Voting and Solicitation

Whether you hold your shares directly as a stockholder of record, or beneficially in street name, you may vote your shares without attending the meeting. Even if you plan to attend the meeting, we recommend that you vote your shares in advance so that your vote will be counted if you later decide not to attend the meeting.

If you hold shares in your name as a holder of record, you are considered the “stockholder of record” with respect to those shares. You can vote your shares by completing and returning the enclosed Proxy which has been mailed to you, along with a postage-paid envelope.

If your shares are held in a stock brokerage account or by a bank or other holder of record, you are considered the “beneficial owner” of shares held in “street name.” This Proxy Statement has been forwarded to you by your broker, bank or other holder of record who is considered, with respect to those shares, the “stockholder of record.” As the beneficial owner, you have the right to direct your broker, bank or other holder of record on how to vote your shares by submitting voting instructions to such person in accordance with the directions outlined in your Proxy.

Stockholders of record may vote in person at the meeting, but beneficial owners must obtain a legal Proxy from the broker, bank or other holder of record authorizing the beneficial holder to vote such shares at the meeting.

Each stockholder of record is entitled to one vote for each share of Common Stock owned by such stockholder on all matters presented at the Annual Meeting. Stockholders do not have the right to cumulate their votes in the election of directors.

The Company will bear the cost of soliciting proxies. In addition, the Company may reimburse brokerage firms and other persons representing beneficial owners of shares for their expenses in forwarding solicitation material to such beneficial owners. Solicitation of proxies by mail may be supplemented by telephone, telegram, facsimile or personal solicitation by directors, officers or regular employees of the Company. No additional compensation will be paid to such persons for such services.

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Quorum; Abstentions; Broker Non-votes

The required quorum for the transaction of business at the Annual Meeting is a majority of the votes eligible to be cast by holders of shares of Common Stock issued and outstanding on the Record Date. Abstentions and broker non-votes will be counted to determine whether there is a quorum present. If a quorum is not present, the Annual Meeting will be rescheduled for a later date.

If you return a signed and dated Proxy but do not indicate how the shares are to be voted, those shares will be voted as recommended by the Board. A valid Proxy also authorizes the individuals named as proxies to vote your shares in their discretion on any other matters which, although not described in the Proxy Statement, are properly presented for action at our Annual Meeting. If you indicate on your Proxy that you wish to “abstain” from voting on an item, your shares will not be voted on that item. A broker non-vote occurs when a bank, broker or other registered holder of record holds shares for a beneficial owner but is not empowered to vote on a particular proposal on behalf of such beneficial owner.

The election of directors and the advisory votes on named executive officer compensation and the frequency of future advisory votes on executive compensation are treated as “non-routine” proposals. This means that if a brokerage firm holds your shares on your behalf, those shares will not be voted in the election of directors unless you provide instructions to that firm by voting your proxy.

In order to ensure that any shares held on your behalf by a brokerage firm or other organization are voted in accordance with your wishes, we encourage you to provide instructions to that firm or organization by voting your proxy.

Vote Required

Each director is elected by the vote of the majority of the votes cast. This means that in order for a director nominee to be elected to our Board of Directors, the number of shares cast “for” a director’s election must exceed the number of votes cast “against” that director’s election (with “abstentions” and “broker non-votes” not counted as a vote cast either “for” or “against” that director’s election, although abstentions and broker non-votes count for quorum purposes). Our Bylaws provide for a majority voting standard for uncontested elections and provide that any incumbent director nominee in an uncontested election who does not receive an affirmative majority of votes cast must promptly tender such director’s resignation to our Board of Directors. Further information regarding the process that will be followed if such an event occurs can be located under the heading “Proposal 1 — Election of Directors.”

The proposal to approve, on an advisory basis, the compensation of our named executive officers and the proposal to ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2011 require the affirmative vote, in person or by proxy, of a majority of the shares present or represented at the meeting and entitled to vote on the matter will constitute the Company’s stockholders’ non-binding approval of the proposals. For such proposals, abstentions are counted for quorum purposes, but in effect count as negative votes because they are shares represented by proxy that are not voted in the affirmative. Broker non-votes are counted for quorum purposes, but are not counted as part of the vote total and have no effect on the outcome.

For the proposal to cast advisory votes for the frequency of future “say on pay,” the outcome will be determined by plurality vote, which means that we will consider stockholders to have expressed a non-binding preference for the option that receives the highest number of favorable votes. This vote is advisory only and not binding on the Board of Directors. Abstentions and broker non-votes will have no effect on this advisory vote.

Voting Recommendations of the Company’s Board of Directors

The Board of Directors recommends a vote (i) “FOR” the election of the Board’s director nominees named herein (ii) “FOR” the approval (on an advisory basis) of the compensation of our named executive officers (iii) “1 YEAR” for the frequency of future advisory votes on executive compensation; and (iv) “FOR” the ratification of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2011.

Attending the Annual Meeting

All stockholders of record as of the Record Date may attend the 2011 Annual Meeting. To gain admission, you will need valid picture identification and proof that you are a stockholder of record of the Company as of the Record Date (which, if you are a beneficial holder, can be obtained from your bank, broker or other record holder of your shares). To obtain directions to attend the 2011 Annual Meeting and vote in person, please contact Investor Relations at

973-691-1300.

Deadlines for Submission of Stockholder Proposals for 2012 Annual Meeting

Stockholders of the Company are entitled to present proposals for consideration at forthcoming stockholder meetings

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provided that they comply with the proxy rules promulgated by the Securities and Exchange Commission (the “SEC”) and the Bylaws of the Company. Stockholders wishing to present a proposal at the Company’s 2011 Annual Stockholder Meeting must submit such proposal in writing to the Company no later than December 21, 2011 if they wish for it to be eligible for inclusion in the proxy statement and form of proxy relating to that meeting. In addition, under the Company’s Bylaws, a stockholder wishing to make a proposal at the 2012 Annual Stockholder Meeting must submit such proposal in writing to the Company no earlier than January 26, 2012 and no later than February 25, 2012. The Nominating and Governance Committee will consider qualified director nominees recommended by stockholders. Our process for receiving and evaluating Board member nominations from our stockholders is described below under the caption “Nominating and Governance Committee.”

Householding

The Company has adopted a procedure approved by the SEC called “householding.” Under this procedure, when multiple stockholders of record share the same address, we may deliver only one set of the Proxy and Proxy Statement to that address unless we have received contrary instructions from one or more of those stockholders. The same procedure applies to brokers and other nominees holding shares of our stock in “street name” for more than one beneficial owner with the same address.

If a stockholder holds shares of stock in multiple accounts (e.g., with our transfer agent and/or banks, brokers or other registered stockholder), we may be unable to use the householding procedures and, therefore, that stockholder may receive multiple copies of the Proxy and Proxy Statement. You should follow the instructions on each Proxy that you receive in order to vote the shares you hold in different accounts.

A stockholder that shares an address with another stockholder, who has received only one set of the Proxy and Proxy Statement may write or call us as specified below to (i) request a separate copy of such materials, which will be promptly mailed without charge, and (ii) request that separate copies of these materials be sent to his or her home for future meetings. Conversely, a stockholder of record who shares the same address with another stockholder of record may write or call us as specified below to request that a single set of the Proxy and Proxy Statement be delivered to that address. Such stockholder requests should be directed to our Investor Relations Department, which can be contacted via phone at 973-691-1300 or mail at Rudolph Technologies, Inc., One Rudolph Road, P.O. Box 1000, Flanders, New Jersey 07836. If you are a beneficial owner of shares held in street name, please contact your bank, broker or other holder of record.

CORPORATE GOVERNANCE PRINCIPLES AND PRACTICES

Rudolph Technologies, Inc. is committed to sound and effective corporate governance practices. Having such principles is essential to running our business efficiently and to maintaining our integrity in the marketplace. The major components of our corporate governance practices are described below.

Codes of Ethics

We have adopted a Code of Business Conduct and Ethics (applicable to all employees, executive officers and directors) and a Financial Code of Ethics (applicable to our financial officers, including our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”)) that set forth principles to guide all employees, executive officers and directors and establish procedures for reporting any violations of these principles. These may be found on our website at <http://www.rudolphtech.com/CodesEthics.aspx> or may be requested by writing to Rudolph Technologies, Inc., Attention: Investor Relations, One Rudolph Road, P.O. Box 1000, Flanders, New Jersey 07836. The Company will disclose any amendment to its codes of ethics or waiver of a provision of its codes of ethics applicable to its officers, including the name of the officer to whom the waiver was granted, on our website at www.rudolphtech.com, on the Investor Relations page.

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Board Leadership Structure and Oversight of Risk

Our Company is led by Mr. Paul F. McLaughlin, who has served as our Chairman since January 2000 and Chief Executive Officer since June 1996. Our Board of Directors is comprised of Mr. McLaughlin and six independent directors. The Board has three standing committees with separate chairs — the Audit, Compensation, and Nominating and Governance Committees. Each of the Board committees is comprised solely of independent directors. Our Audit Committee is responsible for overseeing risk management and, on at least an annual basis, reviews and discusses with management policies and systems pursuant to which management addresses risk, including risks associated with our audit, financial reporting, internal control, disclosure control, legal and regulatory compliance, and investment policies. Our Audit Committee regularly reviews with our Board any issues that arise in connection with such topics and, in accordance with our Summary of Corporate Governance Guidelines, our full Board regularly engages in discussions of risk management to assess major risks facing our Company and review options for the mitigation of such risks. Each of our Board committees also considers the risk within its area of responsibilities. For example, our Compensation Committee periodically reviews enterprise risks to ensure that our compensation programs do not encourage excessive risk-taking and our Nominating and Governance Committee oversees risks related to governance issues, such as succession planning, and serves as the contact point for employees to report corporate compliance issues. We do not have a lead director, but our Summary of Corporate Governance Policies provides that our independent directors meet without the presence of management and the non-independent director coincident with each regularly scheduled Board meeting.

We have employed this same basic leadership structure since the Company became a public company in November 1999. We believe that this leadership structure has been effective for the Company. We have a single leader for our Company and we believe that he is seen by our customers, business partners, investors and other stakeholders as providing strong leadership for the Company and in our industry. We believe that our Chairman/CEO, together with our Audit Committee and the full Board of Directors, provide effective oversight of the risk management function.

Board Meetings and Committees

The Board of Directors of the Company held a total of four meetings during 2010. Each of our directors attended 100% of the total meetings of the Board and Board committees on which he served during 2010. While the Company does not currently have a formal policy regarding the attendance of directors at the annual meeting of stockholders, directors are encouraged to attend. All members of the Board of Directors attended the 2010 Annual Meeting of Stockholders. Each of the Audit Committee, Compensation Committee and Nominating and Governance Committee has adopted a written charter. The charters of these committees are in compliance with rules adopted by the SEC and the NASDAQ Global Select Market[®] on which our Common Stock is listed (“Nasdaq”).

Board Independence

The Board makes an annual determination as to the independence of each of our Board members under the current standards for “independence” established by Nasdaq and the SEC. The Board has determined that the following members of the Board, consisting of a majority of the Board, satisfy these independence standards: Daniel H. Berry, Leo Berlinghieri, Richard F. Spanier, Thomas G. Greig, Aubrey C. Tobey and John R. Whitten. In addition, on four occasions during 2010, our Board met in executive sessions in which solely the independent Board members were present.

Audit Committee

We have an Audit Committee that assists the Board in fulfilling its responsibilities for general oversight of the integrity of our financial statements, our accounting policies and procedures and our compliance with legal and regulatory requirements. Specifically, the Audit Committee recommends engagement of the Company’s independent registered public accountants, and is primarily responsible for approving the services performed by the Company’s independent registered public accountants and for reviewing and evaluating the Company’s system of internal controls over financial reporting and disclosure. The report of our Audit Committee is found below under the caption “Audit Committee Report.”

The Audit Committee is governed by its own charter that sets forth its specific responsibilities and the qualifications for membership to the committee. The charter of the Audit Committee is available on our website at www.rudolphtech.com, on the Investor Relations page. The Audit Committee held five meetings in 2010. The Audit

Committee is currently composed of Thomas G. Greig, Richard F. Spanier and John R. Whitten. The Board has determined that Thomas G. Greig, Richard F. Spanier and John R. Whitten meet the requirements for membership to the Audit Committee set forth by Nasdaq and the SEC, including that they be “independent.”

The Board has determined that John R. Whitten meets the definition of an “Audit Committee Financial Expert” under SEC rules, and also has the level of financial sophistication required of at least one member of the Audit Committee under Nasdaq rules.

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Compensation Committee

The Compensation Committee has its own charter that sets forth its specific responsibilities, including the establishment of the policies upon which compensation of and incentives for the Company's executive officers will be based, the review and recommendation for approval by the independent members of the Board the compensation of the Company's executive officers, and the administration of the Company's stock and stock purchase plans. The charter of the Compensation Committee is available on the Company's website at www.rudolphtech.com, on the Investor Relations page.

In general, the Compensation Committee is responsible for reviewing and recommending for approval by the independent members of the Board of Directors the Company's executive salary levels and variable compensation programs, both cash-based and equity-based. With respect to the compensation of the Company's Chief Executive Officer, the Compensation Committee reviews and and recommends for approval the various elements of the Chief Executive Officer's compensation. With respect to other executive officers, the Compensation Committee reviews the recommendations for compensation for such individuals presented to the Committee by the Chief Executive Officer and the reasons thereof. Each year, the CEO is responsible for establishing personal and corporate objectives for each of the Company executives. These objectives are reviewed and agreed upon by the CEO and the executive subject to the approval of the Compensation Committee. In addition, as part of the annual performance review of the Company's executives, the CEO assesses the performance of his direct reports and determines the merit increase, if any, that would be proposed for each individual. These merit increase proposals, along with each executive's personal and corporate objectives and their bonus target levels (based on a percentage of their base salary), are then compiled by the CEO and submitted to the Compensation Committee for their review. At the Compensation Committee meeting during which the executive compensation plans (bonuses and merit increases) are to be reviewed, the CEO attends the initial session to present the proposed plans and to answer questions. Thereafter, the Compensation Committee meets without the CEO being present to review, discuss and recommend for approval by the independent members of the Board all executive compensation plans subject to any modifications made by the Compensation Committee. The CEO does not participate in decisions regarding his own compensation.

In accordance with its charter, the Compensation Committee may form and delegate its authority to subcommittees when appropriate. Further, the Compensation Committee has the authority to retain and terminate any compensation consultant to be used to assist in the evaluation of director, CEO or executive compensation and has authority to approve the consultant's fees and other retention terms. From time to time, the Compensation Committee engages the services of such outside compensation consultants to provide advice on compensation plans and issues related to the Company's executive and non-executive employees. In 2010, the Compensation Committee engaged Pay Governance, LLC to update the Company's competitive compensation assessment, review certain contract provisions with our CEO and provide other ad hoc assistance to the Committee. The Compensation Committee also has the authority to obtain advice and assistance from internal or external legal, accounting or other advisors.

The Compensation Committee held four meetings in 2010 prior to the Board of Directors meeting where all Compensation Committee members attended in person. This Committee is currently composed of Daniel H. Berry, Leo Berlinghieri and Aubrey C. Tobey. The Board has determined that Daniel H. Berry, Leo Berlinghieri and Aubrey C. Tobey meet the requirements for membership on the Compensation Committee, including the independence requirements of Nasdaq, the criteria established by the Internal Revenue Service to be considered an "outside director," and the criteria established by the SEC to be considered a "non-employee director." For further discussion of the Compensation Committee, please refer to the Executive Compensation section of the Compensation, Discussion and Analysis ("CD&A").

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Nominating and Governance Committee

Like the other committees of the Board, the Nominating and Governance Committee has its own charter that outlines its responsibilities. These responsibilities include identifying prospective director nominees and recommending to the Board director nominees for the next annual meeting of stockholders and replacements of a director in the event a director steps down. The Nominating and Governance Committee also recommends to the Board the appointment of directors to the Audit and Compensation Committees and is charged with developing and recommending to the Board the governance principles applicable to the Company. The charter of the Nominating and Governance Committee is available on our website at www.rudolphtech.com, on the Investor Relations page.

The Nominating and Governance Committee is currently composed of Directors Thomas G. Greig, Richard F. Spanier and Aubrey C. Tobey and held four meetings during the last year. The Board has determined that all of these directors meet the requirements for membership to the Nominating and Governance Committee, including the independence requirements of Nasdaq.

The Nominating and Governance Committee determines the required selection criteria and qualifications of director nominees based upon the needs of the Company at the time nominees are considered. A candidate must possess the ability to apply good business judgment and must be in a position to properly exercise his or her duties of loyalty and care. Candidates should also exhibit proven leadership capabilities, high integrity and experience with a high level of responsibilities within their chosen fields, and have the ability to grasp complex principles of business, finance, international transactions and semiconductor inspection and metrology technologies. When current Board members are considered for nomination for reelection, the Nominating and Governance Committee also takes into consideration their prior contributions to and performance on the Board and their record of attendance.

The Nominating and Governance Committee will consider the above criteria for nominees identified by the Nominating and Governance Committee itself, by stockholders, or through some other source. The Nominating and Governance Committee uses the same process for evaluating all nominees, regardless of the original source of nomination. The Nominating and Governance Committee may use the services of a third party search firm to assist in the identification or evaluation of Board member candidates.

The Nominating and Governance Committee has a formal policy with regard to consideration of director candidates recommended by the Company's stockholders, which may be found on our website at <http://www.rudolphtech.com/DirectorCandidates.aspx>. In accordance with the policy, the Committee will consider recommendations and nominations for candidates to the Board of Directors from stockholders of the Company holding no less than 1% of the Company's securities for at least twelve months prior to the date of the submission of the recommendation or nomination. Stockholders wishing to recommend persons for consideration by the Nominating and Governance Committee as nominees for election to the Company's Board of Directors can do so by writing to the Office of the General Counsel of the Company at its principal executive offices giving each such person's name, biographical data and qualifications, along with the other information specified in the policy and under Section 2.5 of the Company's Bylaws. Any such recommendation should be accompanied by a written statement concerning the eligibility and qualifications from the person recommended and his or her consent to be named as a nominee and, if nominated and elected, to serve as a director.

The Nominating and Governance Committee has not adopted a formal diversity policy with regard to the selection of director nominees. Diversity is one of the factors that the Nominating and Governance Committee considers in identifying nominees for director. In selecting director nominees, the Nominating and Governance Committee considers, among other factors, (1) the competencies and skills that the candidate possesses and the candidate's areas of qualification and expertise that would enhance the composition of the Board, and (2) how the candidate would contribute to the Board's overall balance of expertise, perspectives, backgrounds and experiences in substantive matters pertaining to the Company's business.

In its identification of director nominees, the Nominating and Governance Committee will consider how the candidate would contribute to the Board's overall balance of diversity of expertise, perspectives, backgrounds and experiences in substantive matters pertaining to the Company's business.

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Communications with the Board of Directors

We have a formal policy regarding communications with the Board of Directors, which may be found on our website at <http://www.rudolphtech.com/StockholderCommunicationsPolicy.aspx>. Stockholders may communicate with the Board of Directors by writing to them at c/o Rudolph Technologies, Inc., Office of the General Counsel, One Rudolph Road, P.O. Box 1000, Flanders, New Jersey 07836 and such communications will be forwarded to the Board of Directors. Stockholders who would like their submission directed to a member of the Board of Directors may so specify, and the communication will be forwarded to such specific directors, as appropriate.

Related Persons Transactions Policy

There were no “related person transactions” since the beginning of 2010 involving any director, director nominee or executive officer of the Company, any known 5% stockholder of the Company or any immediate family member of any of the foregoing persons (which are referred to together as “related persons”). A “related person transaction” generally means a transaction involving more than \$120,000 in which the Company (including any of its subsidiaries) is a participant and in which a related person has a direct or indirect material interest. Our related person practices and policies are included in our corporate governance documents, including our Code of Business Conduct and Ethics, Audit Committee Charter and Summary of Corporate Governance Policies, each of which is available at the Investor Relations section of our website located at <http://www.rudolphtech.com/Investors.aspx>. Pursuant to our Code of Business Conduct and Ethics, our directors, officers and employees are required to avoid any actual or apparent conflicts of interest (other than conflicts of interest that have received appropriate approval as described below), which includes taking actions or having interests that may interfere with the objective or efficient performance of such person’s duties to the Company or that may result in such person receiving improper personal benefits as a result of their position with the Company. Pursuant to our Summary of Corporate Governance Policies, if a director becomes involved in any activity or interest that may result in an actual or potential conflict (or the appearance of a conflict) with the interests of the Company, that director is required to disclose such information promptly to the Board, which will determine an appropriate resolution on a case-by-case basis. Pursuant to this policy, all directors must recuse themselves from any discussion or decision affecting their personal, business or professional interests. Similarly, our Board will determine the appropriate resolution of any actual or potential conflict of interest involving our CEO and our CEO will determine the appropriate resolution of any conflict of interest issue involving any other officer of the Company. When necessary and appropriate, resolution of such issues may require consideration of the matter by the Audit Committee. Pursuant to the Board’s Summary of Corporate Governance Policies and the Audit Committee Charter, the Audit Committee, which consists entirely of independent directors, will review any proposed transaction in which the Company or its subsidiaries are to participate if the amount involved in the transaction exceeds \$120,000 and we are aware that any related person may have a direct or indirect material interest in the transaction. The Audit Committee will consider the facts and circumstances and will approve or ratify a proposed transaction if the Audit Committee considers it appropriate and believes that such transaction will serve the long-term interests of our stockholders. The Compensation Committee of the Board reviews and approves compensation decisions for Board members and our executive officers (and such other employees of the Company as directed by the Board) pursuant to the Compensation Committee Charter.

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PROPOSAL 1

ELECTION OF DIRECTORS

Nominees

The authorized number of directors is currently established at seven. The Company's Certificate of Incorporation provides that the directors shall be divided into three classes, with the classes serving for staggered, three-year terms. Currently, there are two directors in each of Class I and Class III and three directors in Class II. Each of the two Class III directors is to be elected at this Annual Meeting and will hold office until the 2014 Annual Meeting or until their successors have been duly elected and qualified. Each of the three Class II directors will hold office until the 2013 Annual Meeting or until their successors have been duly elected and qualified and each of the two Class I directors will hold office until the 2012 Annual Meeting or until their successors have been duly elected and qualified. These directors were approved by the Board for inclusion on this Proxy Statement based on the recommendation of the Nominating and Governance Committee.

Pursuant to the Company's Bylaws, our directors are generally elected by the affirmative vote of the majority of the votes cast (provided, however, that if the number of nominees exceeds the number of directors to be elected, directors will be elected by a plurality voting standard). In order for a director in an uncontested election to be elected, the number of shares cast "for" his election must exceed the number of votes cast "against" his election (with "abstentions" and "broker non-votes" not counted as a vote cast either "for" or "against" that director's election). If a nominee who is an incumbent director is not elected, our Bylaws provide that such director must promptly tender a resignation to the Board. Our Nominating and Governing Committee would then make a recommendation to the Board on whether to accept or reject the tendered resignation, or whether other action should be taken. Within 90 days after the date of the certification of the election results, our Board will act on any such tendered resignation and publicly disclose (in a press release, a filing with the SEC or other broadly disseminated means of communication) its decision regarding the tendered resignation and the rationale behind the decision.

Unless otherwise instructed, the proxy holders will vote the proxies received by them for the Company's two nominees named below, each of whom is currently a director of the Company. Each nominee has indicated that he will serve if elected. In the event that any nominee of the Company becomes unable or unavailable to serve as a director at the time of the Annual Meeting (which we do not anticipate), the proxy holders will vote the proxies for any substitute nominee who is designated by the current Board of Directors to fill the vacancy or the Board of Directors may, in its discretion, elect to reduce the number of directors serving on the Board.

Vote Required

Each Class III Director shall be elected by the vote of the majority of the votes cast. This means that the number of shares cast "for" a director's election must exceed the number of votes cast "against" that director's election in order for such director to be elected (with "abstentions" and "broker non-votes" not counted as a vote cast either "for" or "against" that director's election, although abstentions count for quorum purposes).

The names of the two Class III nominees for director and certain information about each of them are set forth below. The names of, and certain information about, the current Class I and Class II directors with unexpired terms are also set forth below. All information is as of the Record Date.

Name	Position	Director Since	Age
Nominee Class III Directors:			
John R. Whitten	Former Chief Financial Officer, Vice President and Treasurer, Applied Industrial Technologies, Inc.	2006	64
Aubrey C. Tobey	President, ACT International	1998	85
Continuing Class I Directors:			
Leo Berlinghieri	Chief Executive Officer and President, MKS Instruments, Inc.	2008	57
Paul F. McLaughlin	Chairman and Chief Executive Officer, Rudolph Technologies, Inc.	1996	65
Continuing Class II Directors:			

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Daniel H. Berry	Operating Partner, Riverside Partners, LLC	1998	65
Thomas G. Greig	Senior Managing Director, Liberty Capital Partners, Inc.	2003	63
Richard F. Spanier	Retired, Chairman Emeritus	1966	71

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Except as indicated below, each nominee or incumbent director has been engaged in the principal occupation set forth above during the past five years. There are no family relationships between any directors or executive officers of the Company.

Information About The Directors And The Nominees

Our Board and its Nominating and Governance Committee believe that all of the directors and nominees are highly qualified and have demonstrated leadership skills and have experience and judgment in areas that are relevant to our business. We believe that their ability to challenge and stimulate management and their dedication to the affairs of the Company collectively serve the interests of the Company and its stockholders. Additional information regarding the background and qualifications of our directors, including the experience and skills that led to the Board's determination that each director should serve on our Board at this time, is also set forth below.

Nominees for Class III Directors

Aubrey C. Tobey has served as one of the Company's directors since October 1998. Since May 1987, Mr. Tobey has served as President of ACT International, a company which provides marketing and management services for high technology companies. Mr. Tobey holds a B.S. in Mechanical Engineering from Tufts University and an M.S. in Mechanical Engineering from the University of Connecticut. Mr. Tobey has previously served on the board of SEMI, on the U.S. Department of Commerce Technical Advisory Committee for Semiconductors and as a director of Chartered Semiconductor Manufacturing, Ltd. as well as on other boards.

Mr. Tobey's widespread experience for over 45 years in the semiconductor industry provides him with invaluable insights into the industry's sales, marketing and technical challenges and global opportunities. His extensive experience and comprehensive understanding of business matters within both the domestic and international semiconductor markets provides the Board with a broad perspective on key industry issues. Mr. Tobey's strong corporate governance background, realized in part through his breadth of experience on other boards, fuels his significant contributions as a member of the Board, the Company's Compensation Committee and the Company's Nominating and Governance Committee, for which he serves as the chairman.

John R. Whitten has served as one of the Company's directors since July 2006 upon his appointment to the Company's Board of Directors. From November 1995 to December 2003, Mr. Whitten served as Chief Financial Officer, Vice President and Treasurer of Applied Industrial Technologies, Inc. (NYSE- AIT), an industrial supply distributor. Mr. Whitten is a C.P.A. and holds a B.B.A. in Accounting from Cleveland State University. Mr. Whitten is currently an independent director overseeing 63 portfolios in the mutual fund complex of American Century Investments, a registered investment company.

Mr. Whitten's extensive financial background, including his previous experience at a public accounting firm and as Chief Financial Officer of a public company, provide valuable insight to the Board of Directors and the Audit Committee, for which he serves as the chairman.

The Company's Board of Directors unanimously recommends voting "FOR" each of the nominees set forth herein.

Continuing Class I Directors

Paul F. McLaughlin has served as the Company's Chairman since January 2000 and Chief Executive Officer and as a director of the Company since June 1996. Mr. McLaughlin holds a B.S. in Metallurgical Engineering from Rensselaer Polytechnic Institute, an M.S. in Metallurgy and Materials Science from Lehigh University and an M.B.A. from Harvard University Graduate School of Business Administration.

Mr. McLaughlin has over 25 years of experience in the semiconductor capital equipment business, including more than 10 years as Chief Executive Officer of the Company, which gives him a unique and valuable insight into the challenges and strategies relevant to the semiconductor industry as a whole, and to our Company in particular.

Leo Berlinghieri has served as one of the Company's directors since September 2008. Since July 2005, Mr. Berlinghieri has served as Chief Executive Officer and President of MKS Instruments, Inc., an equipment supplier to the semiconductor industry. From April 2004 to July 2005, Mr. Berlinghieri served as President and Chief

Operating Officer and prior to that he served as Vice President and Chief Operating Officer from July 2003 to April 2004 for MKS Instruments, Inc. Mr. Berlinghieri is currently a board member of MKS Instruments, Inc. Mr. Berlinghieri's 30 years of experience coupled with his tenure at the helm of the same public corporation in the semiconductor industry provides him with valuable insight into the operational and strategic issues facing our industry.

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Continuing Class II Directors

Daniel H. Berry has served as one of the Company's directors since October 1998. Since September 2010, Mr. Berry has served as Chief Executive Officer of NDS Surgical Imaging, a supplier to the medical imaging industry. Since January 2002, Mr. Berry has been an Operating Partner of Riverside Partners, LLC, a private equity investment firm. From July 2004 to August 2007, Mr. Berry also served as Executive Vice President of Applied Precision, formerly a Riverside portfolio company. He was employed by Ultratech Stepper, Inc. (presently Ultratech, Inc.), an equipment supplier to the semiconductor industry, from 1990 to 2001 in various positions including President and Chief Operating Officer from May 1999 to November 2001. Prior to this, Mr. Berry held positions at General Signal, Perkin Elmer and Bell Laboratories. Mr. Berry is a member of the Board of Trustees of the Polytechnic Institute of New York University and is a member of the Board of Directors of various companies in Riverside Partners portfolio of investments. Mr. Berry holds a B.S. in Electrical Engineering from the Polytechnic Institute of Brooklyn. Mr. Berry's extensive business experience, particularly within the semiconductor industry for more than 35 years, provides him with insight into the challenges we face within the industry.

Thomas G. Greig has served as one of the Company's directors since January 2003. Mr. Greig has been employed by Liberty Capital Partners, Inc., a private equity investment firm, since July 1998 and currently holds the position of Senior Managing Director. From December 1985 to July 1998, Mr. Greig was a Managing Director of Donaldson, Lufkin, & Jenrette, Inc., an investment banking firm. Mr. Greig holds a B.S. in Engineering from Princeton University, an M.S.E. in Electrical Engineering from New York University and an M.B.A. from Harvard University Graduate School of Business Administration. Mr. Greig is currently the Non-Executive Chairman of the Board of Black Box Corporation.

Mr. Greig has a wide-ranging acquisition and financial background as well as extensive prior experience serving on the boards of public and private companies, offering the Board of Directors and the Audit Committee a combination of valuable skill sets.

Richard F. Spanier has served as Chairman Emeritus of the Company's Board of Directors since January 2000 and prior to that as the Company's Chairman of the Board of Directors since September 1966. From September 1966 to June 1996, Dr. Spanier served as the Company's President and Chief Executive Officer. Dr. Spanier holds a B.S. in Physics, an M.S. in Physical Chemistry and a Ph.D. in Chemical Physics from Stevens Institute of Technology. Dr. Spanier's 30 years of experience as President of the Company and his extensive scientific and practical engineering background provides the Board of Directors with a technical perspective and valuable insight into the challenges and strategies relevant to the semiconductor industry as a whole, and to our Company in particular. In addition, his financial acumen is a valued asset in his role as a member of our Audit Committee.

Compensation of Directors

Directors who are employees of the Company receive no compensation for their services as members of the Board of Directors. In 2010, directors were not paid to serve on the committees of the Board of Directors with the exception of those directors serving as committee chairmen. Daniel H. Berry, Aubrey C. Tobey and John R. Whitten each received cash compensation of \$2,500 each quarter in 2010 for their services as the Chairman of the Compensation Committee, as the Chairman of the Nominating and Governance Committee and as Chairman of the Audit Committee, respectively. From time to time, directors may be compensated for work performed as members of special subcommittees of the Board of Directors. No fees were paid to directors for special subcommittee work in 2010. Directors who are not employees of the Company received cash compensation of \$5,000 for attendance at the first quarterly meeting of the Board of Directors in 2010 and \$10,000 for each of the three remaining quarterly meetings. Effective as of July 2008, the equity component of a non-employee director's compensation is comprised of an annual grant of restricted stock units ("RSUs"), which are awarded annually as of the third quarter Board of Directors meeting, the date of which varies year-to-year, in an amount of shares calculated by dividing \$50,000 by the Company common stock closing stock price on the date of such annual grant, rounded to the nearest 100 shares. In addition, initial grants issued to a new non-employee director as of the first Board of Directors meeting after the election of such non-employee directors ("First Meeting") and are calculated in accordance with the annual grant formula set forth above, but are prorated by the number of quarters between such First Meeting and the date on which the next annual grant is scheduled to be awarded. Any initial grants and/or annual grants so awarded are issued at the closing price of

the Company's common stock as of the date of grant and typically vest on the first anniversary of the grant date. All equity awards granted in 2010 were granted under and subject to the terms of the Rudolph Technologies, Inc. 2009 Stock Plan.

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For the year ended December 31, 2010, the directors, excluding the director who is a named executive officer, of the Company (six individuals) received the following total compensation:

Name	Fees Earned or Paid in Cash	Stock Awards(1)	Option Awards	Total
Leo Berlinghieri	\$ 35,000	\$ 50,040	\$ —	\$ 85,040
Daniel H. Berry	\$ 45,000	\$ 50,040	\$ —	\$ 95,040
Thomas G. Greig	\$ 35,000	\$ 50,040	\$ —	\$ 85,040
Richard F. Spanier	\$ 35,000	\$ 50,040	\$ —	\$ 85,040
Aubrey C. Tobey	\$ 45,000	\$ 50,040	\$ —	\$ 95,040
John R. Whitten	\$ 45,000	\$ 50,040	\$ —	\$ 95,040

Represents the grant date fair value for each share-based compensation award granted during the year, calculated in accordance with FASB ASC Topic 718. The assumptions used in determining the grant date fair values of these awards are set forth in Note 12 to our consolidated financial statements, which are included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 filed with the SEC. As of (1) December 31, 2010, our directors had the following stock awards outstanding: Mr. Berlinghieri — 6,000 RSUs and 0 stock options; Mr. Berry — 6,000 RSUs and 25,000 stock options; Mr. Greig — 6,000 RSUs and 15,000 stock options; Mr. Spanier — 6,000 RSUs and 25,000 stock options; Mr. Tobey — 6,000 RSUs and 25,000 stock options; and Mr. Whitten — 6,000 RSUs and 0 stock options.

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PROPOSAL 2
ADVISORY VOTE ON EXECUTIVE COMPENSATION

We are asking our stockholders to cast an advisory vote to approve the compensation of our named executive officers as disclosed in our Compensation Discussion and Analysis and in the tabular and accompanying narrative disclosure regarding named executive officer compensation in this proxy statement.

Pursuant to recently adopted federal legislation and as required by Section 14A(a)(1) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), our shareholders are entitled to vote at the Annual Meeting to approve the compensation of the Company's named executive officers, as disclosed in this proxy statement pursuant to Item 402 of Regulation S-K under the Securities Act of 1933, as amended and the Exchange Act, at least once every three years.

Our executive compensation arrangements are designed to enhance stockholder value on an annual and long-term basis. Through the use of base pay as well as annual and long-term incentives, we seek to compensate our named executive officers for their contributions to our profitability and success. Please read the Compensation Discussion and Analysis beginning on page 16 of this proxy statement and the tabular and additional narrative disclosures on executive compensation beginning on page 29 of this proxy statement for additional details about our executive compensation arrangements, including information about the fiscal year 2010 compensation of our named executive officers.

This advisory vote addresses the overall compensation of our named executive officers as well as our philosophy and policies regarding executive compensation practices as described in this proxy statement. We are asking our stockholders to indicate their support for our compensation arrangements as described in this proxy statement.

For the reasons discussed above, the Board recommends that stockholders vote in favor of the following resolution:

“RESOLVED, that the compensation paid to the Company's named executive officers, as disclosed in this Proxy Statement pursuant to Item 402 of Regulation S-K, including the Compensation Discussion and Analysis, compensation tables and narrative discussion is hereby APPROVED.”

Because your vote is advisory, it will not be binding upon or overrule any decisions of the Board, nor will it create any additional fiduciary duty on the part of the Board. This advisory vote also does not seek to have the Board or Compensation Committee take any specific action. However, the Board and the Compensation Committee value the view expressed by our stockholders in their vote on this proposal and will take into account the outcome of the vote when considering executive compensation matters in the future. In considering the outcome of this advisory vote, the Board will review and consider all shares voted in favor of the proposal and not in favor of the proposal. Broker non-votes will have no impact on the outcome of this advisory vote.

The Board recommends a vote “FOR” the approval of the compensation of the named executive officers as disclosed in this proxy statement pursuant to Item 402 of Regulation S-K as required by Section 14A(a)(1) of the Exchange Act.

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PROPOSAL 3

ADVISORY VOTE ON THE FREQUENCY OF THE
ADVISORY VOTE ON EXECUTIVE COMPENSATION

We are asking our stockholders to cast an advisory vote regarding how frequently the Company should conduct the type of advisory vote on executive compensation set forth above under “Proposal 2 - Advisory Vote on Executive Compensation.”

Specifically, in this advisory vote we are asking stockholders to indicate whether the Company should conduct an advisory vote on the compensation of our named executive officers once every year, once every two years, or once every three years (i.e., on an annual, biennial or triennial basis). Alternatively, stockholders may abstain from casting a vote on this matter.

After careful consideration, our Board of Directors has determined that an annual advisory vote on executive compensation is the most appropriate alternative for Rudolph Technologies, Inc. The Board of Directors’ determination was influenced by the fact that the compensation of our named executive officers is evaluated, adjusted and approved on an annual basis. As part of the annual review process, the Board of Directors believes that stockholder sentiment should be a factor that is taken into consideration by the Board of Directors and the Compensation Committee in making decisions with respect to executive compensation. By providing an advisory vote on executive compensation on an annual basis, our stockholders will be able to provide us with direct input on our compensation philosophy, policies and practices as disclosed in the proxy statement every year. In addition, we consider this to be a good governance practice. We understand that our stockholders may have different views as to what is the best approach for Rudolph Technologies, Inc. and we look forward to hearing from our stockholders on this agenda item every year.

Based on these considerations, the Board is recommending that stockholders vote that an advisory vote on executive compensation should be held once every year (1 year), but it is important to note that the proxy card provides for four choices (every one, two, or three years, or abstain) and that stockholders are not voting to approve or disapprove the Board’s recommendation.

Because your vote is advisory, it will not be binding upon the Board, nor will it create any additional fiduciary duty on the part of the Board. However, the Board will take into account the outcome of the vote when determining how frequently an advisory vote on executive compensation should be conducted in the future.

Legislation requires that our stockholders be given the opportunity, at least once every six years, to cast an advisory vote regarding how frequently we should conduct this advisory vote on executive compensation.

The Board of Directors recommends a vote in favor of a frequency of once every year (1 year) for future non-binding stockholder votes on the compensation of the named executive officers as required by Section 14A(a)(2) of the Exchange Act.

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PROPOSAL 4

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

Although ratification by stockholders is not required by law, the Board of Directors is submitting the selection of Ernst & Young LLP for ratification as a matter of good corporate governance. The Audit Committee of the Board of Directors has recommended, and the Board of Directors has approved, the selection of Ernst & Young LLP as independent registered public accountants, to audit the financial statements of the Company for the year ending December 31, 2011 and recommends that the stockholders vote for ratification of such appointment. In the event of a negative vote on such ratification, the Board of Directors will reconsider its selection. Even if the selection is ratified, the Audit Committee may appoint a new independent registered public accounting firm at any time during the year if they believe that such a change would be in the best interests of the Company and its stockholders. Ernst & Young LLP has served as the Company's independent registered public accounts since March 19, 2008. Representatives of Ernst & Young LLP are not expected to be present at the Annual Meeting to make a statement nor be available to respond to appropriate questions.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accountants

The Audit Committee pre-approves all audit and permissible non-audit services provided by the Company's independent registered public accountants. These services may include audit services, audit-related services, tax and other services. Pre-approval is generally provided for up to one year, and any pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. The independent registered public accountants and management are required to periodically report to the Audit Committee regarding the extent of services provided by the independent registered public accountants in accordance with this pre-approval and the fees for the services performed to date. The Audit Committee may also pre-approve particular services on a case-by-case basis. During 2010, all services provided by Ernst & Young LLP were pre-approved by the Audit Committee in accordance with this policy.

Fees billed to the Company by Ernst & Young LLP for 2010 and 2009

For the years ended December 31, 2010 and 2009, aggregate fees for professional services rendered by our independent registered public accounting firm, Ernst & Young LLP, in the following categories were as follows:

	2010	2009
Audit fees	\$ 804,525	\$ 805,714
Audit related fees	30,000	30,000
Tax fees	—	—
All other fees	—	—
Total	\$ 834,525	\$ 835,714

Audit Fees:

Audit fees for the years ended December 31, 2010 and 2009 were for the audit of the Company's annual financial statements and a review of those financial statements included in the Company's quarterly reports on Form 10-Q and services that are normally provided by the independent registered public accountants in connection with statutory and regulatory filings or engagements for that calendar year.

Audit Related Fees:

Audit related fees for the years ended December 31, 2010 and 2009 were for assurance and related services that are reasonably related to the performance of the audit or review of the Company's annual financial statements and are not reported under "Audit Fees", including fees for employee benefit plan audits.

Tax Fees:

Tax fees include fees for tax compliance, tax planning and tax advice. No such fees were billed to the Company by Ernst & Young LLP for the years ended December 31, 2010 and 2009.

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All Other Fees:

All other fees consist of fees for products and services other than the services described above. No such fees were billed to the Company by Ernst & Young LLP for the years ended December 31, 2010 and 2009.

All of the fees listed in the chart above were pre-approved by the Audit Committee, which concluded that the provisions of such services by Ernst & Young LLP was compatible with the maintenance of that firm's independence in the conduct of its audit functions.

Vote Required

The affirmative vote of a majority of the votes cast will be required to ratify Ernst & Young LLP as the Company's independent registered public accountants for the year ending December 31, 2011.

The Company's Board of Directors unanimously recommends voting "FOR" the ratification of the appointment of Ernst & Young LLP as the Company's independent registered public accountants for the year ending December 31, 2011.

AUDIT COMMITTEE REPORT

The following is the Audit Committee's report submitted to the Board of Directors for the year ended December 31, 2010.

The Audit Committee of the Board of Directors has:

- reviewed and discussed with management and with Ernst & Young LLP, the Company's independent registered public accounting firm, together and separately, the Company's audited consolidated financial statements contained in its Annual Report on Form 10-K for the year ended December 31, 2010;
- discussed with Ernst & Young LLP, the matters required to be discussed by Statement on Auditing Standards No. 61, as amended (AICPA, Professional Standards, Vol. 1, AU section 380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T; and
- received the written disclosures and the letter from Ernst & Young LLP required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with Ernst & Young LLP its independence.

Based on the foregoing review and discussions, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010.

THE AUDIT COMMITTEE

John R. Whitten (Chairman)
Thomas G. Greig
Richard F. Spanier

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EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Executive Summary

Rewarding continuous improvement in financial and operating results and the creation of shareholder value are key attributes of our compensation philosophy, which serves as the framework for the Company's executive compensation program. The focus of our program is on incentive arrangements that reward executives for improvement in the Company's results and appreciation in our stock value. In 2010, we continued to face challenges related to a global economic recession. Despite the economic conditions, the Company achieved many of its strategic and business objectives for the year.

Earnings for 2010 were \$0.86 per share, compared to loss per share of (\$0.96) in 2009;

Revenues reached \$195.3 million in 2010 versus \$78.7 million in 2009;

Operating cash flow exceeded \$16.3 million in 2010; and

Our stock price finished the year at \$8.23, a gain of over 22% for 2010.

As a result, our Named Executive Officers ("NEOs") earned above target cash bonus awards for 2010 under our Key Executive Cash Bonus Plan. Similarly, our performance-based restricted stock units were earned at a range from 112% to 120% of target and will now time vest equally in 20% increments beginning in March 2011.

To underscore the importance of "pay-for-performance" in our compensation philosophy and our Company's culture, the Committee has developed incentive arrangements based on rigorous performance standards established at levels in excess of the overall industry projections in order that the Company strive to outperform the industry. Our Key Executive Cash Bonus Plan component of compensation rewards executives for achieving specific corporate, business unit and individual goals, including targets related to additional corporate and/or business unit financial measures, operational measures and activities, investor relations activities, transactional activities, and marketing initiatives depending on the executive involved.

Our long-term incentive program consists of grants of performance-based restricted stock units which are earned based on the achievement of annual performance goals and, once earned have additional time vesting requirements. Performance targets related to corporate revenue and EPS were established by the Committee prior to grant.

Achievement of maximum performance can result in earning up to 120% of the target shares granted. Once earned, shares time vest equally over the next four years. Shares earned and vested are subject to the Company's stock ownership and retention guidelines.

Introduction / Corporate Governance

Compensation Committee Members and Charter

The Compensation Committee of the Board of Directors of Rudolph Technologies, Inc. (referred to herein as the "Committee" or the "Compensation Committee") is currently composed of Daniel Berry, who serves as the Chairman of the Committee, Aubrey C. Tobey and Leo Berlinghieri, each of whom meets the requirements for membership on the Compensation Committee, including Nasdaq independence requirements and the criteria established by the SEC to be considered a "non-employee director." In general, the Compensation Committee is responsible for reviewing and recommending for approval by the independent members of the Board of Directors the Company's compensation policies and practices, including executive salary levels and variable compensation programs, both cash-based and equity-based. The Compensation Committee reviews and recommends for approval the various elements of the Chief Executive Officer's ("CEO") compensation. With respect to other executive officers, including each of our named executive officers, the Compensation Committee reviews the recommendations for compensation for such individuals presented to the Committee by the CEO, and the reasons therefore, and may, in its discretion, modify the compensation packages for any such individuals. The Committee then recommends such compensation packages to the Board of Directors for approval.

Compensation Consultants

From time to time, the Compensation Committee has engaged the services of outside compensation consultants to provide advice on compensation plans and issues related to the Company's executive and non-executive employees. In 2010, the Committee engaged Pay Governance, LLC, an executive compensation consulting company to provide

assistance to the Committee in 2010 and early 2011. Included within this most recent assignment, Pay Governance was engaged to update the Company's competitive compensation assessment, review the CEO's contract provisions and provide other ad hoc assistance to the Compensation Committee. Pay Governance has performed no other work for the Company.

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Role of Executives in Establishing Compensation

The Committee makes all determinations regarding executive compensation subject to Board approval. On an annual basis, the Committee evaluates our CEO's performance in light of the goals and objectives established for measuring his performance at the beginning of the previous fiscal year. The results of this evaluation guide the Committee in setting our CEO's salary, bonus and other incentive and equity compensation. With regard to compensation for executives other than the CEO, the Committee seeks input from the CEO. Each year, the CEO is responsible for establishing personal and corporate objectives for each of the Company's executives, including our named executive officers. These objectives are reviewed and agreed upon by the CEO and the executive subject to the approval of the Compensation Committee. In addition, as part of the annual performance review of the Company's executives, the CEO assesses the performance of his direct reports and determines the merit increase, if any, to be proposed for each individual. These merit increase proposals, each executive's personal and corporate objectives, their bonus target levels (based on a percentage of their base salary) and their equity grant proposals, are then compiled by the CEO and submitted to the Compensation Committee for review and consideration for approval. At the Compensation Committee meeting during which the executive compensation plans (bonuses, merit increases and equity grant proposals) are reviewed, the CEO attends the initial session to present the proposed plans and to answer questions. Thereafter, the Compensation Committee meets without the CEO being present to review, discuss and approve all executive compensation plans, subject to any modifications made by the Compensation Committee. Other than set forth above, no other executives attended the Compensation Committee meetings in 2010. Further, no executives of the Company attended any of the Board's executive sessions.

Compensation Committee Activity

During 2010, the Compensation Committee met four times. As discussed above, the Company's Chairman and CEO, Paul McLaughlin, met with the Compensation Committee in early 2010 to present the proposed compensation plans for each of the Company's executives as well as the incentive award opportunities under the 2010 Employee Cash Bonus Program for certain non-executive employees. At each of its meetings held during 2010, the Compensation Committee met in executive session, without the presence of Mr. McLaughlin or any other Company executives or advisors, to review the relevant compensation matters at such times.

In 2010, the Compensation Committee took a number of actions. These included:

- Reviewing and recommending for approval the annual compensation of the Company's CEO for 2010;
- Reviewing and recommending for approval the annual compensation for each executive of the Company for 2010;
- Reviewing and recommending for approval the Key Executive Bonus Plan and Employee Cash Bonus Programs for 2010; and
- Reviewing and recommending for approval the equity incentive awards and related performance targets issued to the Company's executives for 2010.

In reviewing and setting the annual compensation for each executive of the Company, the Compensation Committee reviewed the amounts payable under each of the elements of their respective compensation plans, including their base salary, annual bonus and perquisites, as well as the equity grants for the individuals. In doing so, the Committee took into consideration both the Company's internal pay equity as well as the competitive environment within which the Company operates. In each instance, the Committee determined that the base salary for the individual executives was at an acceptable level and that the perquisites were suitable for the related positions.

In early 2011, the Compensation Committee met to review for 2011 the annual compensation of the Company CEO, the annual compensation for each executive officer, the Key Executive Bonus Plan, and the Employee Cash Bonus Program. In addition, the Committee reviewed and the Board approved the equity incentive awards for the Company's executives and other personnel. The Committee reviewed and the Board approved base salary increases to the executive team for 2011, including each of our named executive officers. In addition, the Committee reviewed and the Board approved both the Key Executive Bonus Plan and the Employee Cash Bonus Program for 2011 and the 2011 equity awards granted to the executive team, which were in the form of performance-based restricted stock units ("RSUs").

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Objectives of Compensation Programs

Compensation Philosophy

The Compensation Committee believes that the most effective executive compensation program is one that is designed to reward the achievement of specific annual, long-term and strategic goals by the Company, and which aligns executives' interests with those of the stockholders by compensating executives based on specified financial performance, with the objective of improving stockholder value. The Compensation Committee evaluates both performance and compensation to ensure that the Company maintains its ability to attract and retain superior employees in key positions and that compensation provided to key employees remains competitive relative to the compensation paid to similarly situated executives at competitor companies. The Compensation Committee believes executive compensation packages provided by the Company to its executives, including the named executive officers, should include cash, select perquisites and stock-based compensation that rewards performance as measured against established goals. In addition, the Company strives to promote an ownership mentality among its key leadership and the Board of Directors, in part through the guidelines described below under the heading "Stock Ownership/Retention Guidelines."

Benchmarking

In order to meet its objective of maintaining competitive executive compensation packages, the Committee obtains third-party compensation information from time to time and reviews executive compensation programs of comparable, publicly held, high technology companies.

The Company has engaged compensation consultants at various times in the development and evaluation of its compensation programs. To the extent that compensation consultants are not engaged to consult with the Committee with respect to compensation for a position or time period, the Committee obtains market compensation information from internal resources at the Company. The Committee reviews data related to compensation levels and programs of other similar companies prior to making its decisions, but only considers such information in a general manner in order to obtain an understanding of the current compensation practices within our industry. In the fall of 2008, the Committee engaged Towers Watson to perform a comprehensive assessment of compensation levels provided to executives. Data representing company proxy disclosures and industry compensation surveys was used in conducting this assessment. Towers Watson developed a peer group of industry related companies based on the following criteria:

- Semiconductor equipment industry (publicly traded companies);
- Revenues of approximately \$500 million or less;
- Market capitalization of less than \$1 billion; and
- Competitors for business and employee talent.

The peer group for 2010, as approved by the Committee, consisted of the following 19 companies:

Advanced Energy Industries Inc.	FormFactor Inc.
ATMI Inc.	LTX-Credence Corp.
Axcelis Technologies Inc.	Mattson Technology Inc.
AXT Inc.	MKS Instruments Inc.
Brooks Automation Inc.	Nanometrics Inc.
Cabot Microelectronics Corp.	PDF Solutions Inc.
Cohu Inc.	Semitoool Inc.
Cymer Inc.	Ultratech Inc.
EMCORE Corp.	Veeco Instruments Inc.
FEI Co.	

In the fall of 2010 for its 2011 review, Pay Governance used the same peer group as set forth above except for Semitoool Inc., which was acquired, and Veeco Instruments Inc., who has outgrown the peer group from a revenues perspective.

The pay practices of the foregoing peer group were analyzed for base salary and short- and long-term incentives.

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Periodically, peer groups are used to evaluate other programs such as executive retirement, perquisites and severance policies. Our peer group data is supplemented by broader technology industry data from compensation surveys to further facilitate the evaluation of compensation levels and design. Compensation levels are developed at the low (25th percentile), middle (50th percentile) and high (75th percentile) end of the market for each pay element (base salary and short- and long-term incentives) and for total compensation. A similar process has been followed by consultants engaged by the Committee in prior years.

While the Committee reviews market data representing the market 25th, 50th and 75th percentiles for each pay element and in total, no specific philosophy of targeting a particular market compensation level has been applied for such compensation and instead the Committee uses its discretion in setting the levels as appropriate. Although we do not specifically target any element of compensation or total compensation for our executives, compensation for the pay elements and total compensation for our named executive officers in 2010 as compared to the market peer group median data was as follows:

- Base salary: 0% to 12% above the market median;
- Short-term incentive: 25% below to 10% above the market median;
- Long-term incentive: 62% below to 37% above the market median; and
- Total compensation: 27% below to 11% above the market median.

Compensation Policies

The Company has not established formal written policies regarding its compensation programs or the elements thereof with the exception of a set of guidelines that address stock ownership by executives and directors (as discussed in more detail below). However, the Compensation Committee has developed a set of core objectives and principles that it has used to develop the executive compensation program. The specific objectives of our executive compensation program are to:

- Attract and retain executive talent;
- Align compensation with Company and individual performance; and
- Foster an ownership mentality and create alignment with stockholders.

The following principles support the objectives and design of the compensation program:

- The compensation program will be fair and competitive, from an internal and external perspective, taking into account the role, unique qualifications and distinct responsibilities of each executive;
- A substantial portion of an executive's compensation will be at risk and linked to the achievement of both corporate and individual goals and changes in stockholder value;
- Retirement benefits will provide financial stability following employment but will not be the focal point of why executives choose to work for the Company;
- The use of perquisites and other executive benefits will serve a business purpose; and
- All compensation program elements taken as a whole will help focus executives to achieve the Company's financial goals.

Compensation Programs Design

The compensation program provided to the Company's executive officers is generally comprised of four parts, each selected to address different objectives: cash base salary, annual cash performance incentive bonuses, long-term incentives which may be in the form of both time-vesting and performance RSU grants and perquisites and other executive benefits. Executives are also entitled to participate in benefit programs available to all Company employees, such as our ESPP and 401(k) Plan. This design was adopted for executives by the Compensation Committee taking into consideration a number of parameters including the Company's compensation consultant's advice, comparable practices within the industry and the desire to achieve the goals discussed herein underlying the compensation plan. It is believed that as a result of this program the Company can attract, retain and motivate employees and reward the achievement of strategic corporate goals, thereby enhancing stockholder value.

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Annually, the Compensation Committee reviews the elements of the compensation package as well as the overall package afforded to the executives. At this time, the Compensation Committee, in its discretion, can recommend adjustments to the elements of the program to the Board of Directors for review and approval. This review would typically be performed coincident with the evaluation of the individual executive's performance in relation to their Key Executive Cash Bonus Plan goals, salary adjustment and equity grants, if any, as discussed below.

The Committee and Board believe that each of the elements as well as the entire compensation package for Company executives is appropriate for the Company given its performance, industry, current challenges and environment. Based on the objectives discussed in the foregoing section, the Compensation Committee seeks to structure any equity or incentive compensation program to motivate executives to achieve the business goals set by the Company and reward the executives for achieving such goals, which we believe aligns the financial incentives of our executives with the interests of our stockholders. The Committee primarily uses salary and perquisites and other executive benefits as a means for providing compensation to employees primarily for their knowledge and experience and for fulfilling their basic job responsibilities.

In establishing these components of the executive compensation package, it is the Compensation Committee's intention to set total executive compensation at a sufficient level to attract and retain a strong motivated leadership team, while remaining reasonable and in line with stockholder perception of overall fairness of executive compensation.

Base salary levels for executive officers of the Company have been generally established at or near the start of each year. The Company's annual executive cash incentive bonuses are administered through its Key Executive Cash Bonus Plan. The plan provides guidelines for the calculation of annual non-equity incentive based compensation, subject to Compensation Committee oversight and modification based on the achievement of corporate and individual goals. At its first meeting of each year, the Compensation Committee determines final bonuses for executive officers earned in the preceding year based on each individual's performance and the performance of the Company, based upon its audited financial statements, if such a plan was established for such preceding year, and also reviews the plan established for the current year and approves the group of executives eligible to participate in the plan for that year. Each of the Company's executives, including our named executive officers, is eligible to receive equity compensation in the form of stock option and/or RSU grants under the Company's 2009 Stock Plan. All full-time and part-time employees are eligible for stock option or RSU grants. It is believed that through the Company's broad-based equity compensation plan, the economic interests of all employees, including the executives, are more closely aligned to those of the stockholders. It is also believed that this approach will allow the Company to use equity as an incentive in a balanced manner that supports the recruitment and retention of top talent. With the implementation of stock option expensing under SFAS No. 123R (now FASB ASC Topic 718) in 2006, the Company shifted the majority of its equity compensation grants away from stock options and toward RSUs, in accordance with the provisions set forth under the heading "Equity Compensation Plan." In doing so, the Company has retained the incentive aspects associated with such grants, to increase the value of our stock, while potentially reducing the dilution to the Company's stock in light of the fewer number of shares granted. The Compensation Committee generally recommends for approval by the Board the grant of equity awards at the first regularly scheduled meeting of the Board or upon completion of the Compensation Committee's review and approval process. The Committee and Board do not generally grant equity awards at other times during the year, other than in the case of a new hire or exceptional circumstances. As described in more detail below under the heading "Equity Compensation Plan," the Committee approved RSU grants, which were subject to both service-based vesting conditions and to performance conditions on February 1, 2010, shortly after at its first regularly scheduled meeting of fiscal 2010 on January 25, 2010. All RSU awards were granted at the fair market value of our common stock on the grant date. Fair market value on the grant date means the closing Nasdaq stock price per share on the grant date.

Impact of Performance on Compensation

The performance of an executive has a direct impact on the compensation received by such executive from the Company. On an annual basis, the CEO reviews the performance and compensation for the Company's executives to determine any potential salary adjustment for each individual. This assessment takes into consideration a number of factors, including the Company's profitability; the performance of applicable business units; the executive's individual

performance and measurable contribution to the Company's success; and pay levels of similar positions with comparable companies in the industry and within similar technology industries.

In addition, both Company and individual performance are assessed by the CEO when proposing to the Committee any bonus payout to the named executive officers (other than the CEO) under the Key Executive Cash Bonus Plan. The Key Executive Cash Bonus Plan also includes various incentive level opportunities based on the executive's accountability and impact on Company operations, with target award opportunities that are established as a percentage of base salary. Typically, these targets range from 10% of base salary to 75% of base salary for the executives in the plan. For our named executive officers, 2010 target cash bonus opportunities were set as follows: Mr. McLaughlin - 75% of salary; Mr. Roth - 45% of salary; Mr. Little

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- 50% of salary and Mr. Plisinski - 45% of salary. For our named executive officers, 2011 target cash bonus opportunities are set as follows: Mr. McLaughlin - 75% of salary; Mr. Roth - 45% of salary; Mr. Little - 50% of salary and Mr. Plisinski - 45% of salary. As Senior Vice President of Worldwide Sales, Mr. Brooks does not participate in the cash bonus aspect of the Key Executive Cash Bonus Plan but instead has approximately 25% of his total compensation tied to sales commissions at quota.

During years in which the Key Executive Cash Bonus Plan is implemented, payout is based upon achievement of corporate and personal objectives with no payout being awarded unless the Company meets 80% of the Board approved corporate financial targets established as part of the plan. Personal objectives are awarded on an "all or nothing" basis. Failure to meet the personal objectives thereby has a negative impact on the ultimate bonus payout. In addition to a review of the prior year's objectives, the CEO and each executive also confer to propose new individual performance bonus targets for the current year, which are combined with the projected corporate targets into a discretionary incentive bonus proposal. The personal targets that are established are designed to ensure the addition of incremental value to the Company if they are achieved and are of sufficient challenge that the executive must dedicate focused effort to achieve them. These personal performance targets in 2010 included goals related to additional corporate and/or business unit financial measures, operational measures and activities, investor relations activities, transactional activities, and marketing initiatives depending on the executive involved. The corporate component to the bonus goals was set based on the Company's then current strategic and financial plans. The determination of these goals is made annually to meet the changing nature of the Company's business. Upon completion of the prior year's results and prior to implementation of the current year's proposed Key Executive Cash Bonus Plan, the results for each participating executive employee are submitted to, and reviewed by, the Compensation Committee, which considers the CEO's recommendations and determines the final bonus earned by each executive based on Company and individual performance and establishes the Company and individual metrics applicable to the next year's Key Executive Cash Bonus Plan. Thereafter, the Committee's recommendations are presented to the Board for approval in order to issue the payment of the bonus, if any, and implement the new plans for the current year. If, during the year, there are changes to the Key Executive Cash Bonus Plan that are proposed, such changes are presented to the Compensation Committee to render a decision as to their implementation. The Compensation Committee may exercise positive or negative discretion in relation to their recommendation to the Board regarding an individual's award under the Key Executive Bonus Plan based upon its review.

Finally, an executive's role, responsibilities, individual performance and contribution to the Company are factors in the size of any discretionary equity grant that may be recommended by the Compensation Committee to the Board of Directors for approval as further long term incentive to the individual.

Based upon the foregoing, the compensation which an executive may realize in the course of a year can be impacted by the positive or negative performance of such individual as well as Company performance. We intend for an individual's compensation under the Key Executive Cash Bonus Plan to be proportionate to the Company's and his or her performance against established, measurable goals. Similarly, equity awards that are performance based, such as those established in 2010, are also proportionate to the measurable goals established for the Company and the executive. However, this relationship is more subjective when applied to salary adjustments. In this case, when implemented, an executive's performance is evaluated by taking into consideration the executive's contribution to the Company, the significance of the individual's achievements in relation to the overall corporate goals and mission, and the executive's effectiveness in his or her role within the Company and then weighed against the performance of other executives. Thus, there is no formula per se which is applied in determining relative salary adjustments; however, industry norms and reference to comparative company data are considered to the extent appropriate.

Elements of Compensation Section

Elements of Executive Compensation

The Compensation Committee believes that the annual cash compensation paid to executives should be commensurate with both the executive's and the Company's performance. For this reason, the Company's executive cash compensation consists of base compensation (salary) and variable incentive compensation (annual bonus and equity awards).

A discussion of the individual components of the Company's executive compensation package follows.

Base Salary

The Company provides executives and other employees with base salary to compensate them for services rendered during the fiscal year. Base salaries for executive officers are established considering a number of factors, including the executive's individual performance, unique qualifications, role and responsibilities, measurable contribution to the Company's profitability and success, and the base salary levels of similar positions with comparable companies in the industry. The Compensation Committee supports the Company's compensation philosophy of moderation for elements such as base salary and perquisites

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and other executive benefits. As noted above, under “Impact of Performance on Compensation,” base salary decisions are made as part of the Company's formal annual review process and are influenced by the performance of the Company and the individual.

The CEO's recommendations for salary adjustments (other than his own) are reviewed and modified as deemed appropriate by the Compensation Committee and then presented to the Board for approval.

In 2009, no base salary rate increases were implemented. Each named executive officer realized reduced compensation in 2009 as compared to 2008 due to mandatory time-off without pay as a result of the challenging economic conditions during that time. In 2010, base salary rate increases for each executive officer for 2010 were implemented, which increases for named executive officers ranged from 3% to 5%. In 2011, similar base salary rate increases for each executive officer for 2011 were implemented ranging from 3% to 5%.

Short-Term Bonus Plan

An executive's annual performance award under the Key Executive Cash Bonus Plan generally depends on the financial performance of the Company relative to profit, revenue or other financial targets and the executive's individual performance. The incentive opportunity is generally set at a higher percentage for more senior officers, with the result that such officers have a higher percentage of their potential total cash compensation at risk.

When established by the Compensation Committee, most executive employees, including all of our named executive officers (other than Mr. Brooks), participate in the Company's Key Executive Cash Bonus Plan, which is designed to generate additional incentive for maximizing the employee's performance in realizing the corporate strategic goals and mission. As noted above, under “Impact of Performance on Compensation,” this plan is individualized to each participating executive employee and generally is based upon the financial performance of the Company relative to profit and revenue targets and the executive's individual performance. The plan is not currently administered to comply with rules set forth under IRC Section 162(m) regarding performance-based compensation, although the Committee is aware of this provision and the potential benefits of compliance.

When implemented, an executive may earn a short-term incentive award due to success as it relates to the executive's individual goals, as long as the Company's performance exceeds the threshold of the corporate performance goal. The Committee has the ability to use its discretion in determining the size of any bonus award and did not do so in 2010. If, during the year, there are changes to the plan that may be proposed, such proposed changes are presented to the Compensation Committee and then the Board or the Compensation Committee, as appropriate, which then renders a decision as to implementation. Upon completion of the year, the individual's and the Company's results with respect to the performance targets are then assessed and presented to the Compensation Committee along with the proposed plans for the current year. The Compensation Committee reviews the submitted payouts and suggests changes to the extent it deems such action necessary. Key Executive Cash Bonus Plan awards are paid out following completion of the annual audit by the Company's independent registered public accountants. This generally occurs in the first quarter of each year, and an executive must remain on the payroll at the payment date to receive payment.

However, in December 2010, the Committee approved an early payout of initial bonus awards under the Key Executive Cash Bonus Plan for 2010 to all eligible participants, including the Named Executive Officers. These initial bonus awards were based on achievement of annual performance metrics under the plan as of the close of the Company's third quarter. The Committee determined to take this action in order to provide its executive officers with an early reward for the Company's exceptional performance during the first three quarters of fiscal 2010. The payments were subject to a clawback provision that required participants to reimburse the Company for any amount that was paid to the participant in excess of the amount that was ultimately determined to be earned under the Company's audited financial results for the full fiscal year. In the event that the Committee determined that a participant was entitled to additional incentive compensation under the plan based on the Company's full year financial results, an additional payment equal to such amount would be made to the participant in March 2011, following the annual audit by the Company's independent registered public accountants. Due to the Company's performance for the full fiscal year, the Company's executive officers were entitled to such additional payments under the Key Executive Cash Bonus Plan in March 2011.

While the Key Executive Bonus Plan was not established in 2009 due to the challenging economic climate, the Compensation Committee reinstated the Key Executive Cash Bonus Plan in 2010 with some modifications. The 2010

plan was established such that each named executive officer's potential cash award was subject to the achievement of 2010 corporate financial objectives relating to Company revenue and non-GAAP earnings per share ("EPS"). The targets established for 2010 were of comparable difficulty for prior years. The cash bonus potential was divided into two portions, 40% which has additional performance requirements ("Additional Performance Component") and 60% which was to be paid out based on achievement of meeting 80% of the 2010 corporate revenue and EPS goals, without further performance requirements. For the Additional Performance Component, the cash bonus payout was contingent on the further meeting of the 2010 corporate revenue and EPS

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goals from the 80% threshold to the 100% level of each goal as well as personal performance goals. In the event the Company exceeded the 2010 corporate revenue and/or EPS goals, additional upside cash bonus payout was proposed to be made under the Additional Performance Component to the executive. The personal performance goals in 2010 included targets related to additional corporate and/or business unit financial measures, operational measures and activities, investor relations activities, transactional activities, and marketing initiatives depending on the executive involved.

In each year the Company has offered the Key Executive Cash Bonus Plan, the corporate targets annually established have been set at levels in excess of the overall industry projections in order that the Company drive to outperform the industry. Between 2006 and 2008, the Company achieved 100%, 12.5%, and 9.5% of the corporate performance goals. Due to the economic conditions, no plan was established for 2009, but with the reinstatement of the plan in 2010, the Company achieved the following performance results (dollars in millions, except per share data):

Performance Measure	Threshold	Target	Actual Performance	
			Achieved	Achieved Percentage
Corporate Revenue	\$121.0	\$151.0	\$195.3	174 %
Non-GAAP Earnings Per Share (1)	\$0.23	\$0.29	\$1.10	776 %

(1) Non-GAAP financial measures exclude the impact of under-utilized manufacturing facilities costs, litigation fees, acquisition related expenses, share based compensation, and restructuring costs.

The 2011 plan has been established such that each named executive officer's potential cash award is subject to the achievement of 2011 corporate financial objectives relating to Company revenue and non-GAAP EPS. The targets established for 2011 are of comparable difficulty as compared to that cited above for prior years. Should the Company not reach 80% of either the 2011 corporate revenue or EPS goal, then no payout under the plan will be issued to executives. In the event the threshold levels are attained then the cash bonus potential of the plan is divided into a maximum of four portions: two variable components related to Company revenue and to EPS ("Variable Components") and two fixed components related to personal performance goals and Company business unit performance goals ("Fixed Components"). Only executives associated with a particular Company business unit have a portion of their cash bonus potential allocated to this aspect of the Fixed Components. Cash bonuses arising from the Fixed Components will be awarded on an "each or nothing" basis. At revenue levels or EPS at or above the 80% thresholds, each business unit performance goal, if applicable, and personal performance goal can be earned in full. If neither the revenue nor the EPS exceed the 80% thresholds, then payouts from business unit goals and personal goals will automatically be zero. Cash bonuses arising from the Variable Components will be awarded starting at the 80% threshold level and increase linearly up to the plan target amount. If the plan target is exceeded in either or both categories then the cash payout will increase for the applicable portion of the Variable Component at 1/2 of the rate from that used between 80% and 100%. The personal performance goals in 2011 include targets related to additional corporate financial measures, operational measures and activities, investor relations activities, transactional activities, and marketing initiatives depending on the executive involved. The business unit performance goals in 2011 include targets related to additional business unit financial measures and operational measures and activities depending on the executive involved. As Senior Vice President of Worldwide Sales, Mr. Brooks does not participate in the cash bonus aspect of the Key Executive Cash Bonus Plan but instead has approximately 25% of his total compensation tied to sales commissions at quota.

Equity Compensation Plan

The Compensation Committee currently administers the Company's 2009 Stock Plan, which was approved by stockholder vote on May 19, 2009 and was effective as of November 1, 2009. Pursuant to the 2009 Stock Plan, employees and members of management, including the Company's named executive officers, may receive annual grants of incentive stock options, non-qualified stock options and/or RSUs (collectively, "Grants") at or about the time of their performance reviews each year from a pool of shares previously approved by Rudolph stockholders. The Company's long-term incentive compensation program seeks to align the executives' interests with the Company's stockholders by rewarding successes in stockholder returns. Additionally, the Committee desires to foster an

ownership mentality among executives by providing stock-based incentives as a portion of compensation. In determining which type of stock vehicles to include in the program, the Committee considers the following attributes:

- Increases in total stockholder return;
- Stock price appreciation; and/or
- Continued loyalty to, and employment with, the Company.

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Over the past several years, the Committee has periodically awarded executives with grants of stock options and/or time-based or performance-based RSUs.

The purpose of the Grant program is to provide incentive to executives and other key employees of the Company to work to maximize long-term return to the Company's stockholders. The number of Grants awarded to each executive officer is made on a discretionary rather than formula basis by the Compensation Committee. Similarly, the allocation of shares from the Grant pool to the CEO is determined by the Compensation Committee. Regarding the Grant process, the Compensation Committee does not delegate any related function, and the named executive officers are not treated differently from other executive officers.

In awarding Grants to the executive officers, the CEO (except in connection with his own Grants) and the Compensation Committee consider a number of subjective factors, including the executive's position and responsibilities at the Company, such executive's individual performance, the number of Grants held (if any) and other factors that they may deem relevant.

In 2010, the Compensation Committee awarded executives with a grants of time-based and performance-based RSUs with the number of RSUs allocated to each named executive determined in a similar manner to the RSU awards discussed above. Each named executive officer's equity award was subject to the achievement of the 2010 corporate financial objectives relating to Company revenue and non-GAAP EPS. The corporate targets were established at levels in excess of the overall industry projections in order that the Company strives to outperform the industry. In 2009, the first year the Company employed performance based equity awards, the target was fully met and 100% of the RSU award was granted. The 2010 equity award was divided into two portions, 20% of which had the Additional Performance Component and 80% of which was paid out based on achievement of meeting 80% of the 2010 corporate revenue and EPS goals, without further performance requirements. The goals for corporate revenue and non-GAAP EPS are the same as those used for 2010 in the Key Executive Bonus Plan and are included in the table on the previous page. For the Additional Performance Component, the bonus payout was contingent on the further meeting of the 2010 corporate revenue and EPS goals from the 80% threshold to the 100% level of each goal as well as personal performance goals. In the event the Company exceeded the 2010 corporate revenue and/or EPS goals, additional upside in the number of RSUs awarded under the Additional Performance Component was proposed to be made to the executive up to a cumulative maximum of 120% of the award target level. The personal performance goals in 2010 include targets related to additional corporate and/or business unit financial measures, operational measures and activities, investor relations activities, transactional activities, and marketing initiatives depending on the executive involved. As a result of the Company achieving 174% of the corporate revenue performance goal and 776% of the corporate EPS performance goal, each named executive officer received the RSU grant in an amount equal to a range of 112% to 120% of their respective award target levels. All RSUs earned under the 2010 program time-vest equally in 20% increments beginning in March 2011.

In 2011, the Compensation Committee awarded executives with a grant of RSUs with the number of RSUs allocated to each named executive determined in a similar manner to the RSU awards discussed above. Twenty percent (20%) of each named executive officer's equity award is subject to the achievement of the 2011 corporate financial objectives relating to Company revenue and EPS. The corporate targets are established at levels in excess of the overall industry projections in order that the Company drive to outperform the industry. For this component of the RSU grant, the bonus payout is contingent on the meeting of the 2011 corporate revenue or EPS goals starting at the 80% threshold and increasing linearly to the 100% level of the goal with the greatest achievement. Should the Company exceed the 2011 corporate revenue and/or EPS goals, additional upside in the number of RSUs awarded under this component will be made to the executive up to a up to a cumulative maximum of 120% of the award target level. The remaining 80% of the RSU grant will be subject solely to service-based vesting conditions. All RSUs earned will time-vest equally in 20% increments beginning in March 2012.

Personal Benefits and Perquisites

All employees of the Company, including its executives, receive a benefit package ("Benefit Package") which includes the following components: health and dental insurance, elective vision care program, life insurance and accidental death and dismemberment coverage, 401(k) savings plan, short and long term disability insurance with supplemental income continuation, health care and dependent care flexible spending account programs, employee assistance

program (EAP), tuition reimbursement plan, employee stock purchase plan, employee referral bonus program, and length of service awards. We believe that these benefits are consistent with industry practice and are necessary in recruiting and retaining qualified employees. In addition to the Benefit Package, executive employees receive the following perquisites: a car allowance of \$500 per month, Company paid tax preparation services and Company paid membership in one airline executive club. The foregoing perquisites were determined based on a review of comparable company offerings performed by the Company and its compensation consultant and are evaluated annually as part of the Company's compensation review. It is believed that these perquisites are reasonable and consistent with the Company's overall compensation program to better enable the Company to attract and retain superior employees for key positions.

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Employee Stock Purchase Plan

The Company has maintained an Employee Stock Purchase Plan since 1999. The Company's 2009 Employee Stock Purchase Plan was approved by stockholder vote on May 19, 2009 and was effective as of November 1, 2009. The Compensation Committee currently administers the Company's 2009 Employee Stock Purchase Plan. Under the terms of our current and prior Employee Stock Purchase Plans, eligible employees may elect to have up to 15% of eligible compensation deducted from their base salary and applied to the purchase of shares of Company common stock. The price the employee must pay for each share of stock is 95% of the fair market value of the Company common stock at the end of the applicable six month purchase period. The Employee Stock Purchase Plans qualify as a non-compensatory plan under section 423 of the Internal Revenue Code.

Other Material Elements

The Company does not have any deferred compensation plans and there are no other material elements related to the Company's compensation of its executives that are not otherwise specified herein.

Employment and Change-in-Control Agreements

Overview. While the Company utilizes employment agreements on a limited basis, we currently maintain employment agreements or arrangements with each of our named executive officers. In 2000, the Company entered into management agreements with Messrs. McLaughlin and Roth, each effective as of July 24, 2000. These individuals previously had employment agreements with the Company at the time when it was a private entity and at the time of the Company's initial public offering, each executive's respective agreement was redrafted to reflect terms that we believe are appropriate for such officer's service in such respective capacities with a publicly held corporation (e.g. rights in equity holdings).

Mr. McLaughlin's management agreement provides for an initial term of two years with automatic renewals for additional two-year terms and Mr. Roth's agreement provides for a term of one year with automatic renewals for additional one-year terms, unless the Company or the applicable executive delivers a notice of non-renewal to the other party. Mr. McLaughlin's agreement prohibits him from competing with the Company in any way or soliciting its employees during the term of his employment and for two years after termination of his employment. Mr. Roth's agreement prohibits him from competing with the Company in any way or soliciting its employees during his terms of employment and for one year after termination of his employment. Upon the merger with August Technology Corporation, the Company assumed certain executive employment agreements into which August Technology had entered, including the employment agreements of Messrs. Plisinski and Brooks. Pursuant to these agreements, each executive has a set annual base salary that may be adjusted upward or downward by the CEO or Board of Directors. Pursuant to these arrangements, each of the foregoing named executive officers may be entitled to payments following a change-in-control event. The Committee believes that providing severance in a change-in-control situation is beneficial to stockholders so that executives may remain objectively neutral when evaluating a transaction that may be beneficial to stockholders yet could negatively impact the continued employment of the executive. As a result, in August 2009, the Compensation Committee further authorized the Company to enter into a Change-in-Control Agreement with Mr. Little and authorized amendments to the management agreements of with Messrs. McLaughlin and Roth to include comparable change-in-control terms.

See "Potential Payments Upon Termination of Employment or Change-in-Control" below for a description of these arrangements and quantification of payments that the Named Executive Officers would have been entitled to receive upon applicable hypothetical termination scenarios as of December 31, 2010.

Retention Incentive. The 2009 amendment to the management agreement of Mr. McLaughlin included a retention incentive which provides that should Mr. McLaughlin remain in the employ of the Company through June 30, 2012, then, upon retiring, he would be entitled to receive:

- His final paycheck, including payout of all earned but unused vacation hours;
- Accelerated vesting of any equity awards that have not previously vested, which would remain exercisable within the shorter of three years from the termination date or the remaining terms of the exercise life of such equity award; and
- The establishment of a Health Savings Account ("HSA") in the amount of \$160,000 for the benefit of Mr. McLaughlin and his spouse whereby, after his retirement, Mr. McLaughlin can pay for his and his spouse's

Qualified Medical Expenses as reflected in IRS Publication 502. Mr. McLaughlin is provided the option to elect to continue participation in the Company's medical benefit plans for any duration, interrupted or not, after his retirement, which may be funded through the HSA.

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This retention incentive was provided to Mr. McLaughlin to help assure that his services are retained at least through the specified target date.

Other Elements of Post-Termination Compensation

The Company does not have a practice of providing retirement benefits, including any supplemental executive retirement plans (SERPs), to its executives. The Company retains the discretion to utilize the offer of severance and/or change-in-control protection as an incentive in its hiring and retention of executives.

Non-Solicitation and Non-Competition Policy. The Company maintains a policy of entering into an agreement with each of its new employees, including executives which contains both non-solicitation and non-competition provisions. The non-solicitation provisions apply for one year after termination of the individual's employment while the non-competition provisions are in effect during the individual's employment and for one year thereafter. Each of the Company's executives has entered into these covenants on the stated terms with the Company, except Mr.

McLaughlin, whose non-solicitation and non-competition provisions are in place during, and extend for two years after the end of, his employment with the Company. In each case, these covenants have been implemented to protect the confidential information, goodwill and other assets of the Company that are transferred to the individual during employment and to preclude possible unfair competition against the Company through the use of such information. For those individuals with employment agreements, should a breach of the non-solicitation or non-competition terms of their agreements occur, this could give rise to the Company declaring a breach under the agreement and terminating all severance payments thereunder.

General Termination Benefits. Upon termination of an executive's employment with the Company, the individual is entitled to receive his or her base salary earned through the termination date, prorated on a daily basis, along with a payout for all accrued but unused vacation time earned through such date. Thereafter, further cash compensation to the executives is discontinued, except to the extent that severance or change-in-control payments must be made per the discussions above. This includes the removal of any obligation by the Company to pay any unpaid bonuses, except in the cases of Messrs. McLaughlin and Roth per their management agreements. In addition to the foregoing, upon termination, all perquisites and benefits cease. As discussed above, certain executives with the Company who have entered into employment agreements are entitled to elect to continue group health or other group benefits as allowed by COBRA. The Company retains the right to offer severance and/or payment of COBRA benefits to any individual who is terminated from the Company at its discretion.

Equity Awards Upon Termination. Except as described under "Potential Payments Upon Termination of Employment or Change-in-Control" below, in the event an individual who has received RSU grants from the Company ceases in their employment or engagement to provide services to the Company, under the Company's Restricted Stock Purchase Agreement and in accordance with the Company's 1999 and 2009 Stock Plans, any RSU grants which are not vested as of the individual's termination date are forfeited immediately, without any further action by the Company.

Similarly, in the event an individual who has received stock option grants from the Company ceases in their employment or engagement to provide services to the Company, under the Company's Employee Stock Option Agreement and in accordance with the Company's 1999 and 2009 Stock Plans, any vested stock options which are not exercised within three months of the individual's termination date are forfeited, without any further action by the Company. As Administrator of the Company's 1999 and 2009 Stock Plans, the Compensation Committee retains the right to waive or amend such forfeiture of any unvested RSU and/or stock option grants at its discretion.

Stock Ownership/Retention Guidelines

The Company has established guidelines related to stock ownership and retention for its executives and its outside directors. The guidelines require that each executive, including each of the named executive officers, who directly reports to the CEO owns at least 2,500 shares of Company common stock within one year of the assumption of an executive position and thereafter maintains such ownership status during the course of employment with the Company. Executives of the Company who are at the Vice President level but do not directly report to the CEO are required to own at least 1,250 shares of Company common stock within one year following the assumption of such position with the Company and thereafter maintain such ownership status during the course of employment. With regard to non-employee Directors of the Company, each Director is required to own at least 2,500 shares of Company common stock within one year following the date of election or appointment to the Board and thereafter maintain such

ownership status during the terms of service as a Director of the Company. The Company has no other stock retention policies applicable to its employees, including the named executive officers and other executives, or directors. The Company adopted these policies to further align the interest of the executives and non-employee directors with the interests of stockholders, have a stake in the long-term financial future of the Company and to further promote the Company's commitment to sound corporate governance while allowing them to prudently manage their personal financial affairs.

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In assessing compliance with the foregoing guidelines, the Company takes into consideration only the ownership of common stock in the Company. To that end, unearned RSUs and vested or unvested stock options do not qualify as shares for purposes of compliance with the Company's stock ownership and retention guidelines.

The Company's stock ownership and retention guidelines are reviewed annually by the Nominating and Governance Committee of the Company. At their last review on July 28, 2010, the Nominating and Governance Committee reviewed the compliance of the Company's executives and directors with the terms of the policies. It was determined that all executives and directors who were with the Company and acting in their executive/director capacities for periods in excess of one year were in compliance with the ownership requirements. In the event that an individual were to not own below the requisite number of shares, the Company would inform the individual of the discrepancy and thereafter, such individual would be required to acquire sufficient shares to reach the threshold amount. Should such individual continue to not own the minimum number of required shares, additional action, including possible removal from the executive role or a determination to not nominate the director for election would be considered by the Board. At its July 2010 meeting, the Nominating and Governance Committee determined that the ownership and retention requirements continue to be fully appropriate and no changes were required at that time.

The Nominating and Governance Committee has scheduled its review of the Company's stock ownership and retention guidelines for its July 2011 meeting and at this annual review will evaluate the appropriateness of the foregoing stock ownership levels for 2012 based in part on the trailing three-year weighted average of the Company's stock price at the time of the evaluation, as well as other considerations such as market conditions and comparable practices within the industry.

The Company has no other policies regarding stock ownership or retention and does not have a policy which addresses hedging of Company stock ownership by executives other than the Company's policy relating to insider trading.

Adjustments or Recovery of Prior Compensation

The Company does not presently have any policies or practices that provide for the recovery or adjustment of amounts previously awarded or paid to a named executive officer in the event that financial results or other performance measures on which an award or payment were based were to be restated or adjusted. However, if the Company is required to restate its financial results due to material noncompliance with any financial reporting requirements as a result of misconduct, the Sarbanes-Oxley Act of 2002 requires the CEO and Chief Financial Officer to disgorge (i) any bonus or other incentive-based or equity-based compensation received from the Company during the 12-month period following the first public issuance of the financial document embodying such financial reporting requirement; and (ii) any profits realized from the sale of Company stock during that 12-month period. In addition, Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act requires the SEC to direct the national securities exchanges to prohibit the listing of any security of an issuer that does not develop and implement a clawback policy. The SEC has not yet finalized its rules related to these clawback policies. Once the final rules are in place, the Company will adopt a policy that complies with SEC regulations.

Impact of Regulatory Requirements

The Company's equity grant policies have been impacted by the implementation of SFAS No. 123R, which was adopted on January 1, 2006 (now FASB ASC Topic 718). The Company has been generally required to value equity granted after the adoption of this accounting pronouncement under the fair value method and expense those amounts in the income statement over the award's vesting period. Because of the financial impact of this accounting pronouncement, the current intent of the Company is to limit the number of shares granted. The Committee believes that this strategy is best aligned with the Company's stakeholder philosophy because it is intended to limit future earnings dilution resulting from the exercise of options while at the same time retains an equity component to compensation, which the Company believes is important to employee commitment.

IRS Limits on Deductibility of Compensation

An income tax deduction under Section 162(m) of the Internal Revenue Code will generally be available for annual compensation in excess of \$1 million paid to the executive officers only if that compensation is "performance-based" and complies with certain other tax law requirements. Although the Compensation Committee considers deductibility issues when approving executive compensation elements, the Company believes that the other compensation

objectives, such as attracting, retaining and providing incentives to qualified managers, are important and may supersede the goal of maintaining deductibility. Consequently, the Compensation Committee may make compensation decisions without regard to deductibility when it believes it is in the best interests of the Company and its stockholders to do so.

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Conclusion

In reviewing its compensation programs, the Company has concluded that each element of compensation as well as the total compensation delivered to its named executive officers and its other executive officers are reasonable, appropriate and in the best interests of the Company and its stockholders. The Company believes that this is primarily attributable to the success of the program in meeting the Company's goals of establishing a compensation package that attracts and retains a strong motivated leadership team, aligns the financial incentives of the executives with the interests of the stockholders, and rewards the achievement of specific annual, long-term and strategic goals by the Company. At the same time, the compensation package remains consistent with those offered by competitive companies within the industry. The Committee and the Board believe that the compensation programs established by the Company have enabled it to recruit and secure a talented and motivated leadership team by which the Company drives toward the ultimate objective of improving stockholder value.

COMPENSATION COMMITTEE REPORT ON EXECUTIVE COMPENSATION

We, the Compensation Committee of the Board of Directors, have reviewed and discussed the Compensation Discussion and Analysis (“CD&A”) within the Executive Compensation section of this Proxy Statement with the management of the Company. Based on such review and discussion, we are of the opinion that the executive compensation policies and plans provide appropriate compensation to properly align Rudolph Technologies, Inc.’s performance and the interests of its stockholders through the use of competitive and equitable executive compensation in a balanced and reasonable manner, for both the short and long-term. Accordingly, we have recommended to the Board of Directors that the CD&A be included as part of this proxy filing.

THE COMPENSATION COMMITTEE

Daniel H. Berry (Chairman)

Leo Berlinghieri

Aubrey C. Tobey

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Summary Compensation Table

The table below sets forth information for the years ended December 31, 2010, 2009 and 2008 concerning the compensation of the Chief Executive Officer, the Chief Financial Officer, the other most highly compensated executive officers and the most highly compensated non-executive officer of the Company who were serving as such at December 31, 2010 (together, the "Named Executive Officers"):

Name and Principal Position	Year	Salary (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation (\$)(2)	All Other Compensation (\$)(3)	Total (\$)
Paul F. McLaughlin	2010	\$580,985	\$677,000	—	\$704,626	\$24,018	\$1,986,629
Chairman and Chief Executive Officer	2009	\$555,864	\$629,600	\$770,010	—	\$20,809	\$1,976,283
	2008	\$565,456	\$800,000	—	\$125,556	\$22,064	\$1,513,076
Steven R. Roth	2010	\$275,334	\$101,550	—	\$196,330	\$19,464	\$592,678
Senior Vice President, Finance and Administration and Chief Financial Officer	2009	\$268,065	\$137,725	\$250,701	—	\$15,016	\$671,507
	2008	\$272,370	\$175,000	—	\$47,984	\$18,014	\$513,368
Nathan H. Little	2010	\$259,384	\$142,170	—	\$162,760	\$18,595	\$582,909
Executive Vice President and General Manager, Inspection Business Unit	2009	\$232,786	\$157,400	\$299,946	—	\$15,229	\$705,361
	2008	\$259,719	\$200,000	—	\$44,737	\$18,564	\$523,020
Michael P. Plisinski	2010	\$248,986	\$101,550	—	\$144,898	\$7,054	\$502,488
Vice President and General Manager, Data Analysis & Review Business Unit	2009	\$242,413	\$118,050	—	—	\$5,252	\$365,715
	2008	\$247,188	\$150,000	—	\$21,544	\$6,832	\$425,564
D. Mayson Brooks (4)	2010	\$378,274	\$33,850	—	—	\$4,298	\$416,422
Senior Vice President, Worldwide Sales and Field Operations	2009	\$328,727	\$78,700	—	—	\$4,614	\$412,041
	2008	\$338,234	\$100,000	—	—	\$5,581	\$443,815

Amounts reflected represent the grant date fair value for each share-based compensation award granted to the executive officer during the covered year, calculated in accordance with FASB ASC Topic 718. The assumptions used in determining the grant date fair values of awards are set forth in Note 12 to our consolidated financial statements, which are included in our Annual Report on Form 10-K filed with the SEC on February 28, 2011. For 2010, the amount reported represents the grant date fair value attributable to the 2010 award of performance-based RSUs, assuming that the performance conditions were satisfied based

(1) on the probable outcome of such conditions at the time of grant. Had each Named Executive Officer earned an award based on achievement of the maximum level of performance conditions, the amounts would have been as follows: Mr. McLaughlin, \$812,400; Mr. Roth, \$121,860; Mr. Little, \$170,604; Mr. Plisinski, \$121,860; and Mr. Brooks, \$40,620. Based on the Company and individual actual performance during fiscal 2010, the grant date fair value amounts for awards actually earned in 2010 were as follows: Mr. McLaughlin, \$812,400; Mr. Roth, \$121,860; Mr. Little, \$159,237; Mr. Plisinski, \$116,254; and Mr. Brooks, \$40,620.

(2) Represents performance bonus awards under the key executive cash bonus plan. With respect to the 2010 amounts, the performance bonus awards were earned in 2010 and a portion was paid out in 2010 with the remaining portion paid out in 2011. In 2009, due to the global economic crisis, the key executive cash bonus plan was temporarily suspended. With respect to the 2008 amounts, the performance bonus awards were earned in 2008, but paid in 2009.

(3) The table below details the components of this column.

Name	Year	Matching Contribution	Insurance (a)	Perquisites	Total "All Other Compensation"
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		to 401(k)			
Paul F. McLaughlin	2010	\$10,259	\$864	\$12,895	(b) \$24,018
Steven R. Roth	2010	\$8,250	\$864	\$10,350	(c) \$19,464
Nathan H. Little	2010	\$7,258	\$864	\$10,473	(d) \$18,595
Michael P. Plisinski	2010	\$6,190	\$864	—*	\$7,054
D. Mayson Brooks	2010	\$3,434	\$864	—*	\$4,298

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- * Less than \$10,000 of perquisites in the aggregate, and therefore, zero perquisites disclosed.
- Insurance is defined as the premium associated with coverage under the group term life insurance and accidental death and dismemberment insurance plans provided by the Company to its employees.
- (a) Coverage is equal to the lesser of two times salary or \$450,000.
- (b) Perquisites include automobile allowance (\$6,000), estimated tax return preparation fees (\$6,500), and reimbursement of executive airline club membership for the year ended December 31, 2010.
- (c) Perquisites include automobile allowance (\$6,000), tax return preparation fees (\$4,000) and reimbursement of executive airline club membership for the year ended December 31, 2010.
- (d) Perquisites include automobile allowance (\$6,000), tax return preparation fees (\$4,000), reimbursement of executive airline club membership and the amount paid by the Company for opting out of health insurance coverage for the year ended December 31, 2010.
- (4) Mr. Brooks' salary consists of both a base salary and a sales commission at quota, which is targeted to approximate 25% of total cash compensation.

Grants of Plan-Based Awards in 2010

The following table sets forth information with respect to non-equity and equity incentive plan awards granted in 2010 to the Named Executive Officers.

	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards (\$) (1)			Estimated Future Payouts Under Equity Incentive Plan Awards (#) (2)			Grant Date Fair Value of Stock and Option Awards (\$)
		Threshold	Target	Maximum	Threshold	Target (e)	Maximum (f)	
Paul F. McLaughlin	2/1/2010	—	583,657	n/a	—	100,000	120,000	677,000
Steven R. Roth	2/1/2010	—	276,107	n/a	—	15,000	18,000	101,550
Nathan H. Little	2/1/2010	—	262,500	n/a	—	21,000	25,200	142,170
Michael P. Plisinski	2/1/2010	—	249,685	n/a	—	15,000	18,000	101,550
D. Mayson Brooks	2/1/2010	n/a	n/a	n/a	—	5,000	6,000	33,850

- (1) The amounts reported in these columns represent the annual cash incentive opportunities under the Company's Key Executive Bonus Plan for each of our Named Executive Officers for the 2010 performance period. The metrics against which performance was measured under this plan, as well as other details regarding the plan, are discussed above in the Compensation Discussion and Analysis under Short-Term Bonus Plan. The amounts actually earned by our Named Executive Officers under the plan are reflected in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table above.
- (2) The amounts reported in these columns represent the award opportunities under the Company's 2010 performance-based RSU program. The metrics against which performance was measured under this program, as well as other details regarding the plan, are discussed above in the Compensation Discussion and Analysis under the heading "Equity Compensation Plan". This award was granted under the Company's 2009 Stock Plan. 20% of the RSUs earned under this plan vested on March 1, 2011 and the remaining RSUs will vest 20% on each of the subsequent four anniversaries of the respective grant dates with the exception of Mr. McLaughlin's award, the vesting of which may accelerate pursuant to the terms of Mr. McLaughlin's management agreement with the Company.

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Outstanding Equity Awards at 2010 Year-End

The following table sets forth information with respect to outstanding equity awards held by the Named Executive Officers at December 31, 2010.

Name	Grant Date(1)	Option Awards (2)				Stock Awards	
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)(3)	Market Value of Units of Stock That Have Not Vested (\$)(4)
Paul F. McLaughlin(5)	1/26/2001	125,000	—	\$40.13	1/25/2011		
	10/19/2001	30,000	—	\$23.40	10/18/2011		
	10/18/2002	35,000	—	\$14.62	10/17/2012		
	1/29/2003	150,000	—	\$16.41	1/28/2013		
	1/29/2004	75,000	—	\$26.20	1/28/2014		
	2/16/2006					7,000	\$57,610
	2/1/2007					32,000	\$263,360
	5/27/2008					26,280	\$216,284
	2/10/2009					128,000	\$1,053,440
	8/20/2009	34,400	137,600	\$6.80	8/19/2019		
Steven R. Roth	2/1/2010					120,000	\$987,600
	1/26/2001	50,000	—	\$40.13	1/25/2011		
	10/19/2001	15,000	—	\$23.40	10/18/2011		
	10/18/2002	10,000	—	\$14.62	10/17/2012		
	1/29/2003	45,000	—	\$16.41	1/28/2013		
	1/29/2004	25,000	—	\$26.20	1/28/2014		
	2/16/2006					1,600	\$13,168
	2/1/2007					7,000	\$57,610
	5/27/2008					5,748	\$47,306
	2/10/2009					28,000	\$230,440
Nathan H. Little	8/20/2009	11,200	44,800	\$6.80	8/19/2019		
	2/1/2010					18,000	\$148,140
	5/22/2001	25,000	—	\$50.30	5/21/2011		
	10/19/2001	15,000	—	\$23.40	10/18/2011		
	1/29/2003	75,000	—	\$16.41	1/28/2013		
	1/29/2004	35,000	—	\$26.20	1/28/2014		
	2/16/2006					2,000	\$16,460
	2/1/2007					8,000	\$65,840
	5/27/2008					6,570	\$54,071
	2/10/2009					32,000	\$263,360
Michael P. Plisinski(6)	8/20/2009	13,400	53,600	\$6.80	8/19/2019		
	2/1/2010					23,521	\$193,578
	2/6/2004	1,324	—	\$24.20	2/6/2014		
	10/22/2004	921	—	\$10.00	10/22/2014		
	12/30/2004	7,624	—	\$13.62	12/30/2014		
	3/7/2005	2,329	—	\$15.87	3/7/2015		
	4/29/2005	26,687	—	\$15.48	4/29/2015		
	7/21/2005	735	—	\$16.71	7/21/2015		

1/25/2006 11,914 — \$14.81 1/25/2016

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Name	Grant Date(1)	Option Awards (2)		Option Exercise Price (\$)	Option Expiration Date	Stock Awards	
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options (#)			Number of Shares or Units of Stock That Have Not Vested (#)(3)	Market Value of Units of Stock That Have Not Vested (\$)(4)
Micheal P. Plisinski (continued)	5/23/2006					2,000	\$16,460
	2/1/2007					7,000	\$57,610
	5/27/2008					4,927	\$40,549
	2/10/2009					24,000	\$197,520
	2/1/2010					17,172	\$141,326
D. Mayson Brooks(7)	2/6/2004	4,766	—	\$24.20	2/6/2014		
	4/30/2004	1,467	—	\$17.19	4/30/2014		
	3/7/2005	1,926	—	\$15.87	3/7/2015		
	7/21/2005	377	—	\$16.71	7/21/2015		
	1/25/2006	8,108	—	\$14.81	1/25/2016		
	5/23/2006					1,000	\$8,230
	2/1/2007					4,000	\$32,920
	5/27/2008					3,285	\$27,036
	2/10/2009					16,000	\$131,680
	2/1/2010					6,000	\$49,380

- (1) For better understanding of this table, we have included an additional column showing the grant date of stock options and restricted stock units.
- (2) Stock options became exercisable in accordance with the vesting schedule below with the exception of Mr. McLaughlin's August 20, 2009 grant (see explanation at note 5 below):
- | Grant Date | Vesting |
|-----------------------|--|
| 1/26/2001 — 1/29/2003 | 1/5 on the first anniversary of the grant date with 1/60 monthly thereafter and vesting accelerated on 4/15/05 |
| 1/29/2004 | 1/5 on the first anniversary of the grant date with 1/60 monthly thereafter and vesting accelerated on 4/15/05 |
| 2/6/2004 — 4/30/2004 | Full vesting at grant date |
| 10/22/2004 | Full vesting at 120 days |
| 12/30/2004 | 1/3 at grant date and in years 2 and 3 |
| 3/7/2005 | Full vesting at grant date |
| 4/29/2005 | 1/3 at grant date and in years 2 and 3 |
| 7/21/2005 | Full vesting at grant date |
| 1/25/2006 | 1/5 at grant date and in years 2, 3, 4 and 5 |
| 8/20/2009 | 1/5 per year on the anniversary of the grant date |
- (3) Restricted stock units vest in accordance with the schedule below with the exception of Mr. McLaughlin's May 27, 2008, February 10, 2009 and February 1, 2010 grants (see explanation at note 5 below):
- | Grant Date | Vesting |
|----------------------|---|
| 1/27/2005 — 2/1/2007 | 1/5 per year on the anniversary of the grant date |
| 5/27/2008 | 1/5 on January 31, 2009 and 1/5 per year on the anniversary of that vest date |
| 2/10/2009 | 1/5 per year on the anniversary of the grant date |
| 2/1/2010 | 1/5 on March 1, 2011 and 1/5 per year on the anniversary of the grant date |

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- (4) Based on the Company's common stock closing price of \$8.23 per share on December 31, 2010. Per Mr. McLaughlin's management agreement with the Company, signed August 20, 2009, if Mr.
- (5) McLaughlin remains employed by the Company through June 30, 2012 all unvested stock option, restricted stock units and other awards granted in accordance with the Company's share-based compensation plans will fully vest.
- (6) Mr. Plisinski's outstanding stock options were assumed in connection with the merger of the Company with August Technology on February 15, 2006.
- (7) Mr. Brooks' outstanding stock options were assumed in connection with the merger of the Company with August Technology on February 15, 2006.

Option Exercises and Stock Vested in 2010

The following table sets forth information with respect to the exercise of stock options and vesting of restricted stock by the Named Executive Officers during the year ended December 31, 2010:

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(1)
Paul F. McLaughlin	—	\$ —	73,760	\$ 547,675
Steven R. Roth	—	\$ —	16,917	\$ 125,090
Nathan H. Little	—	\$ —	20,290	\$ 149,572
Michael P. Plisinski	—	\$ —	13,143	\$ 99,797
D. Mayson Brooks	—	\$ —	8,095	\$ 61,436

(1) Value realized represents fair market value of the shares at time of vesting.

The Company does not have a defined benefit pension program nor does it offer non-qualified deferred compensation.

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Potential Payments Upon Termination of Employment or Change-in-Control

This section (including the following tables) summarizes each Named Executive Officer's estimated payments and other benefits that would be received by the NEO or his estate if his employment had terminated on December 31, 2010, under the circumstances set forth below.

Our Named Executive Officers would be generally be entitled to certain termination payments upon his death or Disability, his involuntary termination without Cause, or his voluntary termination with Good Reason. Messrs. Little, Plisinski and Brooks would only be entitled to termination payments for the executive's voluntary termination with Good Reason following a Change of Control of the Company. Although the definitions of each of these terms is specific to the Named Executive Officer's employment agreement with the Company, the terms generally have the following meanings:

"Disability" generally means that the executive, due to physical or mental impairment, is unable to perform his duties to the Company for a specified period of time and is only defined in the Agreements with Messrs. McLaughlin, Roth and Little. For Messrs. McLaughlin and Roth this period of time is either a period of 90 consecutive days or 120 days in any 365 day period. For Mr. Little, this period of time is 12 months.

"Cause" generally means that the executive is dismissed after the Company's Board concludes that the executive engaged in a crime or other serious act involving moral turpitude; materially breached an agreement between him and the Company; or otherwise materially breached his obligations to the Company.

A voluntary termination for "Good Reason" generally means that the executive's duties, responsibilities or status with the Company or its successor are materially reduced; his primary place of work is moved to a location outside a predetermined radius; or any successor to the Company materially breaches the terms of his agreement with the Company or does not assume his employment agreement or offer him an agreement with comparable terms and benefits. For Messrs. Little, Plisinski and Brooks, a reduction in base salary would also constitute "good reason" for voluntary termination. For Messrs. McLaughlin and Roth, any requirement that the executive make a material misstatement or omission in any financial report or government filing would also constitute "good reason" for voluntary termination.

Mr. McLaughlin

Mr. McLaughlin's management agreement provides for the following:

- In the event Mr. McLaughlin's employment is terminated as a result of his death or "Disability", Mr. McLaughlin or his estate shall be entitled to:
 - » Payment of all base salary due and owing through the termination date including an amount equal to all earned but unused vacation hours through the termination date;
 - » Payment of Mr. McLaughlin's bonus as was paid for the most recent completed bonus period; and Accelerated vesting of all unvested stock options, restricted stock units or other equity awards which shall be exercisable within the shorter of: i) three years from the termination date; or ii) the remaining term of the exercise life of the respective award as of the termination date.
- In the event Mr. McLaughlin's employment is terminated without "Cause" or Mr. McLaughlin terminates his employment for "Good Reason", Mr. McLaughlin shall be entitled to:
 - » Payment of all base salary due and owing through the termination date including an amount equal to all earned but unused vacation hours through the termination date;
 - » Payment for a period of two years of Mr. McLaughlin's:
 - * Then-current base salary (paid over a period of two years); and
 - * Bonus as was paid for the most recent completed bonus period (made as a lump sum payment); Accelerated vesting of all unvested stock options, restricted stock units or other equity awards which shall be exercisable within the shorter of: i) three years from the termination date; or ii) the remaining term of the exercise life of the respective award as of the termination date.

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- If, within one year following the occurrence of a “Change of Control,” Mr. McLaughlin’s employment is terminated for any reason other than for Cause or Mr. McLaughlin terminates his employment for Good Reason, Mr. McLaughlin shall be entitled to:
 - » Payment of all base salary due and owing through the termination date including an amount equal to all earned but unused vacation hours through the termination date;
 - » Payment for a period of two years of Mr. McLaughlin’s:
 - * Then-current base salary (paid over a period of two years); and
 - * Bonus as was paid for the most recent completed bonus period (made as a lump sum payment);
 - » Accelerated vesting of all unvested stock options, restricted stock units or other equity awards;
 - » Entitlement to exercise stock options within the shorter of: i) three years from the termination date; or ii) the remaining term of the exercise life of the respective stock option as of the termination date; and
 - » Maintenance of Mr. McLaughlin’s and his dependent’s health care benefit coverage to the same extent provided for by and with the same Company/Executive payment contribution percentages under Company’s group plans at the time of termination. Such coverage shall extend for a term of one year from the Termination Date unless Executive becomes covered as an insured under another employer’s or spousal health care plan.
- To the extent that termination or change of control payments made to Mr. McLaughlin under his agreement are subject to the excise tax imposed by Section 4999 of the Internal Revenue Code, Mr. McLaughlin would either have to pay the excise tax or have his benefits reduced so that no portion of his termination payments were subject to the excise tax.
- In order to receive these termination or change of control payments, Mr. McLaughlin would be required to sign a general release of all known and unknown claim the he may have against the Company.
- As part of his Employment Agreement, Mr. McLaughlin is subject to non-competition and non-solicitation restrictions. During the term of the Agreement and for a period of two years following his resignation or termination for any reason, Mr. McLaughlin may not:
 - » Directly or indirectly own, operate, manage, control, participate in, consult with, advise, provide services for, or in any manner engage in (including by himself or in association with any person, firm, corporate or other business organization or through an entity), any business engaged in the businesses in which the Company and its subsidiaries is engaged or then proposes to engage within any geographical area in which the Company or its subsidiaries engages in business. Nothing prohibits executive from being a passive owner or not more that 5% of the outstanding stock of any class of a corporation which is publicly traded, or any other passive minority investment in any investment fund, limited partnership or similar entity whether or not publicly traded, and so long as executive has no active participation in the business of such entity; or
 - » Directly or indirectly through another entity, (i) induce or attempt to induce any employee of the Company to leave the employ of the Company, or in any way interfere with the relationship between the Company and any employee thereof, including without limitation, inducing or attempting to induce any employee, group of employees or any other person or persons to interfere with the business or operations of the Company, (ii) hire any person who was an employee of the Company at any time during executive’s employment period, or (iii) induce or attempt to induce, whether directly or indirectly, any customer, supplier, distributor, franchisee, licensee or other business relation of the Company to cease doing business with the Company, or in any way interfere with the relationship between any such customer, supplier, distributor, franchisee, licensee or business relation and the Company.

¹ For Mr. McLaughlin and Mr. Roth, a “Change of Control” would generally be considered to have occurred if: (i) any person or persons becomes the beneficial owner of 25 percent or more of our outstanding voting shares; (ii) during any two consecutive year period individuals who presently make up our Board or who become members of our Board with the approval of at least two-thirds of our existing Board (other than a new director who assumes office in

connection with an actual or threatened election contest) cease to be at least a majority of the Board; (iii) a merger or consolidation of the Company is consummated with another entity (unless the Company would represent more than 51 percent of the combined voting power of the surviving entity and had the power to elect as least a majority of the board of the surviving entity); (iv) our stockholders approve a plan of liquidation of the company or an agreement for the sale of all or substantially all of our assets; or (v) any other event occurs of a nature that would be required to be reported as a “change in control” under Schedule 14A of the Exchange Act.

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Mr. Roth

Mr. Roth's management agreement generally contains similar provisions and generally provides for the same payments upon termination as would be provided under Mr. McLaughlin's management agreement, except that, in the event of a involuntary termination without Cause or a voluntary termination for Good Reason (whether or not a Change of Control had occurred), Mr. Roth would be entitled to payment for a period of one year (instead of two years in the case of Mr. McLaughlin) of his then-current base salary and bonus as was paid for the most recent completed bonus period. Likewise, Mr. Roth would be subject to the same non-competition and non-solicitation restrictions applicable to Mr. McLaughlin, except that such restrictions would be applicable for a period of one year (instead of two years in the case of Mr. McLaughlin).

Mr. Little

Mr. Little's executive change of control agreement provides for the following:

- In the event Mr. Little's employment is terminated as a result of his death or "Disability", Mr. Little or his estate shall be entitled to:
 - » Payment of all base salary due and owing through the termination date including an amount equal to all earned but unused vacation hours through the termination date; and
 - » Accelerated vesting of all unvested stock options, restricted stock units or other equity awards which shall be exercisable within the shorter of: i) three years from the termination date; or ii) the remaining term of the exercise life of the respective award as of the termination date.
- If, within one year following the occurrence of a "Change of Control," Mr. Little's employment is terminated for any reason other than for "Good Cause" or Mr. Little terminates his employment for "Good Reason", Mr. Little shall be entitled to:
 - » Payment of all base salary due and owing through the termination date including an amount equal to all earned but unused vacation hours through the termination date;
 - » Payment of Mr. Little's then-current base salary for a period of 12 months (paid over a period of 12 months);
 - » Accelerated vesting of all unvested stock options, restricted stock units or other equity awards;
 - » Entitlement to exercise stock options within the shorter of: i) three years from the termination date; or ii) the remaining term of the exercise life of the respective stock option as of the termination date; and
 - » Maintenance of Mr. Little's and his dependent's health care benefit coverage to the same extent provided for by and with the same Company/Executive payment contribution percentages under Company's group plans at the time of termination. Such coverage shall extend for a term of one year from the termination date unless he becomes covered as an insured under another employer's or spousal health care plan.

² For Mr. Little, a "Change of Control" would generally be considered to have occurred if: (i) any person or persons becomes the beneficial owner of 50 percent or more of our outstanding voting shares; (ii) during any 12 month period a majority of the Board is replaced by directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election; or (iii) there is a change in the ownership of Company assets that occurs with a person or group over a 12 month period if the subject assets have a total gross fair market value equal to or more than 40 percent of the total gross fair market value of all of the assets of Company immediately prior to such acquisition or acquisitions (subject to certain limitations).

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- To the extent that change of control termination payments made to Mr. Little under this agreement are subject to the excise tax imposed by Section 4999 of the Internal Revenue Code, Mr. Little would either have to pay the excise tax or have his benefits reduced so that no portion of his termination payments were subject to the excise tax.
- In order to receive these change of control termination payments, Mr. Little would be required to sign a general release of all known and unknown claim the he may have against the Company.
- Upon the hiring of Mr. Little, the Company agreed to include a severance stipulation as part of his respective employment package. It was agreed that in the event of his termination without cause, he would receive severance in the amount of six months of his base salary. This stipulation was agreed to as an additional incentive negotiated by Mr. Little and the Company prior to commencing his employment.
- As part of a separate agreement with the Company, Mr. Little is subject to non-competition and non-solicitation restrictions. During the term of the agreement and for a period of one year following his resignation or termination for any reason, Mr. Little may not:
 - » Induce or influence, or attempt to induce or influence any person engaged as an employee, consultant or agent of the Company to terminate his/her relationship with the Company;
 - » Directly or indirectly, solicit, attempt to solicit, assist another to solicit customers of the Company, or in any other way, attempt to influence customers of the Company that were known to executive by virtue of his employment or with whom executive worked with while a Company employee to alter or terminate their business relationship with the Company;
 - » Directly or indirectly, whether as sole proprietor, partner, silent partner, venturer, stockholder, director, officer, consultant or employee or agent, engage or participate in any employment or activity which:
 - * involves the sale, distribution, design and/or manufacturing of instruments for use in the semiconductor manufacturing industry or is otherwise competitive with the Company’s business within the United States; or
 - * may cause him to use or disclose, either intentionally or inadvertently, the Company’s confidential information.

Mr. Plisinski and Mr. Brooks

Mr. Plisinski’s and Mr. Brooks employment agreements each provide for the following:

- In the event of any termination of Mr. Plisinski’s or Mr. Brooks’ employment, the executive shall be entitled to payment of all base salary due and owing through the termination date including an amount equal to all earned but unused vacation hours through the termination date.
- In the event Mr. Plisinski’s or Mr. Brooks’ employment is terminated by the Company without “Cause”, the executive shall be entitled to:
 - » Payment of the executive’s then-current base salary for a period of 12 months; and
 - » Payment by Company for a period of 12 months of amounts due under COBRA for continuation of Company’s group health and other group benefits, if so elected to continue by the executive.

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- If, within 18 months following the occurrence of a “Change in Control,” Mr. Plisinski’s or Mr. Brooks’ employment is terminated for any reason other than for “Good Cause” or Mr. Plisinski or Mr. Brooks terminates his employment for “Good Reason”, the executive shall be entitled to:
 - » Payment of the executive’s then-current base salary for a period of 18 months; and
 - » Payment by Company for a period of 18 months of amounts due under COBRA for continuation of Company’s group health and other group benefits, if so elected to continue by the executive.
 - » Accelerated vesting of all unvested stock options.
- As part of their Employment Agreements, Mr. Plisinski and Mr. Brooks are subject to non-solicitation restrictions. During the term of the Agreement and for a period of one year following their respective resignation or termination for any reason, neither Mr. Plisinski nor Mr. Brooks may:
 - » Directly or indirectly solicit, on executive’s own behalf, or on behalf of another, any of the Company’s or any subsidiary’s customers or potential customers with whom executive or executive’s supervisees had contact, either directly or indirectly, within the twelve months immediately preceding executive’s resignation or termination of employment, for the purpose of providing, selling, or attempting to sell any products or services competing with those provided or sold by the Company or any subsidiary, or clearly contemplated thereby due to research, development, engineering, applications, licensing, or other like projects in process, at the time of resignation or termination; or
 - » Hire or attempt to hire, or influence or solicit, or attempt to influence or solicit, either directly or indirectly, any employee of the Company or any subsidiary to leave or terminate his/her or her employment, or to work for any other person or entity.

³ For Mr. Plisinski and Mr. Brooks, a “Change of Control” would generally be considered to have occurred if: (i) a merger or consolidation of the Company or an acquisition by the Company involving the issuance of its securities as consideration for the acquired business (or any combination thereof, during any consecutive 24 month period) results in the stockholders of the Company following such transactions having less than 50 percent of combined voting power of the surviving entity; (ii) any person or persons becomes the beneficial owner of 20 percent or more of our outstanding shares; (iii) our stockholders approve a plan of liquidation of the Company; (iv) all or substantially all of our assets are sold; (v) during any 24 month consecutive year period the individuals who presently make up our Board or who become members of our Board with the approval of at least two-thirds of our existing Board cease to be at least 70 percent of the Board; or (vi) the Company enters into a letter of intent or other agreement relating to the types of events described above that ultimately results in a change in control or a tender offer, exchange offer or proxy contest is commenced that ultimately results in the type of events described in (ii) or (v) above.

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Cash Severance

Termination Circumstance	Base Salary	Management Incentive Bonus	Value of Accelerated Unvested Equity	Benefits Continuation
Involuntary without cause termination	\$1,167,314 (2X salary)	\$—	\$2,775,062	\$—
Executive resignation for good reason	\$1,167,314 (2X salary)	\$—	\$2,775,062	\$—
Death	\$—	\$—	\$2,775,062	\$—
Disability	\$—	\$—	\$2,775,062	\$—
Retirement	\$—	\$—	\$—	\$—
Within 12 Months following Sale or Change of Control:				
Termination by Company without cause	\$1,167,314 (2X salary)	\$—	\$2,775,062	\$9,123
Termination by executive with good reason	\$1,167,314 (2X salary)	\$—	\$2,775,062	\$9,123

Potential Payments Upon Termination or Change-in-Control — Mr. Roth
Cash Severance

Termination Circumstance	Base Salary	Management Incentive Bonus	Value of Accelerated Unvested Equity	Benefits Continuation
Involuntary without cause termination	\$276,107 (1X salary)	\$—	\$560,728	\$—
Executive resignation for good reason	\$276,107 (1X salary)	\$—	\$560,728	\$—
Death	\$—	\$—	\$560,728	\$—
Disability	\$—	\$—	\$560,728	\$—
Retirement	\$—	\$—	\$—	\$—
Within 12 Months following Sale or Change of Control:				
Termination by Company without cause	\$276,107 (1X salary)	\$—	\$560,728	\$13,950
Termination by executive with good reason	\$276,107 (1X salary)	\$—	\$560,728	\$13,950

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Potential Payments Upon Termination or Change-in-Control — Mr. Little

Termination Circumstance	Cash Severance			
	Base Salary	Management Incentive Bonus	Value of Accelerated Unvested Equity	Benefits Continuation
Involuntary without cause termination	\$131,250 (6 months salary)	\$—	\$—	\$—
Executive resignation for good reason	\$131,250 (6 months salary)	\$—	\$—	\$—
Death	\$—	\$—	\$669,957	\$—
Disability	\$—	\$—	\$669,957	\$—
Retirement	\$—	\$—	\$—	\$—
Within 12 Months following Sale or Change of Control:				
Termination by Company without cause	\$262,500 (1X salary)	\$—	\$669,957	\$9,892
Termination by executive with good reason	\$262,500 (1X salary)	\$—	\$669,957	\$9,892

Potential Payments Upon Termination or Change-in-Control — Mr. Brooks

Termination Circumstance	Cash Severance			
	Base Salary	Management Incentive Bonus	Value of Accelerated Unvested Equity	Benefits Continuation
By the Company with/without cause termination	\$254,964 (1X salary)	\$—	\$—	\$12,874
Death	\$—	\$—	\$—	\$—
Disability	\$254,964	\$—	\$—	\$12,874
Retirement	\$—	\$—	\$—	\$—
Within 18 months following sale or change of control:				
Termination by Company with/without cause	\$382,446 (1.5X salary)	\$—	\$—	\$12,874
Termination by executive with good reason	\$382,446 (1.5X salary)	\$—	\$—	\$12,874

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Potential Payments Upon Termination or Change-in-Control — Mr. Plisinski

Termination Circumstance	Cash Severance			
	Base Salary	Management Incentive Bonus	Value of Accelerated Unvested Equity	Benefits Continuation
By the Company with/without cause termination	\$249,685 (1X salary)	\$—	\$—	\$13,950
Death	\$—	\$—	\$—	\$—
Disability	\$249,685	\$—	\$—	\$13,950
Retirement	\$—	\$—	\$—	\$—
Within 18 months following sale or change of control:				
Termination by Company with/without cause	\$374,523 (1.5X salary)	\$—	\$—	\$13,950
Termination by executive with good reason	\$374,523 (1.5X salary)	\$—	\$—	\$13,950

Executive Officers

Set forth below is certain information regarding the executive officers of the Company and their ages as of March 31, 2011. Information relating to Paul F. McLaughlin is set forth above under the caption “PROPOSAL 1 — ELECTION OF DIRECTORS — Nominees.”

Nathan H. Little, age 59, has served as the Company’s Executive Vice President and General Manager, Inspection Business Unit since February 2006. From July 2004 to February 2006, Mr. Little served as Executive Vice President responsible for global sales, marketing and new business development. From January 2003 to July 2004, Mr. Little served as the Company’s Senior Vice President of Operations responsible for engineering and manufacturing. Mr. Little has been a Vice President since he joined the Company in May 2001. From 1986 through 2001, Mr. Little held various positions with Philips Electronics where he last served as Vice President, NPR Purchasing for Philips Electronics North America. Mr. Little received a B.S. in Mechanical Engineering from Northwestern University, an M.S. in Mechanical Engineering from the University of Minnesota and an M.B.A. from Harvard University Graduate School of Business.

Steven R. Roth, age 50, has served as the Company’s Senior Vice President, Finance and Administration and Chief Financial Officer since February 2002. From September 1996 to February 2002, Mr. Roth served as the Company’s Vice President, Finance and Administration and Chief Financial Officer. From August 1991 to August 1996, Mr. Roth served as a Director of Corporate Finance for Bell Communications Research, now called Telcordia, a research and development company serving the telecommunications industry. Mr. Roth is a C.P.A. and holds a B.S. in Accounting from Villanova University.

D. Mayson Brooks, age 52, has served as the Company’s Senior Vice President of Worldwide Sales and Field Operations since January 2011. Prior to that Mr. Brooks served as the Company’s Vice President of Global Sales since December 2006 and prior to that as the Company’s Vice President of Global Sales, Inspection from February 2006 when the Company merged with August Technology Corporation to December 2006. From July 1999 to February 2006, Mr. Brooks served in various Vice President positions in the areas of sales, marketing and field operations for August Technology. Mr. Brooks holds a B.S. in Engineering from the United States Naval Academy and an M.B.A. from the University of North Carolina.

Scott Danciak, age 41, has served as the Company’s Vice President of Engineering for the Inspection Business Unit since June 2006. From March 2005 to June 2006, Mr. Danciak served as the Company’s Director of Thin Film Development and from September 2004 to March 2005 he served as the Senior Manager for Thin Film Development. From September 2003 to September 2004, Mr. Danciak served as the Company’s Manager of Hardware Engineering. Prior to that, he served the Company in various engineering management and staff positions since 1997. Mr. Danciak

holds a B.S. in Electrical Engineering from Johns Hopkins University.

Robert DiCrosta, age 63, has served as the Company's Vice President of Global Customer Support since February 2002. From July 2000 to February 2002, Mr. DiCrosta served as the Director of Global Customer Support. Prior to that, he served in various positions in Customer Support and Finance with other high tech equipment manufacturers. Mr. DiCrosta received a B.S. in Marketing from the University of Bridgeport and an M.B.A. in Finance and International Finance from New York University.

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Robert A. Koch, age 49, has served as the Company's Vice President and General Counsel since May 2003. From April 1986 to May 2003, Mr. Koch was employed by Howmedica Osteonics Corp., the orthopaedic implant subsidiary of Stryker Corporation, where he was their in-house counsel for 12 years and last served as their Director of Legal Affairs. Mr. Koch holds a B.S. in Chemical Engineering and an M.S. in Biomedical Engineering, both from Rutgers University. Mr. Koch earned his J.D. from Rutgers School of Law — Newark in 1991 and is admitted to practice in New Jersey and New York.

Avishai Kepten, age 55, has served as the Company's Vice President and General Manager, Metrology Business Unit since October 2010. From September 2008 to March 2010, Dr. Kepten served as Vice President, Solar Cell Lines, and Vice President Business Development for Spire Corporation, a solar capital equipment, turnkey manufacturing lines and systems company. From December 2002 to April 2008, Dr. Kepten served as Director of New Product Development and Director of Technology for Novellus Systems, Inc., a semiconductor capital equipment manufacturer. Dr. Kepten holds a Ph.D. in Microelectronics from Israel Institute of Technology.

John R. Kurdock, age 66, has served as the Company's Vice President, Corporate Programs since October 2010. From July 2007 to October 2010, Mr. Kurdock served as the Company's Vice President and General Manager, Metrology Business Unit since July 2007. From November 2006 to July 2007, Mr. Kurdock served as the Company's Assistant General Manager and Vice President, Metrology Business Unit and prior to that as the Company's Vice President of Manufacturing, Metrology from February 2006 to November 2006. Mr. Kurdock joined the Company as Vice President of Manufacturing in January 2005. From June 2003 to January 2005, Mr. Kurdock was an independent consultant specializing in the semiconductor capital equipment industry. From January 1997 to June 2003, Mr. Kurdock was the Vice President of Operations for Electro Scientific Industries, a semiconductor capital equipment manufacturer. Mr. Kurdock holds a B.S. in Mechanical Engineering from Carnegie Mellon University.

Ardelle R. Johnson, age 55, has served as the Company's Vice President of Corporate Marketing since February 2006 when the Company merged with August Technology Corporation. From August 2003 to February 2006, Mr. Johnson served as Vice President of Marketing for August Technology. From June 1980 to April 2003, Mr. Johnson was employed by FSI International Inc., a semiconductor capital equipment company, serving most recently as Vice President of Sales and Marketing. He holds a B.S. in Chemistry from the University of Minnesota and an M.S. from the University of Wisconsin.

Christopher J. Morath, age 42, has served as the Company's Vice President of Operations, Metrology Business Unit, since August 2007. From November 2006 to August 2007, Mr. Morath served as the Company's Director of Manufacturing Operations, Metrology Business Unit. From January 2004 to November 2006, Mr. Morath served as the Company's Director of Marketing and prior to that served for three years as Director of Product Development in Engineering. Mr. Morath received a B.A. in Physics from Boston University, an M.S. and Ph.D. in Condensed Matter Physics from Brown University, and an M.B.A. from the Wharton School of the University of Pennsylvania.

Jeffrey T. Nelson, age 55, has served as the Company's Vice President of Manufacturing since August 2010 and prior to that as the Company's Vice President of Manufacturing, Inspection since February 2006 when the Company merged with August Technology Corporation. From August 2004 to February 2006, Mr. Nelson served as August Technology's Vice President of Manufacturing. Mr. Nelson received a B.S. in Business Administration from the University of Minnesota.

Michael P. Plisinski, age 41, has served as the Company's Vice President and General Manager, Data Analysis and Review Business Unit since February 2006 when the Company merged with August Technology Corporation. From February 2004 to February 2006, he was August Technology's Vice President of Engineering and its Director of Strategic Marketing for review and analysis products from July 2003 to February 2004. Mr. Plisinski joined August Technology as part of the acquisition of Counterpoint Solutions, a semiconductor review and analysis company, where he was both President and sole founder from June 1999 to July 2003. Mr. Plisinski has a B.S. in Computer Science from the University of Massachusetts.

Rajiv Roy, age 52, has served as the Vice President of Business Development and Director of Back-End Product Management since June 2008. From February 2006 to June 2008, Mr. Roy served as the Company's Director of Marketing. Prior to the Company's merger with August Technology in February 2006, Mr. Roy served as the Director of Strategic Marketing for August Technology from April 2003 to February 2006. Mr. Roy joined August Technology

as part of the acquisition of Semiconductor Technologies and Instruments, Inc., a supplier to the semiconductor industry, where he was President from August 2000 to March 2003. Mr. Roy has a Bachelor of Technology in Electrical Engineering from Indian Institute of Technology, Kanpur, and from the University of Texas at Dallas, an M.S. in Math Sciences and a M.A. in Marketing.

Compensation Committee Interlocks and Insider Participation

The Compensation Committee consists of Directors Daniel H. Berry, Leo Berlinghieri and Aubrey C. Tobey, none of whom has any of the interlocking relationships described in Item 407(e)(4) of Regulation S-K.

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SECURITY OWNERSHIP

The following table sets forth certain information with respect to beneficial ownership of the Company's Common Stock as of March 31, 2011 (except as otherwise indicated), by: (i) each person who is known by the Company to own beneficially more than five percent of the Common Stock, (ii) each of the Named Executive Officers, (iii) each of the Company's directors, and (iv) all directors and executive officers as a group. Except as indicated in the footnotes to this table, the persons named in the table have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them, subject to community property laws where applicable.

Beneficial Owner	Number of Shares(1)	Percentage (2)	%
Artisan Investment Corporation(3) 875 East Wisconsin Avenue, Suite 800, Milwaukee, WI 53202	4,265,888	13.5	%
Black Rock, Inc.(4) 40 East 52nd Street, New York, NY 10022	2,566,058	8.1	%
Dimensional Fund Advisors LP(5) Palisades West, Building One, 6300 Bee Cave Road, Austin, Texas 78746	1,914,958	6.1	%
Sparta Asset Management, LLC(6) One O'Hare Centre, 6250 N. River Road, Suite 1000, Rosemont, IL 60018	1,833,692	5.8	%
Gagnon Securities LLC(7) 1370 Avenue of the Americas, Suite 2400, New York, NY 10019	1,677,024	5.3	%
Paul F. McLaughlin	716,537	2.3	%
Steven R. Roth	150,050	*	
Nathan H. Little	201,889	*	
Michael P. Plisinski	157,082	*	
D. Mayson Brooks	27,127	*	
Leo Berlinghieri	2,500	*	
Daniel H. Berry(8) c/o Riverside Partners LLC, One Exeter Plaza, Boston, MA 02116	607,667	1.9	%
Thomas G. Greig	85,500	*	
Richard F. Spanier(9)	98,208	*	
Aubrey C. Tobey	42,500	*	
John R. Whitten	30,000	*	
All directors and executive officers as a group (twenty persons)(10)	2,413,095	7.4	%

* Less than 1%.

(1) Includes the number of shares subject to options which are exercisable and restricted stock units vesting within 60 days of March 31, 2011 by the following persons: Mr. McLaughlin, (324,400 shares), Mr. Roth (106,200 shares), Mr. Little (163,400 shares), Mr. Plisinski (53,534 shares), Mr. Brooks (17,644), Mr. Berry (25,000 shares), Mr. Greig (15,000 shares), Mr. Spanier (25,000 shares), Mr. Tobey (25,000 shares) and all directors and executive officers as a group (954,390 shares).

(2) Applicable percentage ownership is based on 31,551,458 shares of Common Stock outstanding as of March 31, 2011. Beneficial ownership of shares is determined in accordance with the rules of the SEC and generally includes shares as to which a person holds sole or shared voting or investment power. Shares of Common Stock subject to options that are presently exercisable or exercisable within 60 days of March 31, 2011 are deemed to be beneficially owned by the person holding such options for the purpose of computing the percentage ownership of such person, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise noted the address for the stockholders named in this table is c/o Rudolph Technologies, Inc., One Rudolph Road, P.O. Box 1000, Flanders, NJ 07836.

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- (3) Information provided herein is based on the Schedule 13G/A that was filed on February 11, 2011 by Artisan Partners Holdings LP, Artisan Partners Limited Partnership, Artisan Investment Corporation, Artisan Investments GP LLC, ZFIC, Inc., Andrew A. Ziegler, Carlene M. Ziegler and Artisan Funds, Inc. These reporting persons have shared voting and dispositive power over these shares.
- (4) Information provided herein is based on the Schedule 13G/A that was filed on February 8, 2011 by Black Rock, Inc.
- (5) Information provided herein is based on the Schedule 13G/A that was filed on February 11, 2011 by Dimensional Fund Advisors LP.
- (6) Information provided herein is based on the Schedule 13G that was filed on February 7, 2011 by Sparta Asset Management, LLC.
- (7) Information provided herein is based on the Schedule 13G that was filed on February 11, 2011 by Gagnon Securities LLC and Neil Gagnon, which indicates that Gagnon Securities LLC holds shared voting and dispositive power over 704,033 shares and Neil Gagnon holds sole voting and dispositive power over 1,017,092 shares and shared voting and dispositive power over 659,932 shares.
- (8) The number of shares of Common Stock beneficially owned by Mr. Berry includes indirect beneficial ownership in 552,667 shares of Rudolph Technologies Common Stock held by the Riverside Fund II, LP, an affiliate of Riverside Partners, LLC. Mr. Berry is an Operating Partner of Riverside Partners, LLC and disclaims beneficial ownership except to the extent of his pecuniary interest therein.
- (9) Includes 7,671 shares held by Dr. Spanier's wife.
- (10) The number of shares of Common Stock beneficially owned by our directors and executive officers as a group includes 552,667 shares of our Common Stock held by the Riverside Fund II, LP, an affiliate of Riverside Partners, LLC.

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information with respect to the Company's equity compensation plans as of December 31, 2010.

	(a)	(b)	(c)
	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights(1)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders	3,405,281	10.97	3,560,518
Equity compensation plans not approved by security holders	N/A	N/A	N/A
Total	3,405,281	10.97	3,560,518

- (1) Includes 1,454,486 shares issuable upon vesting of outstanding Restricted Stock Units.

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SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's executive officers and directors and persons who own more than 10% of a registered class of the Company's equity securities to file an initial report of ownership on Form 3 and changes in ownership on Form 4 or Form 5 with the SEC. Such persons are also required by SEC rules to furnish the Company with copies of all Section 16(a) forms they file. Based solely on its review of the copies of such forms received by it, or written representations from certain reporting persons, the Company believes that, during the year ended December 31, 2010, all officers, directors and greater than 10% beneficial owners complied with all Section 16(a) filing requirements, except John R. Kurdock filed a late Form 4 on November 9, 2010 with respect to one transaction on November 4, 2010 and Rajiv Roy filed a late Form 4 on May 25, 2010 with respect to one transaction on May 17, 2010.

OTHER MATTERS

The Company knows of no other matters to be submitted to the Annual Meeting. If any other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed Proxy to vote the shares they represent as the Board of Directors may recommend.

ADDITIONAL INFORMATION

Stockholders may obtain a copy of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2010, including financial statements and schedules included in the annual report on Form 10-K, without charge, by visiting the Company's website at www.rudolphtech.com and clicking on Investor Relations or by writing to Steven R. Roth, Chief Financial Officer at the Company's headquarters (One Rudolph Road, P.O. Box 1000, Flanders, New Jersey 07836). Upon written request to the Company, at the address of the Company's headquarters, the exhibits set forth on the exhibit index of the Company's Annual Report on Form 10-K will be made available at reasonable charge (which will be limited to our reasonable expenses in furnishing such exhibits).

BY ORDER OF THE BOARD OF DIRECTORS

Steven R. Roth

Secretary

Dated: April 19, 2011

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Annual Meeting of Stockholders of
RUDOLPH TECHNOLOGIES, INC.

May 25, 2011

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:

The Notice of Meeting, Proxy Statement, Proxy Card

are available at <http://www.rudolphtech.com/resources/images/6169.pdf>

Please sign, date and mail your proxy card in the envelope provided as soon as possible.

Please detach along perforated line and mail in the envelope provided

PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE [X]

The Board of Directors recommends you vote "FOR" all nominees, "FOR" Proposals 2 and 4 and "1 YEAR" for Proposal 3.

1. ELECTION OF DIRECTORS: FOR AGAINST ABSTAIN

Nominees:

Aubrey C. Tobey o o o

John R. Whitten o o o

2. TO APPROVE, ON AN ADVISORY (NON-BINDING) BASIS, THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS AS DISCLOSED IN THE PROXY STATEMENT. o o o

1 YR 2 YR 3YR ABSTAIN

3. TO RECOMMEND, ON AN ADVISORY (NON-BINDING) BASIS, THE FREQUENCY OF THE ADVISORY VOTE ON EXECUTIVE COMPENSATION. o o o o

FOR AGAINST ABSTAIN

4. TO RATIFY THE APPOINTMENT OF ERNST & YOUNG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS. o o o

5. IN THEIR DISCRETION, THE PROXIES ARE AUTHORIZED TO VOTE UPON SUCH OTHER BUSINESS AS MAY PROPERLY BE BROUGHT BEFORE THE MEETING OR ANY ADJOURNMENT THEREOF.

This proxy, when properly executed, will be voted in the manner described herein by the undersigned. If no direction is made, this proxy will be voted FOR all nominees listed, FOR Item 2 and 4, 1 YEAR for Item 3 and according to the discretion of the proxy holders on any other matter that may properly come before the Annual Meeting of Stockholders.

Signature of stockholder Dated Signature of stockholder Dated

Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as an executor, administrator, attorney, trustee or

Note: guardian, please give full title as such. If the signer is a corporation, please sign in full corporate name by duly authorized officer, giving full title as such. If a signer is a partnership, please sign in partnership name by authorized person.

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RUDOLPH TECHNOLOGIES, INC.

PROXY

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD
OF DIRECTORS OF RUDOLPH TECHNOLOGIES, INC.

The undersigned hereby constitutes and appoints Daniel H. Berry and Richard F. Spanier, or either of them, as and for his or her proxies, each with the power to appoint such proxy's substitute, and hereby authorizes them, or either of them, to vote all of the shares of Common Stock of Rudolph Technologies, Inc. held of record by the undersigned on March 31, 2011, at the Annual Meeting of Stockholders of Rudolph Technologies, Inc. to be held on Wednesday, May 25, 2011 and at any and all adjournments or postponements thereof as follows:

(Continued and to be signed on reverse side.)