

SCHEDULE 14A INFORMATION

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

Filed by the Registrant

Filed by a Party other than Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-11(c) or §240.14a-12

MATTSON TECHNOLOGY, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

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- 2) Form, Schedule or Registration Statement No.:
- 3) Filing Party:
- 4) Date Filed:



47131 Bayside Parkway
Fremont, California 94538

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD JUNE 7, 2010**

The Annual Meeting of Stockholders of Mattson Technology, Inc. (the "Company") will be held at the Company's headquarters, located at 47131 Bayside Parkway, Fremont, California 94538 on June 7, 2010, at 10:00 a.m. local time for the following purposes:

1. To elect two (2) Class I directors of the Company to hold office for a three-year term and until their successors are elected and qualified.
2. To ratify the appointment of PricewaterhouseCoopers LLP as the Company's independent registered public accountants for the year ending December 31, 2010.
3. To transact such other business as may properly come before the meeting or any adjournment or postponement of the meeting.

Only stockholders of record at the close of business on April 8, 2010 will be entitled to vote at the meeting. Each of these stockholders is cordially invited to be present and vote at the meeting in person. For ten days prior to the meeting, a complete list of stockholders of record entitled to vote at the meeting will be available for examination by any stockholder, for any purpose relating to the meeting, during ordinary business hours at the Company's headquarters.

The Company is pleased to continue to take advantage of the Securities and Exchange Commission's rules that allow it to furnish proxy materials to its shareholders on the Internet. The Company believes these rules allow it to provide you with the information you need while lowering the costs of delivery and reducing the environmental impact of the Annual Meeting.

By Order of the Board of Directors,

Andy Moring
Chief Financial Officer, Secretary

Fremont, California
April 9, 2010

You are cordially invited to attend the meeting. However, whether or not you plan to attend the meeting in person, to ensure your representation at the annual meeting, you are urged to read this proxy statement and submit your proxy or voting instructions as soon as possible by following the instructions in the notice of Internet availability of proxy materials, which will be mailed to you on or about April 20, 2010. If you received printed copies of the proxy materials by mail, you can also vote by mail. If you later desire to revoke your proxy, you may do so at any time before it is exercised. If you vote by proxy, you may nevertheless attend the Annual Meeting of Stockholders and vote your shares in person.

MATTSON TECHNOLOGY, INC.
PROXY STATEMENT FOR
ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD JUNE 7, 2010

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GENERAL INFORMATION

The Board of Directors of Mattson Technology, Inc. (the “Company”) has made these proxy materials available to you on the Internet, or, upon your request, has delivered printed versions of these materials to you by mail, in connection with soliciting your proxy for use at the Annual Meeting of Stockholders to be held on June 7, 2010 at 10:00 a.m. local time (the “Meeting”), for the purposes set forth in the accompanying notice and at any adjournment or postponement of the Meeting. Stockholders are requested to promptly vote by proxy over the Internet by following the instructions provided in the Notice of Internet Availability of Proxy Materials. If you receive printed copies of the proxy materials by mail, you can also vote by mail.

The date of this Proxy Statement is April 9, 2010. The Proxy Statement, the accompanying proxy card and the Company’s Annual Report will be made available to the Company’s stockholders on the Internet at www.proxyvote.com through the notice and access process on or about April 20, 2010. The solicitation will be made through the Internet and expenses will include reimbursement paid to brokerage firms and others for their expenses in forwarding solicitation material regarding the Meeting to beneficial owners of the Company’s Common Stock. Original solicitation of proxies by Internet and/or mail may be supplemented, if deemed desirable or necessary, by one or more of telephone, facsimile, or personal solicitation by directors, officers, or employees of the Company. No additional compensation will be paid for any such services. The Company has engaged The Proxy Advisory Group, LLC to assist in the solicitation of proxies and provide related advice and informational support, for a services fee and the reimbursement of customary disbursements that are not expected to exceed \$10,000 in the aggregate. Except as described above, the Company does not intend to solicit proxies other than by Internet or, for those stockholders who requested to receive printed proxy materials, by mail. The Company will bear the costs of the solicitation of proxies for the Meeting.

The shares represented by any proxy voted by Internet or by mail will be voted in accordance with the instructions given on the proxy if the proxy is properly executed and is received by the Company prior to the close of voting at the Meeting or any adjournment or postponement thereof. Proxies received by the Company on which no contrary instruction has been given will be voted in accordance with the recommendations of the Board of Directors for each nominee and for each proposal.

SHARES OUTSTANDING AND VOTING RIGHTS

Only holders of shares of common stock of record as of the close of business on April 8, 2010 are entitled to vote at the Meeting. On the record date, there were issued and outstanding 50,019,305 shares of common stock. Each share of common stock is entitled to one vote on all matters to be voted upon.

The presence, in person or by duly authorized proxy, of the holders of a majority of the voting shares of common stock will constitute a quorum for the transaction of business at the Meeting and any continuation or adjournment thereof. The Company treats shares that are voted “WITHHOLD AUTHORITY” or “ABSTAIN” in person or by proxy as being present for purposes of determining whether or not a quorum is present at the Meeting and entitled to vote on a particular subject matter at the Annual Meeting; therefore a “WITHHOLD AUTHORITY” or “ABSTAIN” vote is the same as voting against a proposal that has a required, affirmative voting threshold, such as Proposal Two, the ratification of the appointment of the Company’s independent registered public accountants.

If you hold your common stock through a broker, the broker may be prevented from voting shares held in your brokerage account on some proposals (a “broker non-vote”) unless you have given the broker voting instructions. In particular, starting this year, if you hold your common stock through a broker, it is critical that you cast your vote if you want it to count in Proposal One, the election of the Company’s Class I directors. In the past, if you held your common stock through a broker and you did not indicate how you wanted your shares voted in the election of directors, your broker was allowed to vote those shares on your behalf in the election of directors as the broker felt appropriate. Recent changes in regulation were made to take away the ability of your broker to vote your uninstructed shares in the election of directors on a discretionary basis. Thus, if you hold your common stock through a broker and you do not instruct your broker how to vote on Proposal One, it will be considered a broker non-vote and no votes will be cast on your behalf.

Shares that are subject to a broker non-vote are counted for purposes of determining whether a quorum exists but do not count for or against any particular proposal. Your broker will continue to have discretion to vote any uninstructed shares on Proposal Two, the ratification of the appointment of the Company's independent registered public accountants.

If you are a stockholder of record and you do not cast your vote, no votes will be cast on your behalf on any of the items of business at the Meeting.

Your execution of your proxy by Internet or by mail will not affect your right as a stockholder to attend the Meeting and to vote in person. Any stockholder giving a proxy has a right to revoke it at any time by either (i) voting again by the Internet, (ii) sending a later-dated proxy by mail or sending a written revocation, provided that they are received by the Secretary of the Company prior to the Meeting, or (iii) attendance at the Meeting and voting in person.

If your shares are held in a stock brokerage account or by a bank or other nominee, you are considered the beneficial owner of shares held in "street name." Your broker or nominee is considered to be the stockholder of record with respect to those shares. To attend the Meeting as a beneficial owner, please bring with you proper identification and a statement from the broker, bank or other nominee holding your shares that confirms your beneficial ownership of the shares as of the record date. If you wish to vote or change your vote at the Meeting, you must obtain and bring with you to the Meeting a "legal proxy" from the broker, bank or other nominee holding your shares that confirms your beneficial ownership of the shares and gives you the right to vote your shares at the Meeting.

SECURITY OWNERSHIP OF MANAGEMENT AND PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding ownership of the Company's outstanding common stock as of March 12, 2010 by (i) each stockholder known by the Company to be the beneficial owner of more than 5 percent of the Company's outstanding shares of common stock, based on information contained in any applicable Schedule 13D or 13G filed with the Securities and Exchange Commission ("SEC"), (ii) each director, (iii) each executive officer named in the Summary Compensation Table and (iv) all directors and executive officers as a group. To the Company's knowledge and except as otherwise indicated below, and subject to applicable community property laws, each person named in the table has sole voting and sole investment powers with respect to all shares of common stock shown as beneficially owned by them. Applicable percentage ownership in the table is based on 50,011,389 shares of common stock outstanding as of March 12, 2010. Beneficial ownership is determined under the rules and regulations of the SEC. Shares of common stock subject to options that are presently exercisable, or options exercisable within 60 days and restricted stock units ("RSU") vesting within 60 days of March 12, 2010 are deemed outstanding for the purpose of computing the shares owned and percentage ownership of the person or entity holding options, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person or entity.

<u>Name of Beneficial Owner</u>	<u>Amount and Nature of Beneficial Ownership</u>	<u>Percent of Common Stock Outstanding</u>
NWQ Investment Management Company, LLC 2049 Century Park East, 4th Floor Los Angeles, CA 90067	5,199,337 (1)	10.4%
David L. Dutton	1,014,536 (2)	2.0%
Kenneth Kannappan	118,988 (3)	*
Kenneth G. Smith	115,627 (4)	*
Shigeru Nakayama	114,083 (5)	*
Andy Moring	111,428 (6)	*
Dr. Hans-Georg Betz	95,404 (7)	*
John C. Bolger	36,286 (8)	*
Nigel Wenden	— (9)	—
Richard E. Dyck	1,400 (10)	*
Directors and executive officers as a group (9 persons)	1,607,753 (11)	3.2%

* Less than 1 percent.

- (1) According to Schedule 13G/A filed with the SEC on February 10, 2010 by NWQ Investment Management Company, LLC. ("NWQ"), as of December 31, 2009, NWQ had sole voting power over 4,763,737 shares and sole dispositive power over 5,199,337 shares of the Company's common stock, which are owned by investment advisory clients of NWQ.
- (2) Mr. Dutton: includes 944,129 shares subject to options that were exercisable as of March 12, 2010 and options exercisable within 60 days of March 12, 2010; and 9,257 RSUs that vest within 60 days of March 12, 2010.
- (3) Mr. Kannappan: includes 115,127 shares subject to options that were exercisable as of March 12, 2010 and options exercisable within 60 days of March 12, 2010; and 362 RSUs that vest within 60 days of March 12, 2010.
- (4) Mr. Smith: includes 113,765 shares subject to options that were exercisable as of March 12, 2010 and options exercisable within 60 days of March 12, 2010; and 362 RSUs that vest within 60 days of March 12, 2010.
- (5) Mr. Nakayama: includes 112,222 shares subject to options that were exercisable as of March 12, 2010 and options exercisable within 60 days of March 12, 2010; and 362 RSUs that vest within 60 days of March 12, 2010.

- (6) Mr. Moring: includes 109,226 shares subject to options that were exercisable as of March 12, 2010 and options exercisable within 60 days of March 12, 2010; and 434 RSUs that vest within 60 days of March 12, 2010.
- (7) Dr. Betz: includes 81,403 shares subject to options that were exercisable as of March 12, 2010 and options exercisable within 60 days of March 12, 2010; and 362 RSUs that vest within 60 days of March 12, 2010.
- (8) Mr. Bolger: includes 35,605 shares subject to options that were exercisable as of March 12, 2010 and options exercisable within 60 days of March 12, 2010; and 181 RSUs that vest within 60 days of March 12, 2010.
- (9) Nigel Wenden resigned from the position of Senior Vice-President, Global Business Operations effective August 10, 2009.
- (10) Richard Dyck was appointed to the Company's Board of Directors on January 25, 2010.
- (11) Includes 1,511,477 shares subject to options that were exercisable as of March 12, 2010 and options exercisable within 60 days of March 12, 2010; and 11,319 RSUs that vest within 60 days of March 12, 2010.

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis provides narrative disclosure regarding the compensation plans, programs and arrangements that the Company employed for individuals serving as its Chief Executive Officer, its Chief Financial Officer, and its other most highly compensated executive officers during the 2009 fiscal year, as determined under the rules of the SEC.

During fiscal 2009, the Company's executive officers were as follows:

- David L. Dutton, Chief Executive Officer, President and Director
- Andy Moring, Chief Financial Officer, Secretary, Executive Vice-President - Finance
- Nigel Wenden, Senior Vice-President - Global Business Operations until his resignation on August 10, 2009

Overview of Executive Compensation Program

The Company's major objective is to create value for its shareholders by building and maintaining leadership positions in the technologies the Company develops and the markets the Company serves in the semiconductor equipment industry. The Compensation Committee is responsible for overseeing executive pay and equity programs by reviewing and evaluating them on a regular basis, and if appropriate, revising them to ensure that they support the Company's business objectives.

The objectives of the Company's executive compensation program are:

- to reward performance and link executive compensation to the creation of shareholder value;
- to align executive interests with the interests of the Company's shareholders by emphasizing the use of equity-based compensation;
- to attract and retain high-performing and qualified executives by compensating them at levels that are competitive with peer companies and commensurate with corporate and individual performance; and
- to optimize the use of compensation resources by strategically directing them to those areas where they will have the greatest impact on the long-term success of the Company.

For fiscal 2009, the Compensation Committee also took into consideration the global economic recession and the severe decline in demand for semiconductor equipment in determining executive compensation. As a result of this environment, the Company added the objective of managing its compensation programs in a responsible and prudent manner relative to its financial condition.

Corporate Governance

Role of the Compensation Committee

The Compensation Committee (the "Committee") oversees and administers the Company's executive compensation program in accordance with the Committee Charter, which is accessible via the "Corporate Governance" link at www.mattson.com. At least annually, and usually in December of each year, the Committee meets to assess the Company's and executive officers' performance against the goals that were set for the year, and to establish compensation plans for the following year. In creating such compensation plans, the Committee reviews all components of executive compensation for consistency with the Company's compensation philosophy and considers developments in compensation practices outside of the Company.

In addition, the Committee oversees and administers the Company's compensation program for non-executive employees. The Committee has delegated to a committee comprised of the Company's Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") the authority to grant awards under the 2005 Equity Compensation Plan to certain employees below the executive officer level, subject to specified limitations. The limitations are that these grants must be made in accordance with the guidelines established by the Committee for each pay grade, the exercise prices must be at fair market value on the date of grant, and the Committee must approve all grants in excess of 25,000 shares.

The Committee has the authority to engage independent advisors, such as compensation consultants, to assist it in carrying out its responsibilities. The Committee currently utilizes the services of Farient Advisors, LLC ("Farient"), an independent executive compensation and performance advisory firm, to provide independent advice on various areas of executive compensation. At the request of the Committee, Farient provides information, analysis, and recommendations on the competitiveness and design of the Company's executive compensation program, the Company's goal-setting processes, the Company's change in control programs, and other aspects of compensation, as needed.

Role of Management

At least annually, and usually in December of each year followed by a meeting in January and/or March, the Committee meets with Mr. Dutton, the Company's CEO, and members of the Company's human resources department to obtain recommendations with respect to the Company's compensation practices and to review the information used to support these recommendations. Management makes recommendations to the Committee on the base salaries, bonus awards for the previous year and targets for the following year, performance goals, and equity compensation for executive officers and certain other Company employees. The Committee considers management's recommendations in determining the compensation plan that it ultimately approves. Management also presents information on the performance of the Company and the executive officers to the Committee, and this information is used by the Committee to determine the cash bonuses for the year then ending, salary determinations for the following year, and equity compensation. The Committee discusses the executive officers' compensation with Mr. Dutton, but makes decisions with respect to Mr. Dutton's compensation without Mr. Dutton present.

Resignation of Nigel Wenden and Separation Agreement

On August 10, 2009, Mr. Wenden resigned his position as Senior Vice-President - Global Business Operations. The discussion of compensation programs in this Compensation Discussion and Analysis generally refers to compensation decisions made for Mr. Wenden prior to his resignation and reflects the general policies and decision-making processes of the Compensation Committee. Special compensation arrangements associated with the separation agreement are described immediately below and are reflected in the Summary Compensation Table which follows this Compensation Discussion and Analysis.

In connection with Mr. Wenden's resignation, the Company entered into a Separation Agreement with him, dated August 10, 2009 (the "Separation Agreement"). Under the Separation Agreement, Mr. Wenden received six months' salary totaling \$145,000, plus an additional three months' salary totaling \$72,500 upon signing a customary general release of claims against the Company.

Elements of Compensation

In structuring the Company's compensation program, the Committee seeks to select the types and levels of compensation that will further its goals of rewarding performance, linking executive compensation to the creation of stockholder value, attracting and retaining highly qualified employees and maximizing long-term stockholder returns. Consistent with these goals, the Company's compensation program generally includes a mix of salary, cash bonus, and stock options, and may include RSUs with service-based or performance-based vesting. Based on its review of compensation practices of its peer group companies, the Committee believes that offering a mix of compensation types is necessary to compete successfully for management talent and achieve the Company's goals. The Committee evaluates the mix of compensation types annually based on the Company's needs and prevailing market practices.

A description of each of the elements of compensation, and the role of each in the total compensation package, is described below:

Salary provides a fixed compensation to employees for their performance of ongoing job-related responsibilities. An adequate salary commensurate to the position helps the Company attract and retain talent, and provides recognition to the employee based on their level, experience and individual performance.

Short-term incentive plans include performance-based annual cash incentives for the CEO and CFO and semi-annual cash incentives for other officers. These incentives are typically based on revenue and earnings per share (EPS) objectives, with a modifier for strategic performance. These rewards encourage executives to meet or exceed financial and strategic objectives.

Long-term incentive plans are delivered in the form of awards of stock options and RSUs. The RSUs include grants with service-based vesting and performance-based vesting. Stock price appreciation is typically linked to the financial performance of the Company. These awards help align executive interests with shareholder interests and help attract and retain talent.

Retirement and welfare benefits include medical, dental, vision, life insurance, long-term disability insurance, a tax-qualified 401(k) Plan and a non-qualified deferred compensation plan. These benefits are required to attract and retain talent, and these benefits provide employees with reasonable security.

For fiscal 2009, the Committee decided to only utilize base salary and stock options as the compensation program for the Company's senior executives and management employees. This decision was based on an assessment of the financial condition of the Company at the beginning of the year and the determination that cash bonuses would not be an appropriate use of Company resources given the difficult economic environment and the unreasonable degree of difficulty that would be associated with any performance goals the Committee would require to achieve the bonus for the year. As an alternative to cash bonuses, the Committee awarded both a regular annual focal grant of stock options and a special retention pool of stock options ("Special Retention Stock Options") to be differentially allocated to top performers. The Special Retention Stock Options have a two-year vesting, which is shorter than the typical four-year vesting of the Company's equity programs, as the Company and the Committee believed that this shorter vesting period would enhance the perceived value of the grants and encourage near term retention. The Committee also selected stock options as the only equity vehicle for 2009 given the relatively low share price of the Company's stock and the belief that options would provide the greatest retention and incentive for managing the Company through the economic downturn.

Pay Benchmarking

The Company believes that, on average, its executive pay should be positioned at the median of the market for competitive average performance, at above market for above average performance, and conversely, at below market for below market performance. To execute this compensation positioning strategy, the Committee compares the Company's target compensation and mix for its executive officers against target compensation and mix in other companies similar to Mattson. In addition, the Committee references an expanded peer group to compare pay design and practices.

The Company conducted a pay benchmark review in December 2008 and used the analysis from that review to make decisions regarding executive pay for fiscal 2009. Farient developed a specific group of peers to provide a direct reference for pay levels of the CEO and CFO and an expanded group of peer companies to benchmark compensation design and pay practices. The specific peer group developed by Farient consisted of companies in the semiconductor equipment industry with annual revenue between \$150 million and \$1 billion in fiscal 2007.

The specific peer group was comprised of the following companies:

Specific Peers

Advanced Energy Industries, Inc.	Formfactor, Inc.
Asyst Technologies, Inc.	Kulicke & Soffa Industries, Inc.
Aviza Technology, Inc.	LTX Corporation
Axcelis Technologies, Inc.	Newport Corporation
Brooks Automations, Inc.	Rudolph Technologies, Inc.
COHU, Inc.	Semitool, Inc.
Credence Systems Corporation	Ultra Clean Holdings, Inc.
Cymer, Inc.	Varian Semiconductor Equipment Associates, Inc.
Electro Scientific Industries, Inc.	Veeco Instruments, Inc.

The expanded peers included the following companies, which fell outside of the prescribed revenue range:

Applied Materials, Inc.
KLA-Tencor Corporation
Lam Research Corporation
Novellus Systems, Inc.

The Company conducted a pay benchmark review in November 2009 and used the analysis from that review to make decisions regarding executive pay for fiscal 2010. In connection with the November 2009 review, Farient revised the peer group to reflect changes in the size of the Company and the market in which it competes for talent given the overall difficulty in the semiconductor equipment industry in 2009. The specific peer group developed by Farient consisted of companies in the semiconductor equipment industry with fiscal year 2008 revenues between \$50 million and \$300 million, adjusted for companies that had been acquired or filed for bankruptcy during 2009.

As a result of this process, six peers were added while nine peers were removed from the peer group for 2009 compared to 2008. Two of the nine peers removed were due to bankruptcy. The specific peer group for 2009 was comprised of the following companies:

Specific Peers

Amtech Systems, Inc.	inTest Corporation
Axcelis Technologies, Inc.	LTX-Credence Corporation
Cascade Microtech, Inc.	Nanometrics, Inc.
COHU, Inc.	Rudolph Technologies, Inc.
Electro Scientific Industries, Inc.	Semitool, Inc.
Form Factor, Inc.	Ultra Clean Holdings, Inc.
FSI International, Inc.	Ultratech, Inc.

The expanded peer group remained unchanged.

In addition to using these peer companies, the Company used compensation data from recognized surveys of high-technology companies to help determine market-based compensation for executive-level positions as reviewed by the Committee.

Elements and Analysis of Compensation

Base Salary

The Committee sets executive salaries on an annual basis, usually in December of each year for the following year, or at the time of promotion. In setting base salary levels, the Committee considers a variety of factors, both quantitative and qualitative, with the ultimate goal of rewarding positive performance and remaining competitive in attracting and retaining executive talent. Base salaries are determined in accordance with each executive's position, performance, experience, skills, and market practices. In addition, the Committee takes into account the CEO's recommendations for executive positions that are reviewed by the Committee. The Committee retains the discretion to consider individual and corporate performance, prior experience, length of employment, existing and historic salary levels, internal consistency among employee pay levels, external pressures to attract and retain talent, and market conditions generally when making individual pay decision. The Committee evaluates each of these factors in its judgment; they are not measured in any quantitative way nor is there an explicit weighting applied to these factors.

For 2009, after taking into consideration the compensation targets, management's recommendations, the Company's performance, and Fariant's recommendations, the Committee decided to maintain the base salaries for the Company's executives at the 2008 levels, consistent with salaries for the majority of employees during 2009. No salary increases were approved for 2010; however, the Company may consider salary increases later in the year based on its operating performance. Given the difficult economic environment, the CEO requested a voluntary 10 percent reduction in his salary for 2009 and this voluntary reduction was continued for 2010. As a cost-reduction measure in 2009, the Company implemented mandatory furloughs for all employees, including the executive officers. The furloughs resulted in additional reductions in the salaries of the executive officers in 2009 (see Summary Compensation Table).

The salaries for the Company's executive officers for 2008 through 2010 are as follows:

Name and Title	2010 (1)	2009 (2)	2008
David L. Dutton <i>Chief Executive Officer, President and Director</i>	\$ 405,000	\$ 405,000	\$ 450,000
Andy Moring <i>Chief Financial Officer, Secretary, Executive Vice-President - Finance</i>	\$ 290,000	\$ 290,000	\$ 290,000
Nigel Wenden (3) <i>Senior Vice-President - Global Business Operations</i>	N/A	\$ 290,000	\$ 290,000

- (1) The 2010 base salaries for the executive officers were determined by the Committee in November 2009, and may be changed by subsequent actions of the Committee or the Board of Directors. Mr. Dutton's 2010 salary reflects a 10 percent reduction in his base salary of \$450,000, as a continuation of his voluntary election to reduce his salary during 2009.
- (2) Subsequent to the Committee's determination of the base salaries for 2009, Mr. Dutton voluntarily reduced his salary by 10 percent as part of a cost-reduction measure. In the Summary Compensation Table for 2009, salaries for the executive officers reflect the impact of the Company's mandatory furloughs and Mr. Dutton's voluntary salary reduction.
- (3) Nigel Wenden resigned from the position of Senior Vice-President, Global Business Operations effective August 10, 2009.

Short-Term Cash Bonus

The Company's executive officers are generally eligible to receive cash bonuses based upon the Company's achievement of performance targets set by the Committee. The Committee believes that the practice of awarding cash bonuses based on the achievement of performance targets furthers the Company's goal of strengthening the connection between the interests of management and the Company's stockholders. Performance-based awards are also an important tool for motivating management to achieve the financial and operating results considered by the Committee to be the most significant to the Company's long-term health and profitability. The short-term cash bonuses are evaluated and paid annually for the CEO and CFO, and semiannually for all other employees participating in the incentive plans. The bonus targets, as a percentage of base salary, for the Company's executive officers for 2010 and 2009 are as follows:

Name and Title	Target Bonus Level (1)		Maximum Bonus Level (1)	
	2010 (2)	2009 (3)	2010 (2)	2009 (3)
David L. Dutton <i>Chief Executive Officer, President and Director</i>	100%	100%	200%	200%
Andy Moring <i>Chief Financial Officer, Secretary, Executive Vice-President - Finance</i>	60%	60%	120%	120%
Nigel Wenden (4) <i>Senior Vice-President - Global Business Operations</i>	N/A	40%	N/A	80%

- (1) Traditionally, the Committee determines the executive officers' cash bonuses by comparing the performance of the Company against the performance targets set at the beginning of the year. The Committee normally determines the targets for the following year at the same meeting. Target and maximum bonuses are defined by reference to each executive officer's base salary. The maximum payout for each executive officer equals twice the target bonus level.
- (2) The Committee did not establish a cash bonus plan for 2010, but may consider implementing a partial-year plan later in 2010 depending on the Company's performance.
- (3) The Committee suspended cash bonuses in 2009, but instead granted Special Retention Stock Options to the executive officers as described above.
- (4) Mr. Wenden resigned from the position of Senior Vice-President, Global Business Operations effective August 10, 2009.

In view of the recession and the deepening economic crisis in 2008, the Committee determined that it would be difficult to set meaningful goals for 2009. As a result, the Committee decided to suspend the short-term cash bonus plan for fiscal 2009. In lieu of a cash bonus plan for 2009, the Committee approved the Special Retention Stock Options, with a 2-year vesting. The Committee determined that stock options would help retain key talent over the foreseeable future, keep management focused on managing the Company through the current economic downturn, align participants with shareholder interests, help preserve cash, and provide significant potential upside compensation for recipients. Management developed recommendations on who should participate in the program and the stock option grants to each individual was based on an assessment of the potential impact of each individual on the Company's future success, competitive pay and retention considerations.

For fiscal 2010, the Committee again found it difficult to establish a cash bonus plan with meaningful performance objectives, and as a result, the Committee did not establish a cash bonus plan as of the beginning of the year. The Company and the Committee may consider implementing a part-year plan later in 2010 based on the Company's operating performance and whether the Company's performance warrants the establishment of a formal bonus plan arrangement for the year. The Committee did not make a special grant of stock options in lieu of a cash bonus plan for 2010, but did ask management, with the assistance of Fariant, to revise the equity guidelines for annual refresh grants to employees taking the current lower share prices into consideration. This generally resulted in higher share grant guidelines when compared to previous years.

QPR Plan

In addition to the cash bonuses discussed under “Short-Term Cash Bonus,” all of the Company’s employees, including its executive officers, are eligible for a quarterly cash bonus under the Company’s Quarterly Profit Reward Plan (the “QPR Plan”). The QPR Plan awards are based on the Company’s achievement of targeted operating margin (defined as operating income as a percentage of revenue) in the relevant quarter. For 2009, no payments were made under the QPR Plan since the Company did not achieve a positive operating margin. For 2010, the Company will not make payments under the QPR Plan until it achieves an operating margin of 2 percent, with payments increasing as operating margin increases above 2 percent. Should the Company achieve an operating margin of 2 percent, 4 percent, 8 percent and 10 percent, the estimated payout under the QPR would be approximately \$43, \$171, \$686 and \$1,071, respectively, per employee.

Stock Options and RSUs

In addition to any performance based cash compensation, the Company generally seeks to align the interests of stockholders and executive officers by making equity-based compensation a significant component of its executive compensation packages. The Company awards stock options and/or RSUs under its 2005 Equity Incentive Plan. The Committee believes that granting a mix of stock options and RSUs over time is an effective plan design as it provides a balance between performance and retention incentives while controlling share dilution.

The Company generally makes grants of stock options and RSUs to eligible employees, including its executive officers, upon commencement of employment and on an annual basis. It also makes periodic grants in connection with employee promotions and other special awards. Annual equity compensation awards to executive officers are determined by the Committee at its December meeting or shortly thereafter. The grant date of all annual grants will be the opening date of the Company’s first quarter stock trading window (i.e. the third trading day after the Company’s fourth quarter earnings release). Grant dates for new hire grants are the date the employee begins work; provided that, if such date is during a trading blackout period, awards will be granted on the first day after the next trading window opens. Grant dates for promotional or special award grants are the opening date of the Company’s stock trading window immediately following such promotion or special award notification.

For 2009 and 2010, due to the expected modest recovery in the semiconductor equipment industry and the financial condition of the Company, the committee chose to make all equity grants in the form of stock options. It is the perspective of the Company and the Committee that at current share prices, stock options are the most effective equity incentive vehicle to retain executive and key employee talent through a difficult economic environment because stock options provides an attractive upside opportunity when the Company’s share prices recover to historical levels.

All stock options are granted with an exercise price equal to their fair market value on the date of grant, which is equal to the closing price of the Company’s common stock as quoted on the NASDAQ Global Select Market on the date of grant. For 2009, the Special Retention Stock Options, made in lieu of the annual bonus under the cash bonus plan, vest over a two-year period in equal annual installments. All other options, vest over a period of four years at a rate of 25 percent after the first year and 1/48th of the initial amount granted each month thereafter. All grant vesting is conditioned upon continued employment with or service to the Company through each vesting date.

Due to the low price of the Company’s stock price, RSUs were not granted in 2009 or 2010. In general, RSUs vest equally over a 4-year period. On occasion, the Company grants RSUs for varying purposes with different vesting schedules.

In determining the number and terms of stock options to be granted for 2009 and 2010, the Committee considered the total dilution impact from equity grants, recognizing that it would not be possible to provide a competitive dollar value of grants in a year of particularly low share prices without reaching unacceptable levels of dilution. As a result, grants were determined taking into consideration the total number of shares to be granted to all employees, the need to retain key talent, historical grant practices and the competitive market for individual executives. For the executive officers, the specific grants approved for 2009 and 2010 were as follows:

Name and Title	2010	2009
	Stock Options	Stock Options
David L. Dutton <i>Chief Executive Officer, President and Director</i>	190,000	180,000 (1)
Andy Moring <i>Chief Financial Officer, Secretary, Executive Vice-President - Finance</i>	95,000	61,000 (2)
Nigel Wenden (3) <i>Senior Vice-President - Global Business Operations</i>	—	27,500

(1) Includes 30,000 Special Retention Stock Options granted in lieu of the short-term cash bonuses in 2009.

(2) Includes 16,000 Special Retention Stock Options granted in lieu of the short-term cash bonuses in 2009.

(3) Mr. Wenden resigned from the position of Senior Vice-President, Global Business Operations effective August 10, 2009.

Deferred Compensation Plan

In January 2006, the Committee implemented a non-qualified deferred compensation plan (the “NQDC Plan”), which allows eligible employees, including executive officers, and members of the Board of Directors to voluntarily defer receipt of a portion of their base salaries, cash bonuses or directorship fees, as the case may be, thereby allowing the participating employee or director to defer taxation on such amounts. The NQDC Plan is offered to eligible employees in order to allow them to defer more compensation than they would otherwise be permitted to defer under a tax-qualified retirement plan, such as the Company’s 401(k) Plan, discussed below. In addition, the Company, acting through the Board of Directors, may make discretionary contributions to the accounts of one or more NQDC Plan participants. The Committee determined the terms of the NQDC Plan after consulting with Pen-Cal Administrators, a NQDC management agency.

In 2008 and 2009, there were no discretionary contributions made by the Board of Directors to the NQDC Plan. All earnings or losses under the NQDC Plan were based on the market performance of the investments selected at the direction of the individual participant.

The Company believes that the NQDC Plan is an important component of the total compensation package that it uses to attract and retain management talent. The NQDC Plan is evaluated for competitiveness in the marketplace from time to time.

Employee Stock Purchase Plan

The Company’s Employee Stock Purchase Plan (“ESPP”) permits its employees, including the executive officers, to have a portion of their regular earnings withheld over a six-month offering period to purchase shares of the Company’s common stock on a discounted basis, equal to 90 percent of the closing price per share of the Company’s common stock on the NASDAQ Global Select Market on the date preceding the purchase date.

In 2009, in light of the requirements of the IRS and the impact of the Company’s reduced share price on the number of shares that could be purchased by ESPP participants, the Committee revised the ESPP Plan by restricting the number of shares participants are eligible to purchase to 2,000 shares during any purchase period. Shares purchased under the ESPP will continue to be purchased at 90 percent of the closing price of the Company’s common stock on the date preceding each purchase date.

401(k) Plan

The Company maintains a tax-qualified 401(k) Plan, which provides for broad-based employee participation. Under the 401(k) Plan, all employees are eligible to receive matching contributions from the Company, an amount equal to each participating employee's contribution to his or her 401(k) account, up to a maximum of three percent of such employee's base salary. For 2009, the Company made matching contributions of \$200 for Mr. Dutton, \$2,864 for Mr. Moring and \$1,004 for Mr. Wenden. In March 2009, the Company for the time being suspended matching contributions to the 401(k) Plan as part of its continued cost-reduction initiatives. The Committee intends to evaluate reinstating the Company's matching contribution this year based on overall business conditions in 2010.

Other Compensation

The Company offers a number of other benefits to its executive officers pursuant to benefit programs that are provided to the Company's broad-based employee population, including medical, dental and vision insurance, long-term and short-term disability insurance, life and accidental death and dismemberment insurance, health and dependent care flexible spending accounts, business travel insurance, relocation/expatriate programs and services, educational assistance, employee assistance and certain other benefits. The Company believes that these benefits are necessary for it to compete effectively for employee talent and that the availability of these benefits programs enhances employee health, productivity and loyalty to the Company. These generally available benefits do not directly factor into decisions regarding executive officers' total compensation packages.

Compensation of Chief Executive Officer

The Committee reviews Mr. Dutton's total compensation package on an annual basis in December and January. When conducting this review, the Committee considers Mr. Dutton's contributions to the Company's performance and peer benchmark data.

Compensation for the CEO differs from pay practices for the Company's other executive officers based on the CEO's level of responsibility and accountability for overall corporate performance. As a result, the CEO's targeted compensation is materially greater than that of other executives, has a higher risk-reward composition and is linked to the Company's financial performance. These differences are also reflected in the peer benchmark data.

As noted above, the Committee did not award Mr. Dutton a cash bonus for 2009, as the Company did not meet the financial performance targets warranting a payout. In addition, Mr. Dutton did not receive a salary increase for 2009, as such an increase was not warranted based on market pay comparables. For 2009, Mr. Dutton voluntarily elected to reduce his salary by 10 percent and has elected to keep his salary at the reduced level in 2010.

In February 2009, the Committee awarded Mr. Dutton an annual grant of 150,000 options with a four-year vesting period, and an additional 30,000 options with a two-year vesting period. These awards have a combined fair market value of approximately \$77,000, as measured on the date of grant in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, *Compensation-Stock Compensation* ("FASB ASC Topic 718"). For more information regarding the method and assumptions used in the determination of fair value of stock options refer to Note 13 to the Company's consolidated financial statements included in the Company's 2009 Annual Report on Form 10-K for the year ended December 31, 2009 (the "2009 Annual Report on Form 10-K").

In February 2010, the Committee awarded Mr. Dutton an annual grant of 190,000 options, with a four-year vesting period and a fair market value of approximately \$355,000, as measured on the date of grant in accordance with FASB ASC Topic 718.

Post-Employment Compensation

The Company recognizes that it is possible that it could undergo a change of control, and that this possibility could result in the departure or distraction of the executive officers to the detriment of the Company and its stockholders. Consequently, the Company has entered into agreements with its executive officers and other senior executives that provide them with certain benefits upon the termination of their employment following a change of control of the Company. These benefits include the continuation of salary and medical and dental insurance coverage and the accelerated vesting of stock awards. The Company believes that these agreements will help to maintain the continued focus and dedication of the executive officers to their assigned duties without the distraction that could result from the possibility of a change of control, and that these agreements represent common market practice in the industry.

For additional information on these Change of Control Agreements, see “Executive Compensation—Employment Contracts, Termination of Employment and Change in Control Agreements,” below.

Accounting and Tax Considerations

Deductibility of Executive Compensation

Section 162(m) of the Internal Revenue Code (the “Code”) imposes limitations on the deductibility for federal income tax purposes of compensation over \$1.0 million paid to certain executive officers in a taxable year. Compensation above \$1.0 million may only be deducted if it is “performance-based compensation” within the meaning of the Code. Income from options granted under the Company’s stock option plan would generally qualify for a deduction under these restrictions so long as the options are granted by a committee whose members are non-employee directors. Income from RSUs with time-based vesting will not qualify for a deduction under these restrictions. The Committee believes that at the present time it is unlikely that the salary and bonus compensation paid to any executive officer in a taxable year that is subject to the deduction limit will exceed \$1.0 million. However, it is possible that the vesting of RSUs in the future could cause a payment that is subject to the deduction limit. The Committee has established a policy for determining the forms of incentive compensation awarded to its executive officers that qualify as “performance-based compensation,” namely achievement of corporate goals and individual objectives. The Committee intends to continue to evaluate the effects of the Code and any U.S. Treasury regulations and the advisability of qualifying its executive compensation for deductibility of such compensation. The Committee’s policy is to qualify its executive compensation for deductibility under applicable tax laws to the extent practicable.

Taxation of “Parachute” Payments and Deferred Compensation

Section 280G and related Code sections provide that executive officers and directors who hold significant stockholder interests and certain other service providers could be subject to significant additional taxes if they receive payments or benefits in connection with a change in control of the Company that exceed certain limits, and that the Company or its successor could lose a deduction on the amounts subject to the additional tax. The Company has not provided any executive officer with a gross-up or other reimbursement for tax amounts the executive might pay pursuant to Section 280G.

Section 409A of the Code also imposes additional significant taxes in the event that an executive officer, director or service provider receives “deferred compensation” that does not meet the requirements of Section 409A. To assist in the avoidance of additional tax under Section 409A, the Company has structured its NQDC Plan and equity awards in a manner intended to comply with the applicable Section 409A requirements.

Accounting for Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with FASB ASC Topic 718. This authoritative guidance requires the Company to measure the fair value of all stock-based awards, including stock options and RSUs on the date of grant and to recognize the related stock-based compensation expense over the requisite service period, which is generally the vesting period. In 2005, the Company adopted the 2005 Equity Incentive Plan, in part to give it the flexibility to grant such other forms of equity-based compensation to enable it to control compensation expense, as necessary. For more information regarding the Company's accounting for stock-based compensation refer to Note 12 and Note 13 to the Company's consolidated financial statements included in the Company's 2009 Annual Report on Form 10-K for the year ended December 31, 2009 (the "2009 Annual Report on Form 10-K").

Assessment of Compensation and Risk

The Company's compensation programs are intended to reward its employees for strong performance over the long-term, with consideration for near-term actions and results that strengthen the Company. -The Company believes that although a larger portion of the total target compensation for its executive officers is performance-based, the executive compensation programs do not encourage excessive and unnecessary risk-taking. The design of these compensation programs is intended to encourage the executive officers to remain focused on both the short- and long-term operational and financial goals of the Company. For 2009 and 2010, the Company has very limited incentive compensation programs for its executive officers other than stock option grants, a typical incentive tool in the semiconductor industry.

EXECUTIVE COMPENSATION

Summary Compensation Table for the Years Ended December 31, 2009, 2008 and 2007

The following table presents information for the years ended December 31, 2009, 2008 and 2007 regarding the compensation paid to the Company's CEO and each of the Company's other executive officers:

Name and Title	Year	Salary	Bonus	Stock Awards (4)	Option Awards (5)	Non-Equity Incentive Plan Compensation (6)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (7)	All Other Compensation (7)	Total
David L. Dutton	2009	\$ 392,922	(1)	—	\$ 76,896	—	—	\$ 1,599	\$ 471,417
<i>Chief Executive Officer,</i>	2008	\$ 450,000	—	\$ 183,520	\$ 441,885	—	—	\$ 4,230	\$ 1,079,635
<i>President and Director</i>	2007	\$ 450,000	—	\$ 127,019	\$ 707,250	\$ 1,042	—	\$ 3,529	\$ 1,288,840
Andy Moring (8)	2009	\$ 247,377	(2)	—	\$ 26,059	—	—	\$ 4,772	\$ 278,208
<i>Chief Financial Officer,</i>	2008	\$ 275,532	—	\$ 7,516	\$ 181,948	—	—	\$ 13,053	\$ 478,049
<i>Secretary, Executive</i>	2007	—	—	—	—	—	—	—	—
<i>Vice-President - Finance</i>									
Nigel Wenden (9)	2009	\$ 161,473	—	—	\$ 11,748	—	—	\$ 219,347	\$ 392,568
<i>Senior Vice-President -</i>	2008	\$ 117,115	\$ 100,000	(3)	\$ 205,310	—	—	\$ 3,415	\$ 425,840
<i>Global Business Operations</i>	2007	—	—	—	—	—	—	—	—

- (1) Mr. Dutton's base salary of \$450,000 was reduced in 2009 as a result of a 10 percent voluntary salary reduction as well as the impact of the Company's mandatory furloughs. Both of these actions were in connection with the Company's cost-reduction measures in 2009.
- (2) Mr. Moring's salary of \$295,000 was reduced in 2009 as a result of the Company's mandatory furloughs.
- (3) Mr. Wenden received a hire-on bonus in August 2008.
- (4) Represents the grant date fair value of RSUs, as calculated in accordance with FASB ASC Topic 718.
- (5) Represents the grant date fair value of stock option awards, as calculated in accordance with FASB ASC Topic 718. The Company uses the Black-Scholes option pricing model to measure the fair value of stock options. For more information regarding the assumptions used in determining grant date fair value refer to Note 13 to the Company's consolidated financial statements included in its 2009 Annual Report on Form 10-K.
- (6) Non-Equity Compensation includes payments made under the QPR. In 2009 and 2008, Messrs. Dutton, Moring and Wenden did not receive payments under the QPR. In 2007, Mr. Dutton received \$1,042 under the QPR.
- (7) All Other Compensation includes the Company's matching contribution under the 401(k) plan, the intrinsic value realized by participation in the Company's ESPP plan, the value of excess group life policies and severance payments.
- (8) Mr. Moring was appointed Chief Financial Officer, Executive Vice-President – Finance effective June 12, 2008. Mr. Moring was not an executive officer in 2007.
- (9) Mr. Wenden resigned from the position of Senior Vice-President, Global Business Operations effective August 10, 2009. All Other Compensation for Mr. Wenden includes \$217,500 of severance payments made under the Separation Agreement in 2009.

Stock option awards granted in 2009 to executive officers were granted under the Company's 2005 Equity Incentive Plan, with seven-year terms and four-year vesting period, at a rate of 25 percent after the initial year and 1/48th each month thereafter. The Company did not grant any RSUs in 2009.

Plan-based Awards Granted During the Year Ended December 31, 2009

The following table provides the specified information on plan-based awards made during the year ended December 31, 2009 to the persons named in the Summary Compensation Table:

Name and Title	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of	All Other Option Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Per Share	Grant Date Fair Value of Stock and Option Awards (3)
		Thres-hold (1)	Target (1)	Max-imum (1)	Thres-hold	Target	Max-imum	Units	Options		
David L. Dutton			\$ 450,000	\$ 900,000							
Chief Executive Officer,	02/09/09								150,000	\$ 0.76	\$ 64,080
President and Director	02/09/09								30,000 (2)	\$ 0.76	\$ 12,816
Andy Moring			\$ 174,000	\$ 348,000							
Chief Financial Officer,	02/09/09								45,000	\$ 0.76	\$ 19,224
Secretary, Executive Vice-President - Finance	02/09/09								16,000 (2)	\$ 0.76	\$ 6,835
Nigel Wenden (4)			\$ 116,000	\$ 232,000							
Senior Vice-President - Global Business Operations	02/09/09								12,500	\$ 0.76	\$ 5,340
	02/09/09								15,000 (2)	\$ 0.76	\$ 6,408

- (1) The Company suspended awards under its non-equity incentive plans (short-term cash bonus) for fiscal 2009 in light of the significant weakness in the semiconductor equipment industry and the resulting adverse effect on the Company's results from operations and financial condition. Depending on the Company's operating performance during 2010, the Committee will evaluate whether to reinstate awards under the non-equity incentive plans, as described above under the heading "Short Term Cash Bonus."
- (2) Consists of grants of the Special Retention Stock Options, in lieu of short-term cash bonuses, as described above under the heading "Short Term Cash Bonus."
- (3) Grant date fair value is measured in accordance with FASB ASC Topic 718. The Company uses the Black-Scholes option pricing model to measure the fair value of stock options. For more information regarding the assumptions used in determining grant date fair value refer to Note 13 to the Company's consolidated financial statements included in its 2009 Annual Report on Form 10-K.
- (4) Mr. Wenden resigned from the position of Senior Vice-President, Global Business Operations effective August 10, 2009.

Equity Awards Outstanding at December 31, 2009

The following table provides information as of December 31, 2009 regarding unexercised options and unvested RSUs held by each of the Company's executive officers. A table legend describing the amounts included in each column is included below the table:

Name and Title	Option Awards					Stock Awards			
	I	II	III	IV	V	VI	VII	VIII	IX
David L. Dutton	40,000	—	—	\$ 10.44	01/02/11	—	—	—	—
Chief Executive Officer,	200,000	—	—	\$ 7.65	12/13/11	—	—	—	—
President and Director	60,000	—	—	\$ 6.95	01/22/12	—	—	—	—
	5,466	—	—	\$ 1.90	09/23/12	—	—	—	—
	40,000	—	—	\$ 3.08	11/08/12	—	—	—	—
	6,383	—	—	\$ 2.35	01/15/13	—	—	—	—
	80,000	—	—	\$ 2.23	04/10/13	—	—	—	—
	1,705	—	—	\$ 8.80	09/09/13	—	—	—	—
	1,000	—	—	\$ 12.29	12/29/13	—	—	—	—
	626	—	—	\$ 12.00	03/01/14	—	—	—	—
	100,000	—	—	\$ 11.03	03/12/14	—	—	—	—
	100,000	—	—	\$ 9.25	03/08/15	—	—	—	—
	74,479	6,771 (1)	—	\$ 11.92	04/04/13	—	—	—	—
	88,540	36,460 (2)	—	\$ 8.81	02/05/14	—	—	—	—
	68,749	81,251 (3)	—	\$ 5.86	02/04/15	—	—	—	—
	—	150,000 (6)	—	\$ 0.76	02/09/16	—	—	—	—
	—	30,000 (7)	—	\$ 0.76	02/09/16	4,375 (8)	\$ 15,619	—	—
	—	—	—	—	—	4,375 (9)	\$ 15,619	—	—
	—	—	—	—	—	30,000 (10)	\$ 107,100	—	—
	—	—	—	—	—	—	—	66,000 (11)	\$ 235,620
Andy Moring									
Chief Financial Officer, Secretary,	46,979	8,021 (4)	—	\$ 8.29	07/17/13	—	—	—	—
Executive Vice-President - Finance	6,197	2,553 (2)	—	\$ 8.81	02/05/14	—	—	—	—
	9,165	10,835 (3)	—	\$ 5.86	02/04/15	—	—	—	—
	18,750	31,250 (5)	—	\$ 4.98	06/27/15	—	—	—	—
	—	45,000 (6)	—	\$ 0.76	02/09/16	407 (9)	\$ 1,453	—	—
	—	16,000 (7)	—	\$ 0.76	02/09/16	2,625 (10)	\$ 9,371	—	—
	—	—	—	—	—	—	—	37,000 (11)	\$ 132,090

Legend

Option Awards

- I Number of securities underlying unexercised options which are vested and exercisable
- II Number of securities underlying unexercised options which are unvested
- III Equity incentive plan awards: number of securities underlying unexercised unearned options
- IV Option Exercise Price
- V Option Expiration Date

Stock Awards

- VI Number of time-based RSUs that have not vested
- VII Market value of time-based RSUs that have not vested as of December 31, 2009
- VIII Equity incentive plan awards: number of unearned performance-based RSUs that have not vested
- IX Equity incentive plan awards: market or payout value of unearned performance-based RSUs that have not vested as of December 31, 2009

- (1) For this option award, 25 percent of the initial grant vested on April 4, 2007, and 1/48th of the initial amount vests each month thereafter.
- (2) For this option award, 25 percent of the initial grant vested on February 5, 2008, and 1/48th of the initial amount vests each month thereafter.
- (3) For this option award, 25 percent of the initial grant vested on February 4, 2009, and 1/48th of the initial amount vests each month thereafter.
- (4) For this option award, 25 percent of the initial grant vested on July 17, 2007, and 1/48th of the initial amount vests each month thereafter.
- (5) For this option award, 25 percent of the initial grant vested on June 27, 2009, and 1/48th of the initial amount vests each month thereafter.
- (6) For this option award, 25 percent of the initial grant vested on February 9, 2010, and 1/48th of the initial amount vests each month thereafter.
- (7) For this option award, 50 percent vested on February 9, 2010 and 1/24th of the initial amount vests each month thereafter.
- (8) For these time-based RSUs, 25 percent of the initial grant vested on May 1, 2007, and 1/16th of the initial amount vests each quarter thereafter.

- (9) For these time-based RSUs, 25 percent of the initial grant vested on February 5, 2008, and 1/16th of the initial amount vests each quarter thereafter.
- (10) For these time-based RSUs, 25 percent of the initial grant vested on February 4, 2009, and 1/4th of the initial amount vests each year thereafter.
- (11) In March 2008, the Committee approved a special grant of performance-based RSUs to certain executives and other key employees. Due to the severe weakness in the semiconductor equipment market, the Company believes that the revenue goals as stipulated in the Growth Plan will not be met by 2011. For this performance-based RSU award, the vesting is based on the achievement of specific revenue and operating profit margin targets.

Equity Awards Exercised or Vested During the Year Ended December 31, 2009

The following table provides the specified information on exercises of options to purchase common stock and RSUs that vested during the year ended December 31, 2009 with respect to the executive officers:

Name and Title	Option Awards		Stock Awards	
	Number of Shares Acquired	Value Realized	Number of Shares Acquired	Value Realized
	On Exercise	On Exercise	On Vesting	On Vesting (1)
David L. Dutton <i>Chief Executive Officer, President and Director</i>	—	—	22,250	\$ 26,149
Andy Moring <i>Chief Financial Officer, Secretary, Executive Vice-President - Finance</i>	—	—	1,200	\$ 1,212
Nigel Wenden (2) <i>Senior Vice-President - Global Business Operations</i>	—	—	—	—

- (1) All stock awards that vested in 2009 were time-based RSUs. The value realized on vesting was determined by multiplying the number of such RSUs by the per-share closing price of the Company's common stock on the vesting date.
- (2) Mr. Wenden resigned from the position of Senior Vice-President, Global Business Operations effective August 10, 2009.

Non-Qualified Deferred Compensation

Under the deferred compensation plan, the Company provides eligible employees and non-employee members of its Board of Directors who participate in the plan ("Participants") the opportunity to defer a specified percentage of their base salary or retainer fees for participation on the Company's Board and Board Committees. In addition, the Company's Board of Directors may make discretionary contributions to the accounts of one or more Participants. In 2009, there were no contributions to the deferred compensation plan by the executive officers, and there were no discretionary contributions made by the Board of Directors.

Employment Contracts, Termination of Employment and Change in Control Arrangements

The Company has entered into a Severance and Executive Change in Control Agreement with Mr. Dutton, the Company's CEO, and has also entered into Executive Change of Control Agreements with Mr. Moring, CFO (collectively, these agreements are the "Severance Agreements"). Each Severance Agreement provides that severance benefits become payable to the executive upon the occurrence of certain types of severance events. The amount of compensation payable to each such executive upon the occurrence of each type of severance event is listed in the tables below, and is calculated assuming that the applicable event occurred on December 31, 2009:

Name and Title	Type of Severance Event (1)	Continuation of Salary Benefit	Annual Target Bonus Award	Continuation of Insurance Benefit	Accelerated Vesting of Stock Options (2)	Accelerated Vesting of Restricted Stock Units (3)
David L. Dutton	I.	\$ 900,000	\$ 450,000	\$ 39,644	\$ 505,800	\$ 138,338
<i>Chief Executive Officer,</i>	II.	\$ 900,000	\$ 450,000	\$ 39,644	\$ 505,800	\$ 138,338
<i>President and Director</i>	III.	\$ 450,000	—	\$ 19,822	—	—
Andy Moring	I.	\$ 290,000	\$ 174,000	\$ 18,811	\$ 171,410	\$ 10,824
<i>Chief Operating Officer, Secretary,</i>	II.	\$ 290,000	\$ 174,000	\$ 18,811	\$ 171,410	\$ 10,824
<i>Executive Vice-President - Finance</i>						

- (1) The Severance Agreements with the CEO and CFO identify two types of events that would trigger the benefits described above. In addition to the two identified types of events, a third type is defined for the CEO. Each event and the material consequences thereof under the Severance Agreements are further described below.
- (2) The value of the unvested and accelerated stock options is the difference between the exercise price of the option and \$3.57 per share, the closing price of the Company's common stock on December 31, 2009.
- (3) The value of the unvested and accelerated time-based RSUs is based on \$3.57, the closing price of the Company's common stock on December 31, 2009.

I. In the event that, within 12 months following a "Change in Control" of the Company (described below), any of the executive officers is terminated by the Company without "good cause" (defined as (i) performance of any act or failure to perform any act in bad faith and to the detriment of the Company, (ii) dishonesty, material breach of any agreement with the Company, or intentional misconduct, or (iii) commission of a crime involving dishonesty, breach of trust or physical or emotional harm to any person), then, upon signing a general release, the CEO is entitled to receive two times his annual salary, his annual target bonus, full vesting of all stock options and RSUs outstanding, and full medical and dental insurance benefits for a period of two years. The CFO, upon signing a general release, is entitled to receive one year's annual salary, his annual target bonus, full vesting of all stock options and RSUs outstanding, and full medical and dental insurance benefits for a period of one year.

II. In the event that, within 12 months following a "Change in Control" of the Company, any of the executive officers terminates his employment with the Company for "good reason" (defined as (i) a significant reduction by the Company in the executive's annual base salary, (ii) the failure of the Company to obtain an agreement from any successor to the Company, or purchaser of all or substantially all of the Company's assets, to assume the Agreement, (iii) the assignment of the executive to duties which reflect a material adverse change in authority, responsibility or status with the Company or any successor, or (iv) the Company requiring the executive to reside or be based at a location 50 miles or more from the location where the executive was based immediately prior to the Change in Control), then, upon signing a general release, the CEO is entitled to receive two times his annual salary, his annual target bonus, full vesting of all stock options and RSUs outstanding, and full medical and dental insurance benefits for a period of two years. The CFO, upon signing a general release, is entitled to receive one year's annual salary, his annual target bonus, full vesting of all stock options and RSUs outstanding, and full medical and dental insurance benefits for a period of one year.

III. In the event the Company terminates the CEO without good cause, and without a Change in Control, the CEO, is entitled to receive one year's salary, and full medical and dental insurance benefits for a period of one year.

If any part of the benefits under a Severance Agreement is determined by the Company's accountants to be an excess parachute payment under Section 280G of the Internal Revenue Code, then at the executive's option, the payment will be reduced to the minimum extent necessary to have no excess parachute payment.

"Change of Control" is defined as (i) the direct or indirect sale or exchange in a single or series of related transactions by the shareholders of the Company of more than 50 percent of the voting stock of the Company, (ii) a merger or consolidation in which the Company is a party, or (iii) the sale, exchange, or transfer of all or substantially all of the assets of the Company; wherein the shareholders of the Company immediately before the transaction do not retain immediately after the transaction, ownership of more than 50 percent of the total combined voting power of the outstanding voting stock of the Company or the surviving corporation.

Pursuant to the Company's 2005 Equity Incentive Plan, in the event that a Change in Control of the Company, as defined therein, occurs and the acquiring corporation does not assume or substitute new options for outstanding options granted under the 2005 Equity Incentive Plan, any unexercised and unvested portions of the outstanding options will become immediately exercisable and vested in full as of the date of the Change in Control. Any option or portion thereof that is neither assumed nor substituted with new options by the acquiring corporation nor exercised as of the date of the Change in Control will terminate and cease to be outstanding effective as of the date of the Change in Control.

Pursuant to the Company's 1994 Employee Stock Purchase Plan, as amended, in the event of a proposed sale of all or substantially all of the Company's assets, or a merger or consolidation of the Company, then in the sole discretion of the plan administrator, (i) each purchase option granted under the 1994 Employee Stock Purchase Plan shall be assumed or an equivalent purchase option shall be substituted by the successor corporation, (ii) all outstanding purchase options shall be deemed exercisable on a date set by the administrator that is on or before the date of consummation of such merger, consolidation or sale or (iii) all outstanding purchase options shall terminate and the accumulated payroll deductions shall be returned to the participants.

Pension Benefits

None of the Company's executive officers are covered by a pension plan or other similar benefit plan that provides for payments or other benefits at, following, or in connection with retirement.

CODE OF ETHICS

The Board of Directors of the Company has approved a Code of Ethics and Business Conduct that applies to all employees, including the Company's Chief Executive Officer, President and Director, and Chief Financial Officer, Executive Vice-President - Finance. A copy of the Code of Ethics and Business Conduct can be found posted on the Company's website (<http://www.mattson.com>). To the extent permitted, the Company intends to disclose any future amendments to its Code of Ethics and Business Conduct by posting the changed version on the same website.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's officers and directors, and persons who own more than ten percent of a registered class of the Company's equity securities, to file reports of ownership and changes in ownership with the Securities and Exchange Commission. Officers, directors and greater than ten percent shareholders are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms filed by such persons.

To the Company's knowledge, based solely on review of the copies of such reports furnished to the Company and written representation from certain reporting persons that no other reports were required, the Company believes that during 2009, its executive officers, directors and ten percent stockholders complied with all Section 16(a) filing requirements.

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth certain information, as of December 31, 2009, concerning shares of the Company's common stock authorized for issuance under all of the Company's equity compensation plans:

	Number of securities to be issued upon exercise of outstanding options (a)	Weighted-average exercise price of outstanding options (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	5,033,000	\$ 6.62	6,639,000
Equity compensation plans not approved by security holders	-	-	-
	<u>5,033,000</u>	<u>\$ 6.62</u>	<u>6,639,000</u>

REPORT OF THE COMPENSATION COMMITTEE ON EXECUTIVE COMPENSATION

The Committee, which is comprised of three independent directors, recommends to the Company's Board of Directors compensation of Company directors and officers and oversees the administration of the Company's 2005 Equity Incentive Plan.

Management of the Company has prepared the Compensation Discussion and Analysis as required by Item 402(b) of Regulation S-K, and the Committee has reviewed and discussed it with management. Based on this review and discussion, the Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Proxy Statement for the Company's 2010 Meeting of Stockholders.

COMPENSATION COMMITTEE

Dr. Hans-Georg Betz, Chairman
Kenneth Kannappan
Kenneth G. Smith

April 9, 2010

PROPOSAL ONE

ELECTION OF DIRECTORS

The Company has a classified Board of Directors consisting of two Class I directors (Kenneth Kannappan and John Bolger), three Class II directors (Dr. Hans-Georg Betz, David Dutton and Kenneth Smith) and two Class III directors (Richard E. Dyck and Shigeru Nakayama). Dr. Jochen Melchior resigned from the Board of Directors effective August 10, 2009, resulting in a vacancy. On January 25, 2010, the Board of Directors appointed Richard E. Dyck to fill the vacancy created by the resignation of Dr Melchior, as a Class III director. Class I, II and III directors will serve until the Annual Meetings of Stockholders to be held in 2010, 2011, and 2012, respectively, and until their respective successors are duly elected and qualified. At each Annual Meeting of Stockholders, directors are elected for a full term of three years to succeed those directors whose terms expire on the Annual Meeting date.

The term of the Class I directors will expire on the date of the upcoming Annual Meeting. Accordingly, two persons are to be elected to serve as Class I directors of the Board of Directors at the Meeting. The Board's nominees for election by the stockholders to those two positions are the current Class I members of the Board of Directors, Kenneth Kannappan and John Bolger. Unless otherwise directed by stockholders, the proxyholders will vote all shares represented by proxies held by them for the election of the Board's nominees. In the event that either Mr. Kannappan or Mr. Bolger becomes unavailable or unable to serve as a director of the Company prior to the voting, the proxyholders will refrain from voting for the unavailable nominee and will vote for a substitute nominee in the exercise of their best judgment.

Vote Required and Recommendation of the Board of Directors

If a quorum is present for voting at the Annual Meeting, the two nominees for Class I director receiving the highest number of votes will be elected as Class I directors. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum, but will have no effect on the vote.

The Board unanimously recommends a vote FOR the nominees listed herein.

The following table sets forth the Company's current directors, including the Class I nominees to be elected at this Meeting and information with respect to their ages as of December 31, 2009.

Name	Age	Title	Director Since
<i>Class I directors whose terms expire at the 2010 Annual Meeting of Stockholders:</i>			
Kenneth Kannappan	50	Director (Chairman)	July 1998
John C. Bolger	63	Director	December 2006
<i>Class II directors whose terms expire at the 2011 Annual Meeting of Stockholders:</i>			
<i>Nominees for reelection at the Annual Meeting:</i>			
Dr. Hans-Georg Betz	63	Director	January 2001
David L. Dutton	49	Director	December 2001
Kenneth G. Smith	60	Director	August 1994
<i>Class III directors whose terms expire at the 2012 Annual Meeting of Stockholders:</i>			
Richard E. Dyck (1)	65	Director	January 2010
Shigeru Nakayama	74	Director	May 1996

(1) Richard E. Dyck was appointed to the Company's Board of Directors on January 25, 2010 to fill the vacancy created by the resignation of Jochen Melchior on August 10, 2009.

Director Nomination and Qualification

The Nominating and Governance Committee is responsible for evaluating candidates for membership on the Board of Directors and making recommendations to the Board regarding candidates. In carrying out its function to nominate candidates for election to the Board, the Nominating and Governance Committee considers a mix of attributes, including technical industry experience, business expertise, regional and global knowledge and strength (especially in Asia, the location of many of the Company's customers), financial expertise, independence and diversity—diversity being broadly construed to mean a variety of opinions, perspectives and backgrounds, such as gender, race and ethnicity differences, as well as other differentiating business experiences and characteristics. The result is a Board of Directors for Mattson composed of independent directors serving a full spectrum of the Company's needs. The Nominating and Governance Committee will consider director candidates recommended by stockholders of the Company, based on the same criteria that would apply to candidates identified by a Committee member. There are no specific, minimum qualifications that have been formulated by the Nominating and Governance Committee that must be met by a recommended nominee. The Nominating and Governance Committee believes that it is desirable for a majority of the Company's directors to satisfy the definition of independence for purposes of the applicable NASDAQ listing standards, and for at least one director to possess the attributes necessary to be an "audit committee financial expert."

The information below sets forth certain background information regarding the Company's directors:

- *Kenneth Kannappan* has served as a director since July 1998 and Chairman since June 2008. Mr. Kannappan has served as the President and Chief Executive Officer of Plantronics, Inc., a telecommunications equipment manufacturer, since January 1999. From 1995 to 1998, Mr. Kannappan held various executive positions at Plantronics, Inc. From 1985 to 1995, Mr. Kannappan was Senior Vice President of Kidder, Peabody & Co. Incorporated, an investment banking company. Mr. Kannappan currently serves as a member of the board of directors of Plantronics, Inc. Also, during the last five years, Mr. Kannappan has served as a director and Chairman of the board of directors of Integrated Device Technology, Inc. Through Mr. Kannappan's experience as the Chief Executive Officer of Plantronics, Inc., he is able to contribute valuable insights regarding the management of a technology-based business, which has led the Board of Directors to conclude that he should serve as a director.
- *Dr. Hans-Georg Betz* has served as a director since January 2001. Dr. Betz also serves as Chairman of the Company's Compensation Committee. Since August 2005, Dr. Betz has served as President and Chief Executive Officer of Advanced Energy Industries, Inc. Dr. Betz served as Chief Executive Officer of West STEAG Partners from August 2001 until August 2005, and as Chief Executive Officer of STEAG Electronic Systems AG from January 1996 to July 2001. During the last five years, Dr. Betz has served as Chairman of the Management Board of STEAG Electronic Systems AG; as a member of the Management Board of STEAG AG and Fraunhofer-Verbund Mikroelektronik; and as a director of STEAG HamaTech AG. Also, during the last five years, Dr. Betz has served as a director of GuideTech, Inc., Photodigm, Inc., Lambda Crossing, Tevet, InfoCyclone, Advanced Energy and Envara. Dr. Betz's experience as the chief executive of several high-tech companies and his experience in the semiconductor equipment industry make him a valuable member of the Board and have led the Board of Directors to conclude that he should serve as a director.
- *John C. Bolger* has served as a director since December 2006. Mr. Bolger also serves as Chairman of the Company's Audit Committee. Mr. Bolger is a retired Vice President of Finance and Administration of Cisco Systems, Inc., a manufacturer of computer networking systems. Mr. Bolger is currently a private investor and has served as a director and as a member of the Compensation Committee of Cogent, Inc. since 2004. Also, during the last five years, Mr. Bolger has served as a director of Wind River Systems, Inc.; as a director of Mission West Properties, Inc; and as a director of Integrated Device Technology, Inc. Mr. Bolger received a B.A. from the University of Massachusetts in 1969 and an M.B.A. from Harvard University in 1971. He is a Certified Public Accountant. Mr. Bolger's financial expertise and the Board's determination that he qualifies as an Audit Committee "financial expert" make him a valuable advisor to the Board and contribute to his effectiveness as Chairman of the Audit Committee, which has led the Board of Directors to conclude that he should serve as a director.

- *David L. Dutton* has served as Mattson's Chief Executive Officer and Director since December 2001. Mr. Dutton also served as Mattson's President from October 2001 to June 2005 and from November 2007 to the present. From 1998 to 2000, Mr. Dutton served as Executive Vice President and Chief Operating Officer of Mattson. Mr. Dutton previously served as President of the Plasma Products Division. Mr. Dutton joined Mattson in 1994 as General Manager of the Strip/Plasma Etch division. Mr. Dutton started his career in the semiconductor industry in 1984 and held engineering management positions for wafer processing and development at Intel Corporation and Maxim Integrated Products, Inc. Mr. Dutton serves on the Board of Directors for the Bay Area Council. Mr. Dutton's long tenure with the Company, including his day to day leadership of the Company in his role of CEO, along with his deep industry expertise, allow him to advise the Board with respect to the operational and strategic challenges facing the Company, leading the Board to conclude that he should serve as a director.
- *Richard E. Dyck* has served as a director since January 2010. Mr. Dyck is the founder and President of TGK, K.K., a supplier of connection systems for the testing of semiconductors, since 2009. Mr. Dyck was the founder and President of TCS Japan K.K. and East Asia Connector Services, Ltd (Shanghai), manufacturers of high-speed connection systems, until their acquisitions in 2009. Mr. Dyck was the Vice-President and an Executive Officer of Teradyne, Inc., a semiconductor test equipment company, and the Chairman of Teradyne, Japan from 1982 until 1999. During the last five years, Mr. Dyck has served as a director and chairman of Alphana Technology; as a director of Avanstrate; as a member of the Board of Trustees of the Sasakawa Peace foundation; and as a member of the Advisory Committee of the Japan External Trade Organization. Mr. Dyck's extensive experience working in Japan and throughout Asia allows him to contribute valuable insights regarding the Company's extensive activity and customer base in that region and has led the Board to conclude that he should serve as a director.
- *Shigeru Nakayama* has served as a director since May 1996. Since 1996, Mr. Nakayama has been a business consultant to Semiconductor Equipment and Materials International, an international association of semiconductor equipment manufacturers and materials suppliers. From 1984 to 1994, Mr. Nakayama was the President of SEMI Japan, a member of Semiconductor Equipment and Materials International. Mr. Nakayama's experience with SEMI, and his deep understanding of the semiconductor industry allow him to contribute an important international perspective regarding the Company's challenges and opportunities, leading the Board to conclude that he should serve as a director.
- *Kenneth G. Smith* has served as a director since August 1994. Mr. Smith is a retired President, Chief Operating Officer and a Director of WaferTech, a semiconductor manufacturer, from May 1996 until April 2000. From 1991 to 1995, Mr. Smith was Vice President of Operations at Micron Semiconductor, Inc., a semiconductor manufacturer. Mr. Smith's experience in the semiconductor industry make him an effective advisor to the Board regarding strategic and operational issues, which has led the Board to conclude that he should serve as a director.

Any stockholder who wishes to recommend a candidate for nomination as a director should submit the recommendation in writing to the Company at its principal executive offices, to the attention of the Nominating and Governance Committee, not later than 120 calendar days before the one-year anniversary of the Company's mailing of its prior year's Proxy Statement to stockholders. A stockholder recommending a person as a director candidate may be requested by the Nominating and Governance Committee to provide further information for purposes of evaluating the candidate and for the purpose of providing appropriate disclosure to stockholders.

Board Leadership Structure

Since June 2008, Mr. Kannappan, who is independent in accordance with the applicable NASDAQ listing standards, has served as Chairman of the Board of Directors. The Chairman presides at meetings of the Company's stockholders and directors and leads the Board in fulfilling its responsibilities. The Company believes that the current leadership structure of the Board is appropriate at the present time and allows the Board to fulfill its duties effectively and efficiently based on Mattson's current needs.

Board Meetings and Committees

During the year ended December 31, 2009, the Board of Directors held six meetings, with each director attending at least 75 percent of the meetings of the Board of Directors and at least 75 percent of the meetings of each of the Committees on which he served.

The Board of Directors of the Company has a standing Audit Committee, Compensation Committee and a Nominating and Governance Committee, each of which has a written charter. The Committee charters can be viewed at the Company's web site at <http://www.mattson.com>.

For a description of the principal functions of the Audit Committee, see "Report of the Audit Committee." During 2009, the Audit Committee consisted of Mr. Bolger, Mr. Kannappan and Mr. Smith, each of whom is independent for purposes of the NASDAQ listing standards. The Audit Committee held seven meetings during 2009.

The principal functions of the Compensation Committee are to set the salary and bonus earned by the CEO and other executive officers of the Company; to establish the compensation of directors for service on the Board and Board Committees of the Company; to review all components of executive officer and director compensation for consistency with the Committee's compensation philosophy as in effect from time to time; to review compensation policies applicable to the entire Company; to oversee the administration of the Company's stock option and stock purchase plans; and to perform such other duties regarding compensation for employees, consultants and directors as the Board may delegate from time to time. See "Compensation Discussion and Analysis – Corporate Governance." During 2009, the Committee consisted of Dr. Betz, Mr. Kannappan and Mr. Smith, each of whom is independent for purposes of the NASDAQ listing standards. The Compensation Committee held two meetings during 2009.

The principal functions of the Nominating and Governance Committee are to identify individuals qualified to become Board members; select, or recommend to the Board, director nominees for each election of directors; develop and recommend to the Board criteria for selecting qualified director candidates; consider committee member qualifications, appointment and removal; and recommend corporate governance principles applicable to the Company, and provide oversight in the evaluation of the Board and each committee. During 2009, the Nominating and Governance Committee consisted of Mr. Nakayama, Dr. Betz, and Mr. Bolger. Each of the members of the Nominating and Governance Committee is independent for purposes of the NASDAQ listing standards. The Nominating and Governance Committee held two meetings during 2009.

Director Attendance at Annual Stockholder Meeting

The Company typically schedules a Board meeting in conjunction with the Annual Meeting of Stockholders. The Company expects, but does not require, that all directors will attend, absent a valid reason, such as a schedule conflict. Last year, all seven members of the Board of Directors attended the Annual Meeting.

Risk Oversight

The Board of Directors, through its committees, is actively involved in overseeing risk management for the Company. The Audit Committee, among other things, reviews the Company's financial risks and reviews the Company's policies with respect to risk assessment and risk management and internal controls that management has implemented to monitor or control such risks.

The Compensation Committee oversees risk management as it relates to the Company's compensation plans, policies and practices in connection with structuring its executive compensation programs and reviewing its incentive compensation programs for other employees, including evaluating whether the compensation programs may create an environment and/or incentives for employees to take excessive or inappropriate risks which could have a material adverse effect on the Company.

The Nominating and Corporate Governance Committee oversees the Company's identification, categorization and evaluation of enterprise risks, as well as developing risk mitigation and response strategies.

Compensation of Directors

Compensation for non-employee directors is a mix of cash and equity-based compensation to reward directors for a year of service in fulfilling their responsibilities. The equity-based component for non-employee directors' compensation is intended to align their long-term interests with those of the Company's stockholders. The Company does not compensate its management director (David Dutton, Chief Executive Officer) for Board service in addition to his regular employee compensation. Each year, the Committee evaluates the appropriate level and form of compensation for non-employee directors and recommends changes, if any, to the Board. The following table provides compensation information for the year ended December 31, 2009 for each non-employee member of the Company's Board of Directors:

Name	Fees Earned or Paid in Cash	Stock Awards	Option Awards (1)	Non-Equity Incentive Plan Compensation	Change in	All	Total
					Pension Value and Nonqualified Deferred Compensation Earnings	Other Compensation	
Kenneth Kannappan	\$ 63,000	—	\$ 15,392	—	—	—	\$ 78,392
John C. Bolger	\$ 54,000	—	\$ 15,392	—	—	—	\$ 69,392
Dr. Hans-Georg Betz	\$ 51,300	—	\$ 15,392	—	—	—	\$ 66,692
Dr. Jochen A. Melchior (2)	\$ 45,000	—	\$ 12,313	—	—	—	\$ 57,313
Shigeru Nakayama	\$ 47,700	—	\$ 15,392	—	—	—	\$ 63,092
Kenneth G. Smith	\$ 47,700	—	\$ 15,392	—	—	—	\$ 63,092

- (1) Represents the grant date fair value of stock option awards, as calculated in accordance with FASB ASC Topic 718. The Company uses the Black-Scholes option pricing model to measure the fair value of stock options. For more information regarding the assumptions used in determining grant date fair value refer to Note 13 to the Company's consolidated financial statements included in its 2009 Annual Report on Form 10-K.
- (2) Dr. Jochen A. Melchior resigned from the Board of Directors of Mattson Technology, Inc. on August 10, 2009.

For 2009, as a cost reduction measure, the Board of Directors agreed to take a ten percent reduction in compensation. As a result, for 2009, the Chairman (Mr. Kannappan) received an annual retainer of \$63,000, the Chairman of the Audit Committee (Mr. Bolger) received an annual retainer of \$54,000, the Chairman of the Compensation Committee (Dr. Betz) received an annual retainer of \$51,300, the Chairman of the Nominating and Governance Committee (Mr. Nakayama) received an annual retainer of \$47,700 and the other non-employee directors, consisting of Mr. Smith and Mr. Melchior received annual retainers of \$47,700 and \$45,000, respectively. In addition, for 2009, each non-employee director who continuously served on the Board for six months as of the date of the Annual Meeting of Stockholders was granted stock options to purchase 16,000 shares or, in the case of the Chairman of the Board or the chairs of committees, an option to purchase 20,000 shares, on the date of the 2009 Annual Meeting of Stockholders.

For 2010, compensation for non-employee directors was returned to its normal level, after being reduced in 2009 in connection with the Company's cost-reduction measures. For 2010, the Chairman (Mr. Kannappan) will receive an annual retainer of \$70,000, the Chairman of the Audit Committee (Mr. Bolger) will receive an annual retainer of \$60,000, the Chairman of the Compensation Committee (Dr. Betz) will receive an annual retainer of \$57,000, the Chairman of the Nominating and Governance Committee (Mr. Nakayama) will receive an annual retainer of \$53,000 and the other non-employee directors, consisting of Mr. Smith and Mr. Dyck will receive annual retainers of \$53,000 and \$50,000, respectively. For 2010, each non-employee director who continuously serves on the Board for six months as of the date of the Annual Meeting of Stockholders will be granted an option to purchase 16,000 shares or, in the case of the Chairman of the Board or the chairs of committees, an option to purchase 20,000 shares, on the date of the 2010 Annual Meeting of Stockholders.

The Company grants stock options to non-employee directors as follows:

- I. Upon the initial election or appointment of an individual to the Board of Directors, the non-employee director is granted an option to purchase shares of the Company's common stock, with the number of shares determined and approved by the Board on the date of appointment or election to the Board (vesting commencement date).
- II. Each non-employee director who has continuously served on the Board for six months as of the date of the Annual Meeting of Stockholders is granted an option to purchase 16,000 shares or, in the case of the Chairman of the Board or the chairs of committees, an option to purchase 20,000 shares, on the date of each Annual Meeting of Stockholders.

Options granted to a non-employee director upon his/her initial election vest (i) the first 4/10th when the non-employee director completes 12 months of continuous service on the Board, (ii) an additional 3/10th when the non-employee director completes 24 months of continuous service on the Board from the vesting commencement date, (iii) an additional 2/10th when the non-employee director completes 36 months of continuous service on the Board from the vesting commencement date, and (iv) the last 1/10th of the shares when the non-employee director completes 48 months of continuous service on the Board from the vesting commencement date.

Options granted to a non-employee director on the date of the Annual Meeting of Stockholders vest (i) 25 percent when the non-employee director completes 12 months of continuous service on the Board (ii) an additional 25 percent each 12 months of continuous service thereafter, so as to be 100 percent vested on the fourth anniversary of the vesting commencement date, subject to the non-employee director's continued service on the Board.

Option award amounts are presented based on their grant date fair market value, which the Company measures in accordance with FASB ASC Topic 718. For more information regarding the assumptions used in determining grant date fair value under FASB ASC Topic 718, refer to the notes to the Company's consolidated financial statements included in the Company's 2009 Annual Report on Form 10-K.

Stockholder Communications with the Directors

Any stockholder wishing to communicate with the full Board of Directors or any individual directors regarding the Company may write to the director, c/o Andy Moring, Secretary, Mattson Technology, Inc., 47131 Bayside Parkway, Fremont, California 94538. Communications from stockholders to one or more directors will be collected and organized by the Company's Secretary under procedures approved by the independent directors. The Secretary will forward all communications to the Chairman of the Board of Directors, or to the identified director(s), as soon as practicable, although communications that are abusive, in bad taste or that present safety or security concerns may be handled differently. The Secretary may, at his discretion, not forward correspondence if it is primarily commercial in nature or if it relates to an improper or irrelevant topic. If multiple communications are received on a similar topic, the Secretary may, at his discretion, forward only representative correspondence.

Director Independence, Certain Relationships and Related Transactions

Under applicable NASDAQ listing standards, a majority of the members of the Company's Board of Directors must qualify as "independent," as affirmatively determined by the Board. No director qualifies as independent unless the Board of Directors determines that the director has no direct or indirect material relationship with the Company. On an annual basis, each director and executive officer is obligated to complete a director and officer questionnaire which requires disclosure of any transactions with the Company in which the director or executive officer, or any member of his or her immediate family, have a direct or indirect material interest. The Company reviews its relationship with any entity employing a director or on which a director currently serves as a member of the Board of Directors. In addition, the Company uses the questionnaire to obtain information on legal proceedings or actions in which directors are involved or other matters involving directors, which may require disclosure.

The Board has determined that a majority of its members are “independent” within the meaning of the NASDAQ listing standards. Specifically, the following members of the Board have been determined to be independent: Dr. Betz, Mr. Bolger, Mr. Dyck, Mr. Kannappan, Mr. Nakayama and Mr. Smith.

During the year ended December 31, 2009 and subsequent to such date, there was no transaction or series of transactions, and there is no proposed transaction or series of transactions, to which the Company was or is a party in which the amount involved exceeded or exceeds \$120,000 and in which any director, executive officer, holder of more than five percent of the Company’s common stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest.

The Company has entered into indemnification agreements with certain of its directors in which the Company has agreed to indemnify such directors to the fullest extent allowable under Delaware law if any such director is made a party to any action or threatened with any action as a result of such person’s service or having served as an officer, director, employee or agent of the Company or having served, at the Company’s request, as an officer, director, employee or agent of another company.

Consistent with the requirements of the SEC, NASDAQ and general corporate “best practices” proposals, the Board of Directors reviews all relevant transactions or relationships between each director and the Company, senior management and the Company’s independent registered public accounting firm. During this review, the Board considers whether there are any transactions or relationships between directors or any of their immediate family members (or any entity of which a director or an immediate family member is an executive officer, general partner or significant equity holder) and members of the Company’s senior management or their affiliates. The Board consults with the Company’s corporate counsel to ensure that the Board’s determinations are consistent with all relevant securities and other laws and regulations regarding the definition of “independence,” including those set forth in pertinent NASDAQ listing standards, as in effect from time to time. Each member of the Compensation Committee and the Corporate Governance and Nominating Committee of the Board is independent within the meaning of the NASDAQ listing standards, and each member of the Audit Committee is independent under applicable NASDAQ listing standards and SEC rules.

Compensation Committee Interlocks and Insider Participation

During 2009, the Compensation Committee consisted of Dr. Betz, Mr. Kannappan and Mr. Smith. No interlocking relationship exists between any member of the Company’s Board of Directors or Compensation Committee and any member of the board of directors or compensation committee of any other company.

PROPOSAL TWO

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

The Audit Committee of the Board of Directors has selected PricewaterhouseCoopers LLP (“PwC”) as the Company’s independent registered public accountants for the year ending December 31, 2010. Representatives of PwC are expected to be present at the Meeting, and will have the opportunity to make a statement if they desire to do so and will be available to respond to appropriate questions.

Stockholder ratification of the selection of PwC as the Company’s independent registered public accountants is not required by the Company’s Bylaws or otherwise. The Company is submitting the selection of PwC to the stockholders for ratification as a matter of good corporate practice. In the event the stockholders fail to ratify the selection, the Audit Committee of the Board of Directors will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee at its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee determines that such a change could be in the best interest of the Company and its stockholders.

Vote Required and Recommendation of the Board of Directors

The affirmative vote of a majority of the votes present or represented by proxy and entitled to a vote at the Annual Meeting of Stockholders, at which a quorum representing a majority of all outstanding shares of common stock of the Company is present and voting, is required for approval of this proposal. Abstentions and broker non-votes will each be counted present for purposes of determining the presence of a quorum, but will not be counted as having been voted on this proposal.

The Board unanimously recommends a vote FOR the ratification of the appointment of PwC to serve as the Company’s independent registered public accountants for the year ending December 31, 2010.

Audit and Related Fees

The following table shows fees paid by the Company for professional services rendered by PwC for the years ended December 31, 2009 and 2008:

	<u>Fiscal 2009</u>	<u>Fiscal 2008</u>
Audit Fees	\$ 870,485	\$ 1,150,700
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees	—	—
Total Fees	<u>\$ 870,485</u>	<u>\$ 1,150,700</u>

Audit Fees represent professional services rendered for the audit of the Company’s consolidated financial statements included in the Company’s Annual Report on Form 10-K, review of the interim consolidated financial statements included in quarterly reports on Form 10-Q, audit and assessment of the Company’s internal controls over financial reporting and services that are normally provided by PwC in connection with statutory and regulatory filings or engagements.

Audit-Related Fees represent assurance and related services that are reasonably related to the performance of the audit or review of the Company’s consolidated financial statements and are not reported under “Audit Fees.” These services include accounting consultations in connection with attestation services that are not required by statute or regulation, and consultations concerning financial accounting and reporting standards.

Tax Fees represent professional services for Federal, state and international tax compliance, tax advice and tax planning.

All Other Fees represent services other than the services described above.

All of the services reflected in the table were pre-approved by the Audit Committee.

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 independent registered public accounting firm. These services may include audit services, audit-related services, tax services and other services. 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 accounting firm and management periodically report to the Audit Committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval, and the fees for the services performed to date. In addition, any audit and non-audit fees for newly proposed professional services that arise during the year, or changes to previously approved fees and work, are reviewed and approved in advance of commencement of such services by the Audit Committee at their regularly scheduled meetings throughout the year. Should a situation arise that requires approval between meetings, the Audit Committee has delegated authority to its Chairman to authorize such pre-approval and report on the same at the next regularly scheduled meeting.

REPORT OF THE AUDIT COMMITTEE

The Audit Committee of the Board of Directors is responsible for monitoring the integrity of the Company's consolidated financial statements, its system of internal controls and the independence and performance of its independent registered public accounting firm. The Audit Committee is also responsible for the selection of the Company's independent registered public accounting firm, and approves all professional services performed by the independent registered public accounting firm. The Audit Committee is composed of three independent, non-employee directors and operates under a written charter adopted and approved by the Board of Directors. The charter for the Audit Committee has been amended as of the date of this Proxy Statement and is available on the Company's website at <http://ir.mattson.com/governance.cfm>. The members of the Audit Committee at December 31, 2009 were John Bolger (Chairman), Kenneth Kannappan and Kenneth Smith. Each of the members of the Audit Committee is independent for purposes of the NASDAQ listing standards and the SEC rules as they apply to audit committee members. The Board has determined that John Bolger is an "audit committee financial expert" as defined by SEC rules.

Management is responsible for the financial reporting process, for establishing and maintaining adequate internal control over financial reporting, and for the preparation of consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. The independent registered public accounting firm has the responsibility to express an opinion on the financial statements and on internal control over financial reporting based on an audit conducted in accordance with the standards of the Public Company Accounting Oversight Board (U.S.). Our responsibility is to monitor and review these processes, as well as to review the independent audit plan and the reports of the independent registered public accounting firm. We rely on the information provided to us and on the representations made by management and the independent registered public accounting firm.

In this context, we held seven meetings during 2009. The meetings were designed, among other things, to facilitate and encourage communication among the Audit Committee, management and the Company's independent registered public accounting firm. PwC performed the audit of the Company's consolidated financial statements for 2009 as its independent registered public accounting firm. We discussed with the Company's management and PwC the overall scope of and plan for the 2009 audit before it was performed by PwC. We met with PwC to discuss the results of their examination. We have also selected PwC as the Company's independent registered public accounting firm for 2010.

We have reviewed and discussed with management and PwC the audited consolidated financial statements of the Company for the year ended December 31, 2009 contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2009. We also discussed with the Company's independent registered public accounting firm, 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).

The Company's independent registered public accounting firm also provided to us the written disclosures and a letter required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the audit committee concerning independence. We discussed with the independent registered public accounting firm their independence from the Company. When considering PwC's independence, we considered whether their provision of services to the Company beyond those rendered in connection with their audit and review of the Company's consolidated financial statements was compatible with maintaining their independence. We also reviewed and pre-approved, among other things, the fees paid to the independent registered public accounting firm for audit and non-audit services.

Based on our review and these meetings, discussions and reports, and subject to the limitations on our role and responsibilities referred to above and in the Audit Committee Charter, we recommended to the Board of Directors that the Company's audited consolidated financial statements for the year ended December 31, 2009 be included in the Company's Annual Report on Form 10-K.

April 9, 2010

AUDIT COMMITTEE

John Bolger, Chairman
Kenneth Kannappan
Kenneth Smith

STOCKHOLDER PROPOSALS TO BE PRESENTED AT NEXT ANNUAL MEETING

The Company has an advance notice provision under its bylaws for stockholder business to be presented at meetings of stockholders. Such provision states that in order for stockholder business to be properly brought before a meeting by a stockholder, such stockholder must have given timely notice thereof in writing to the Secretary of the Company. A stockholder proposal, to be timely, must be received at the Company's principal executive offices not less than 120 calendar days in advance of the one year anniversary of the date the Company's proxy statement was released to stockholders in connection with the previous year's Annual Meeting of Stockholders; except that (i) if no annual meeting was held in the previous year, (ii) if the date of the annual meeting has been changed by more than thirty calendar days from the date contemplated at the time of the previous year's proxy statement, or (iii) in the event of a special meeting, then notice must be received not later than the close of business on the tenth day following the day on which notice of the date of the meeting was mailed or public disclosure of the meeting date was made.

Proposals of stockholders intended to be presented at the next Annual Meeting of Stockholders of the Company (i) must be received by the Company at its offices no later than December 30, 2010, and (ii) if the proposal is intended to be included in the Company's Proxy Statement for that meeting, must satisfy the conditions established by the SEC applicable thereto.

TRANSACTION OF OTHER BUSINESS

At the date of this Proxy Statement, the Board of Directors knows of no other business that will be conducted at the 2010 Annual Meeting of Stockholders other than as described in this Proxy Statement. If any other matter or matters are properly brought before the meeting or any adjournment thereof, it is the intention of the persons named in the accompanying form of Proxy to vote the Proxy on such matters in accordance with their best judgment.

THE COMPANY'S STOCKHOLDERS ARE URGED TO PROMPTLY SUBMIT THEIR PROXY OR VOTING INSTRUCTIONS AS SOON AS POSSIBLE BY FOLLOWING THE INSTRUCTIONS IN THE NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIALS, WHICH WAS MAILED TO YOU ON OR ABOUT APRIL 20, 2010. IF YOU REQUEST PRINTED COPIES OF THE PROXY MATERIALS BY MAIL, YOU CAN ALSO VOTE BY MAIL.

By Order of the Board of Directors,



Andy Moring
Chief Financial Officer, Secretary

April 9, 2010

PROXY
MATTSON TECHNOLOGY, INC.
47131 Bayside Parkway, Fremont, California 94538

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints David Dutton and Andy Moring (the "Proxies"), and each of them, each with the power to appoint his substitute, and hereby authorizes each of them to represent and vote all of the shares of common stock of Mattson Technology, Inc. (the "Company") held of record by the undersigned on April 8, 2010, at the Annual Meeting of Stockholders to be held on June 7, 2010 or any adjournment or postponement thereof, as hereinafter specified upon the proposals listed below and as more particularly described in the Proxy Statement of the Company dated April 9, 2010, receipt of which is hereby acknowledged, and in their discretion upon such other matters as may properly come before the meeting.

1. To elect the following directors as Class I directors of the Company to hold office for a three-year term and until their successors are elected and qualified.

FOR all nominees listed below
(except as written to the contrary below)
Kenneth Kannappan
John C. Bolger

WITHHOLD AUTHORITY

To withhold authority to vote for any nominee, print that nominee's name in the space provided below:

2. To ratify the appointment of PricewaterhouseCoopers LLC as the Company's independent registered public accountants for the year ending December 31, 2010.

FOR

AGAINST

ABSTAIN

3. To transact such other business as may properly come before the meeting.

This Proxy when properly executed will be voted in the manner directed herein by the undersigned stockholder. If no direction is given, the Proxy will be voted FOR all nominees listed in Proposal 1 and FOR Proposal 2.

Please sign exactly as your name appears on your stock certificates. When shares are held by joint tenants, both should sign. When signing as an attorney, as executor, administrator, trustee or guardian, please give your full title. If a corporation, please sign in full corporate name, by President or other authorized officer. If a partnership, please sign in partnership name by authorized person.

Dated: _____, 2010

Signature

Signature if held jointly

WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING IN PERSON, YOU ARE URGED TO DATE, SIGN AND PROMPTLY RETURN THE ENCLOSED PROXY IN THE ENVELOPE PROVIDED TO ASSURE THAT YOUR SHARES ARE REPRESENTED AT THE MEETING. IF YOU ATTEND THE MEETING, YOU MAY VOTE IN PERSON IF YOU WISH TO DO SO EVEN THOUGH YOU HAVE SENT IN YOUR PROXY.