

SCHEDULE 14A INFORMATION

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

Filed by the Registrant

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

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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 3, 2008**

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 3, 2008, at 10:00 a.m. local time for the following purposes:

1. To elect three (3) Class II 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, 2008.
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 9, 2008 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.

In an effort to facilitate the voting process we are pleased to take advantage of new Securities and Exchange Commission rules that allow proxy materials to be furnished to shareholders on the Internet.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read "John R. Horn", is written over a horizontal line.

John R. Horn, Secretary

Fremont, California
April 16, 2008

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 was mailed to you on or about April 16, 2008. 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 3, 2008**

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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 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 3, 2008 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 rereceive printed copies of the proxy materials by mail, you can also vote by mail.

The date of this Proxy Statement is April 16, 2008, the approximate date on which this proxy statement, the accompanying proxy card and the Company's Annual Report are being mailed to the Company's stockholders or made available on the Internet at www.proxyvote.com through the notice and access process. The solicitation will be made through the Internet and by mail 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, telephone and/or mail may be supplemented, if deemed desirable or necessary, by one or more of telephone, telegram, facsimile, or personal solicitation by directors, officers, or employees of the Company. No additional compensation will be paid for any such services. We have 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, by telephone 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, by telephone 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 9, 2008 are entitled to vote at the Meeting. On the record date, there were issued and outstanding 49,351,385 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. Votes for and against, abstentions and broker non-votes (i.e., shares held by brokers or nominees which are represented at the Meeting, but with respect to which such broker or nominee is not empowered to vote on a particular matter) will be counted as present in determining whether a quorum is present at the Meeting. Under rules governing brokers who are voting with respect to shares held in street name, brokers have the discretion to vote such shares on routine matters, but not on non-routine matters. Routine matters include the election of directors. Non-routine matters include amendments to equity compensation plans, including amendments to increase the share reserve under such plans.

Your execution of your proxy by Internet, by telephone 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 or telephone, (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.

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 14, 2008 by (i) each stockholder known by the Company to be the beneficial owner of more than 5% of the Company's outstanding shares of common stock, (ii) each director, (iii) each executive officer named in the Summary Compensation Table below 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 49,348,754 shares of common stock outstanding as of March 14, 2008. Beneficial ownership is determined under the rules and regulations of the Securities and Exchange Commission. Shares of common stock subject to options that are presently exercisable or exercisable common stock options and restricted stock units vesting within 60 days of March 14, 2008 are deemed outstanding for the purpose of computing the shares owned and percentage ownership of the person or entity holding options or restricted stock units, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person or entity.

| Name of Beneficial Owner | Amount and Nature of Beneficial Ownership | Percent of Common Stock Outstanding |
|---|--|--|
| NWQ Investment Management Company, LLC 2049 Century Park East, 4th Floor Los Angeles, CA 90067 | 8,168,586 (1) | 16.6% |
| The TCW Group, Inc., on behalf of the TCW Business Unit 865 South Figueroa Street Los Angeles CA, 90017 | 4,992,393 (2) | 10.1% |
| T. Rowe Price Associates, Inc. 100 E. Pratt Street Baltimore, MD 21202 | 4,114,243 (3) | 8.3% |
| Dr. Jochen Melchior | 100,275 (4) | * |
| Dr. Hans-Georg Betz | 51,750 (5) | * |
| Kenneth Kannappan | 101,750 (6) | * |
| Shigeru Nakayama | 93,604 (7) | * |
| Kenneth G. Smith | 92,250 (8) | * |
| John C. Bolger | 12,000 (9) | * |
| David L. Dutton | 776,340 (10) | 1.6% |
| Robert B. MacKnight | 604,036 (11) | 1.2% |
| William I. Turner | 131,412 (12) | * |
| Ludger H. Viefhues | 495,424 (13) | 1.0% |
| Stephen T. Lanza | 92,582 (14) | * |
| Directors and executive officers as a group (11 persons) | 2,551,423 (15) | 5.2% |

* Represents an amount less than 1%.

- (1) According to Schedule 13G filed with the Securities and Exchange Commission on February 14, 2008 by NWQ Investment Management Company, LLC ("NWQ"), as of December 31, 2007 NWQ had sole voting power over 7,747,049 shares and sole dispositive power over 8,168,586 shares of the Company's common stock, which shares are owned by investment advisory clients of NWQ.

- (2) According to Schedule 13G filed with the Securities and Exchange Commission on February 11, 2008 by The TCW Group, Inc. on behalf of the TCW Business Unit (the "TCW Business Unit"), as of December 31, 2007 the TCW Business Unit had the shared power to vote of 1,740,479 shares and the shared power to dispose of 4,992,393 shares.
- (3) According to Schedule 13G filed with the Securities and Exchange Commission on February 13, 2008 by T. Rowe Price Associates, Inc ("T. Rowe Price"), as of December 31, 2007, T. Rowe Price had sole voting power over 304,700 shares and sole dispositive power over 4,114,243 shares of the Company's common stock.
- (4) Dr. Melchior: includes 100,000 shares subject to options exercisable within 60 days of March 14, 2008.
- (5) Dr. Betz: consists of 51,750 shares subject to options exercisable within 60 days of March 14, 2008.
- (6) Mr. Kannappan: includes 99,750 shares subject to options exercisable within 60 days of March 14, 2008.
- (7) Mr. Nakayama: consists of 93,604 shares subject to options exercisable within 60 days of March 14, 2008.
- (8) Mr. Smith: consists of 92,250 shares subject to options exercisable within 60 days of March 14, 2008.
- (9) Mr. Bolger: consists of 12,000 shares subject to options exercisable within 60 days of March 14, 2008.
- (10) Mr. Dutton: includes 754,059 shares subject to options exercisable within 60 days of March 14, 2008 and 3,063 restricted stock units that vest within 60 days of March 14, 2008.
- (11) Mr. MacKnight: consists of 602,036 shares subject to options exercisable within 60 days of March 14, 2008 and 2,000 restricted stock units that vest within 60 days of March 14, 2008.
- (12) Mr. Turner: includes 91,000 shares subject to options exercisable within 60 days of March 14, 2008 and 125 restricted stock units that vest within 60 days of March 14, 2008.
- (13) Mr. Viefhues: includes 492,693 shares subject to options exercisable within 60 days of March 14, 2008.
- (14) Mr. Lanza: includes 90,754 shares subject to options exercisable within 60 days of March 14, 2008 and 725 restricted stock units that vest within 60 days of March 14, 2008.
- (15) Includes 2,479,896 shares subject to options exercisable within 60 days of March 14, 2008 and 5,913 restricted stock units that vest within 60 days of March 14, 2008.

EXECUTIVE COMPENSATION AND OTHER MATTERS

Compensation Discussion and Analysis

Overview of Executive Compensation Program

The Company's executive compensation program is designed to achieve four principal goals:

- to reward performance and link executive compensation to the creation of stockholder value through performance-based and equity-based compensation;
- to attract, retain and motivate highly qualified executives by compensating them at a level that is competitive with peer group companies and commensurate with performance;
- to maximize long-term stockholder returns by utilizing performance metrics and compensation vehicles which align with value creation; and
- to differentially reward high performing individual executives.

The short-term cash bonus program is aligned with the goals of rewarding performance and maximizing stockholder returns through the use of performance metrics and goals, which the Company believes will drive shareholder value. See "Elements of Compensation—Short-Term Cash Bonus," below. In addition to linking executive officers' bonuses to Company performance, the Company seeks to align the interests of stockholders and executive officers by making stock options and restricted stock units a significant component of its executive compensation packages. For a discussion of the Company's equity compensation program, see "Elements of Compensation—Stock Options and Restricted Stock Units" below.

In order to maintain executive compensation at levels consistent with those of other companies in the Company's industry and of a size similar to that of the Company, the Compensation Committee of the Company's Board of Directors (the "Committee"), with the assistance of management and a third-party consultant, regularly compares the types and amounts of compensation paid to similarly situated executive officers at peer group companies. This benchmark analysis, together with Company and individual performance data, forms the basis for the Committee's decisions regarding cash and equity-based compensation. The Committee considers the results of this benchmark analysis valuable for several purposes, including helping the Company to compete successfully for management talent and holding compensation costs at a reasonable level. For a discussion of the Company's benchmark analysis, see "Elements of Compensation" below.

Accounting, tax and other regulatory developments can have an important effect on the Company's compensation costs and, consequently, on the forms of compensation utilized by the Committee. The Committee, with the assistance of management and the Company's outside legal and accounting advisors, monitors such developments and adjusts the Company's compensation practices accordingly. For a discussion of certain accounting and tax considerations that are significant to the Company's compensation policies, see "Accounting and Tax Considerations" below.

Corporate Governance

Role of Compensation Committee

The Compensation Committee oversees and administers the Company's executive compensation program in accordance with the Compensation 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 performance targets set for the year then ending and to establish a compensation plan for the following year. In creating such compensation plans, the Committee reviews the base salary, bonus and long-term incentive components of executive officer 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 equity compensation program for non-executive employees. The Committee has delegated to a committee comprised of the Company's Chief Executive Officer (CEO), Chief Financial Officer (CFO) and Senior Vice President of Organization Capability the authority to grant awards under the 2005 Equity Compensation Plan to certain employees below the executive officer level, subject to specified limitations. These grant amounts must be within the guidelines previously approved by the Committee, the exercise price of such grants must be the fair market value on the date of grant, and all grants in excess of 25,000 options or equivalent must receive Committee approval.

The Committee has the authority to engage independent advisors, such as compensation consultants, to assist it in carrying out its responsibilities. Beginning with the year-end 2007 compensation review and 2008 compensation planning activities, the Committee engaged Farient Advisors on an on-going contractual basis to provide independent expertise on applicable facets of compensation. The Committee reviews the services of independent advisors each year.

Farient Advisors was retained by the Committee to conduct a comprehensive review and analysis of the Company's executive compensation program for the CEO and CFO and to make recommendations for the fiscal 2008 compensation structure and design. Farient does not recommend specific pay levels for individual executives. Farient serves at the discretion of the Committee and does no other work for the Company other than that authorized by the Committee. The Committee believes that it is critical for the compensation consultant to meet with management, especially the Chief Executive Officer and Senior Vice President of Organizational Capability, for input on other executives and for perspective on the impact of compensation recommendations.

Role of Management

At least annually, and usually in December of each year followed by a meeting in January, the Committee meets with Mr. Dutton (the Company's CEO) and members of the Company's Organization Capability Department to obtain recommendations with respect to Company compensation practices and to review the information used to support these recommendations. For the 2008 pay decisions, Farient Advisors was asked by the Committee to assist in developing recommendations by providing market based information and guidance.

Management makes recommendations to the Committee on the base salary, short-term bonuses, and equity compensation for the executive officers and certain other Company employees. The Committee considers management's recommendations, as well as the input of Farient Advisors, in determining the compensation plan that it ultimately approves. Management also presents the Committee with information on the performance of the Company and the executive officers, and this information is used by the Committee to determine the cash bonuses for the year then ending. The Committee discusses the executive officers' compensation with Mr. Dutton, but makes decisions with respect to Mr. Dutton's compensation without Mr. Dutton present.

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, rewarding performance differentially, and maximizing long-term stockholders returns. Consistent with these goals, the Company's compensation program includes a mix of salary, cash bonus, stock options and restricted stock units. The restricted stock units include grants with both service-based vesting and, beginning in 2008, 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.

For 2007, compensation of the Company's executive officers was benchmarked against two peer groups. The first peer group consisted of companies with revenues similar to those of the Company (between \$200 million and \$500 million per year) drawn from a variety of high technology industries. The Company obtained this information from Radford/AON High Technology Surveys and Consulting. After this peer group comparison was performed, the Company checked the results for general consistency against compensation practices of a second peer group that consisted of capital equipment companies with similar revenues. For 2007, this peer group was comprised of the following companies:

| | |
|-------------------------------------|----------------------------------|
| Advanced Energy Industries, Inc. | FEI Company |
| Asyst Technologies, Inc. | Formfactor, Inc |
| Axcelis Technologies, Inc. | Kulicke & Soffa Industries, Inc. |
| Brooks Automation, Inc. | LTX Corporation |
| COHU, Inc | Newport Corporation |
| Credence Systems Corp. | Ultra Clean Holdings, Inc. |
| Cymer, Inc. | Veeco Instruments, Inc. |
| Electro Scientific Industries, Inc. | |

For 2008, Farient Advisors evaluated this peer group, and recommended the addition of four companies and the deletion of one. This recommendation, which was adopted by the Committee, resulted in a peer group comprised of companies (a) whose primary business is capital equipment or highly engineered equipment components used in semiconductor manufacturing, and (b) with revenues from \$150 million to \$1 billion. Farient presented to the Committee data demonstrating that, among companies in the peer group, total direct compensation was not correlated with size. The peer group is as follows:

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

For 2007, the Committee targeted each element of executive compensation at the 60th percentile of the Company's peer group. For 2008, the Committee targeted total direct compensation (i.e. salary, target bonus and equity incentives) at the median of its revised peer group. The mix of 2008 compensation was also determined with reference to the peer group which, on average, (a) targeted the CEO's short-term bonus at one times salary and long-term incentive at two times salary and (b) targeted the CFO's short-term bonus at 66% of salary and long-term incentive at 109% of salary.

Base Salary

The Committee sets executive salaries on an annual basis, usually in December of each year for the following year, after considering the recommendations of management. 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.

One of the Committee's primary considerations when setting executive officers' base salaries is how those salaries compare to the base salaries of executive officers within the Company's peer group. These and other data helps to inform the Committee's determination of base salaries, and 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. 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 qualitative factors.

For 2008, after taking into consideration the compensation targets, management's recommendations, Company performance and the external consultant's recommendations, the Committee decided to maintain the base salaries of the CEO and CFO at 2007 levels. The Committee decided to leave base salary levels substantially unchanged in 2008 because it believed that existing salary levels were adequate in light of market data. For additional information on Mr. Dutton's base salary, see "Compensation of Chief Executive Officer," below.

The annual base salaries of the executive officers paid in 2006 and 2007, and the base salaries of the executive officers set for 2008 (as determined by the Committee in December 2007), are set out in the table below:

| Name and Title | 2008(1) | 2007 | 2006 |
|--|----------------|-------------|-------------|
| David L. Dutton <i>Chief Executive Officer and Director</i> | \$ 450,000 | \$ 450,000 | \$ 450,000 |
| Robert B. MacKnight (2) <i>Chief Operating Officer and President</i> | \$ 380,000 | \$ 380,000 | \$ 378,538 |
| William I. Turner <i>Chief Financial Officer Executive Vice-President, Finance</i> | \$ 320,000 | \$ 320,000 | \$ 110,769 |
| Ludger H. Viefhues (3) <i>Executive Vice-President, Finance</i> | N/A | \$ 160,000 | \$ 320,000 |
| Stephen T. Lanza <i>Senior Vice-President & General Manager Global Business Operations</i> | \$ 287,100 | \$ 281,050 | N/A |

- (1) Base salary figures for 2008 represent the base salaries determined by the Committee in December 2007, and may be changed by subsequent action by the Committee or Board of Directors.
- (2) Effective March 31, 2008, Robert B. MacKnight ceased to serve in the position of President and Chief Operating Officer. Mr. MacKnight has entered into a separation agreement with the Company, which provides for his transition from President and Chief Operating Officer to Vice President. Mr. MacKnight's separation agreement can be found in the Company's Form 8-K filed November 14, 2007.
- (3) Ludger H. Viefhues retired from the Company and his role as Executive Vice-President, Finance on June 30, 2007. Mr. Viefhues' base salary above excludes \$54,886 of payments in 2007 for earned sabbatical and paid-time off which were paid in June 2007.

Short-Term Cash Bonus

The Company's executive officers are 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 most significant to the Company's long-term health and profitability. The short-term cash bonus is evaluated and paid annually for the Chief Executive Officer, Chief Operating Officer and Chief Financial Officer, and semiannually for all other employees participating in the bonus plan.

The Committee determines the executive officers' cash bonus payouts 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. In setting performance targets, the Committee seeks to set goals that are challenging but achievable, and may reconsider those goals if market conditions change significantly.

Target and maximum bonuses are defined by reference to each executive officer's base salary. With respect to 2007 and 2008, the target and maximum bonus levels as a percentage of the respective base salaries of each of the executive officers are as set out in the table below. Actual bonuses paid in 2008, if any, will depend on actual performance during 2008 versus the performance targets for 2008.

| Name and Title | Target Bonus Level | | Maximum Bonus Level | |
|--|--------------------|------|---------------------|------|
| | 2008 | 2007 | 2008 | 2007 |
| David L. Dutton <i>Chief Executive Officer and Director</i> | 100% | 100% | 200% | 200% |
| Robert B. MacKnight <i>Chief Operating Officer and President</i> | N/A (1) | 75% | N/A (1) | 150% |
| William I. Turner <i>Chief Financial Officer and Executive Vice-President, Finance</i> | 60% | 60% | 120% | 120% |
| Ludger H. Viefhues <i>Executive Vice-President, Finance</i> | N/A (2) | 60% | N/A (2) | 120% |
| Stephen T. Lanza <i>Senior Vice-President & General Manager Global Business Operations</i> | 40% | 40% | 80% | 80% |

- (1) Effective March 31, 2008, Robert B. MacKnight will cease to serve in the position of President and Chief Operating Officer.
- (2) Ludger H. Viefhues retired from the company and his role as Executive Vice-President, Finance on June 30, 2007.

The executive officers' 2007 cash bonus funding was tied to the Company's operating profit. Under the plan formula, 25% of target bonuses was to be funded if the Company achieved 67% of its goal for operating profit percent (the plan threshold), and 100% of target bonuses was to be funded if the company achieved its goal for operating profit percent.

Once the bonus pool is funded, the Committee used additional performance metrics to determine specific bonus payouts within the overall funding of the plan. In 2007, each performance metric was weighted based upon the Committee's view of its significance to the Company's overall objective of successfully implementing its business plan and achieving its financial objectives. Consequently, The following performance metrics were used for 2007:

- *Operating Profit Percentage* – Operating profit percentage is defined as income from operations, excluding certain royalty payments received by the Company and certain adjustments made pursuant to SFAS No. 123(R), divided by net sales. The Committee believes this to be a good measure of the Company's progress towards achieving its goal of maximizing corporate profitability. In 2007, 50% of the executive officers' cash bonuses were based upon the Company's performance versus its operating profit goal.
- *Gross Profit Margin* – Gross profit margin is defined as net sales (excluding royalties) less corresponding cost of sales as a percentage of net sales (excluding royalties). In 2007, 50% of the executive officers' cash bonuses were based upon the Company's performance versus its gross profit margin goal.

The Company exceeded its minimum, or threshold, performance targets for the first half of 2007, but not for the entire year. Since the CEO, COO and CFO's bonuses are based on full-year results, no bonus was paid to them for 2007.

The following are the 2007 and 2006 bonuses paid to the executive officers:

| Name and Title | Year | Amount | Percentage of Base Salary |
|---|-------------|---------------|----------------------------------|
| David L. Dutton | 2007 | — | — |
| <i>Chief Executive Officer and Director</i> | 2006 | \$ 138,116 | 30.7% |
| Robert B. MacKnight | 2007 | — | — |
| <i>Chief Operating Officer and President</i> | 2006 | \$ 87,005 | 23.0% |
| William I. Turner | 2007 | — | — |
| <i>Chief Financial Officer and Executive Vice-President, Finance</i> | 2006 | \$ 10,293 | 9.3% |
| Ludger H. Viefhues | 2007 | — | — |
| <i>Executive Vice-President, Finance</i> | 2006 | \$ 49,108 | 15.3% |
| Stephen T. Lanza | 2007 | \$ 30,057 | 10.7% |
| <i>Senior Vice-President & General Manager Global Business Operations</i> | | | |

In December 2007, the Committee decided to change the performance metrics used to determine 2008 bonuses. For 2008, bonuses will be based on Company revenue and diluted earnings per share, with each measure being weighted 50%. The Committee chose these metrics due to the importance of size and profitability in determining competitiveness in the semiconductor equipment industry. The Committee retains the discretion to increase or reduce the calculated bonus payments by 33%, in the event it believes that other factors should be taken into account in assessing performance. No bonus payments will be made unless the threshold earnings per share goal has been met.

The 2008 performance targets associated with the revenue and earnings per share metrics were set by the Committee at a level that can be achieved if the Company achieves its market share and profitability goals. The Committee believes that, for the executives to earn their target bonuses, the Company will have to perform at a high level.

QPR Plan

In addition to the cash bonuses discussed under “Short-Term Cash Bonus,” all Company employees, including its executive officers, are eligible for a quarterly cash bonus under the Company’s Quarterly Profit Reward Plan (the “QPR Plan”). QPR Plan awards are based upon the Company’s targeted operating margin (defined as operating income as a percentage of revenue) in the relevant quarter. During 2007, no payments were to be made under the QPR Plan until the Company achieved an operating margin of 5%, with payments increasing as operating margin increased above 5%. At 6%, 10%, 15% and 20% operating margins, the per employee payouts were estimated to be \$94, \$470, \$940 and \$1,411, respectively. In 2007, quarterly awards under the QPR Plan were not subject to a maximum amount in order to give eligible employees the potential to more fully participate in positive financial results of the Company. Under the QPR Plan, each eligible employee receives the same bonus amount.

In 2007, Mr. Dutton, Mr. Lanza, Mr. MacKnight and Mr. Turner each received \$1,042 under the QPR Plan, and Mr. Viefhues received \$452 under the QPR Plan.

For 2008, no payments will be made under the QPR Plan until the Company achieves an operating margin of 5%, with payments increasing as operating margin increases above 5%. At 6%, 10%, 15% and 20% operating margins, the per employee payouts are estimated to be \$94, \$470, \$940 and \$1,411, respectively.

Stock Options and Restricted Stock Units

The Company provides long-term incentive compensation to its executive officers through awards of stock options and restricted stock units (“RSUs”) under its 2005 Equity Incentive Plan. The purpose of providing this equity-based compensation is to give participants a direct financial interest in the long-term performance of the Company, which helps to align the interests of participants with those of the Company’s stockholders and motivates executives to maximize long-term stockholder returns. The Committee believes that a mix of stock options and RSUs is the most effective plan design as it provides for a balance between performance and retention incentives while controlling share dilution.

The Company 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 awards. Annual equity compensation awards to executive officers are determined by the Committee at its December meeting or shortly thereafter. In the past, the grant date for such awards was at the culmination of the Company’s internal process for determining awards to all its eligible employees, which typically occurred in early March. Beginning in 2007 and going forward, 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, RSUs will be granted on the first day the next trading window opens. Grant dates for promotional or award grants are the opening date of the Company’s stock trading window immediately following such promotion or award notification.

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 sale price of the Company’s common stock as quoted on the NASDAQ Global Select Market on the date of grant. Except as set out below, all options vest over a period of four years at a rate of 25% after one year and 1/48th of the initial amount granted each month thereafter, conditioned upon continued employment with the Company through each vesting date. In 2007 all RSUs vest over a period of four years at a rate of 25% after one year and 1/16th of the initial amount granted each quarter thereafter. RSU’s granted in 2008 vest at a rate of 25% after one year and 25% at each corresponding anniversary date of grant. All grant vesting is conditioned upon continued employment with or service to the Company through each vesting date.

When determining the number and terms of annual stock option and RSU grants to an individual, the Committee considers individual performance, overall contribution to the Company, retention, the number of equity-based securities held, and peer group data regarding long-term incentive compensation as a percentage of base salary. In its peer group benchmarking, the Company compares the total value (based on the fair market value of the award as of the determination date) of its stock option and RSU grants against market data collected regarding the equity grant practices for its peer group

For information on the stock options and RSUs granted to the executive officers during 2007, see “Executive Compensation—Equity Awards Granted During the Year Ended December 31, 2007,” below.

In March 2008, the Committee approved the grant of performance-based RSUs to certain executives. This plan (the “Growth Plan”) is designed to compensate executives if they achieve certain revenue growth objectives over the next four years (2008-2011). The objective of Growth Plan is to motivate and reward for “transformative” growth of the business, with a requirement to more than double the revenues of the Company before all the awards will be vested. Under the Plan, the RSUs vest in four equal increments upon the achievement of four sequentially increasing revenue performance targets. Vesting will occur in the year following the fiscal year in which each revenue goal has been met. Therefore, it is conceivable that with strong enough growth, all four goals could be met in one year and 100% of the grant would be vested. Management views the first two goals as reasonably achievable, while the final two goals require significant growth in revenue and market share. In order to ensure that growth does not come at the expense of profitability or shareholder returns, no vesting will occur until certain operating profit margin and stock price thresholds have been met. If any of these performance-based RSUs have not vested by the end of 2011, then those units will be forfeited.

Pursuant to the Growth Plan, in March 2008 David Dutton received a grant of 66,000 RSUs, William Turner received a grant of 47,000 RSUs and Stephen Lanza received a grant of 42,000 RSUs.

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 the portion of their base salaries, cash bonuses or directorship fees, 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 2007 and 2006, there were no discretionary contributions made to NQDC Plan accounts. All earnings 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 and a very typical market practice amongst competitor companies. 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 Company employees, including the executive officers, to have a portion of their regular earnings withheld over a six-month period to purchase shares of the Company’s common stock on a discounted basis. The price paid for common stock purchased through the ESPP is equal to 90% 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. Several of the executive officers have from time to time participated in the ESPP.

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. The matching contribution for the 401(k) Plan for 2007 was \$500 for Mr. Dutton, \$5,781 for Mr. Lanza, \$3,686 for Mr. MacKnight, \$6,395 for Mr. Turner and \$4,482 for Mr. Viefhues. The Company contributes 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.

Other Compensation

The Company offers a number of other benefits to its executive officers pursuant to benefit programs that provide for broad-based employee participation, 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 the Company to compete effectively for employee talent and that the availability of these benefits programs enhances employee health and productivity and loyalty to the Company. These generally available benefits do not directly factor into decisions regarding executive officers’ total compensation packages.

The Company also may grant additional benefits to executive officers at the time that they commence employment with the Company. The Company has reimbursed the CFO, Mr. Turner for certain personal travel expenses associated with his relocation to California during 2007.

Compensation of Chief Executive Officer

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

As noted above, the Committee did not award Mr. Dutton a cash bonus for 2007 or a salary increase for 2008. As discussed above, Mr. Dutton's target bonus for 2007 was 100% of his base salary, or \$450,000, but he did not receive a bonus because the Company did not meet all the financial performance targets warranting a payout.

At the beginning of 2007, the Committee awarded Mr. Dutton 125,000 stock options and 14,000 restricted stock units, based primarily on its benchmarking analysis. The aggregate grant date fair market value of these awards was approximately \$0.8 million. In 2006, Mr. Dutton received stock option grants to purchase a total of 81,250 shares of common stock and RSUs representing 35,000 shares of common stock. The aggregate grant date fair market value of these equity-based awards was approximately \$1.1 million.

In 2007, while the Company did not meet the performance targets contained in its bonus plan, significant operational and financial improvements were achieved, including the following:

- *Strong gross margin performance*—In 2007, the Company improved gross margins by 7.4 percentage points to 46.1% from 38.7% in 2006.
- *Strong operational performance*—Income before taxes was \$32.5 million, or 12.1% of net sales in 2007, compared to \$21.2 million, or 7.5% of sales in 2006.
- *New Products*—A number of new products have been developed under Mr. Dutton's leadership, most notably the Company's etch and flash RTP products.

In recognition of these improvements, and the contribution they are expected to make to future Company performance, the Committee increased the amount of Mr. Dutton's annual grants for 2008 to 150,000 stock options and 50,000 restricted stock units. These grants were made in February 2008. In March 2008, the Committee granted Mr. Dutton 66,000 performance-based restricted stock units under the Growth Plan. As discussed above, these RSUs are intended to compensate Mr. Dutton for "transformative" revenue growth.

Post-Employment Compensation

The Company recognizes that it is possible that it could undergo a change in 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 CEO and CFO that provide them with certain benefits upon the termination of their employment following a change in control of the Company. These benefits include the continuation of salary and insurance coverage and the accelerated vesting of stock options. 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 in control as well as being common market practice.

For additional information on these changes in 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 restricted stock units 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 restricted stock units 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, 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 exceeds 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 structured its NQDC Plan and structures its equity awards in a manner intended to comply with the applicable Section 409A requirements.

Accounting for Stock-Based Compensation

The Company has expensed stock option grants under Financial Accounting Standards Board (FASB) Statement No. 123(R), *Share-Based Payment*, (SFAS No. 123(R)) beginning in 2006. SFAS No. 123(R) requires companies to include the fair value of equity compensation as a compensation expense in their income statements. 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.

Executive Compensation

Summary Compensation Table for the Year Ended December 31, 2007 and 2006

The following table presents information for the year ended December 31, 2007 and 2006 regarding the compensation paid to the Company's Chief Executive Officer and each of the Company's other executive officers.

| Name and Title | Year | Salary | Bonus (1) | Stock Awards (2) | Option Awards (3) | Non-Equity Incentive Plan Comp- ensation (4) | Change in Pension Value and Nonqualified Deferred Compensation Earnings (5) | All Other Comp- ensation (6) | Total |
|--|------|------------|--------------|------------------------|-------------------------|---|---|--|------------|
| David L. Dutton | 2007 | \$ 450,000 | — | \$ 127,019 | \$ 341,137 | \$ 1,042 | — | \$ 3,529 | \$ 922,727 |
| <i>Chief Executive Officer and Director</i> | 2006 | \$ 450,000 | — | \$ 66,344 | \$ 152,294 | \$ 139,939 | — | \$ 4,357 | \$ 812,934 |
| Robert B. MacKnight | 2007 | \$ 380,000 | — | \$ 83,073 | \$ 280,989 | \$ 1,042 | — | \$ 7,350 | \$ 752,454 |
| <i>Chief Operating Officer and President</i> | 2006 | \$ 378,538 | — | \$ 43,598 | \$ 161,093 | \$ 88,828 | — | \$ 12,748 | \$ 684,805 |
| William I. Turner (1) | 2007 | \$ 320,000 | — | \$ 3,968 | \$ 241,306 | \$ 1,042 | — | \$ 8,023 | \$ 574,339 |
| <i>Chief Financial Officer and Executive Vice-President, Finance</i> | 2006 | \$ 110,769 | \$ 60,556 | — | \$ 55,553 | \$ 10,793 | — | \$ 53,086 | \$ 290,757 |
| Ludger H. Viefhues | 2007 | \$ 234,886 | \$ 50,552 | \$ 63,964 | \$ 106,651 | \$ 452 | — | \$ 8,977 | \$ 465,482 |
| <i>Executive Vice-President, Finance</i> | 2006 | \$ 320,000 | — | \$ 128,986 | \$ 318,913 | \$ 50,931 | — | \$ 11,248 | \$ 830,078 |
| Stephen T. Lanza | 2007 | \$ 281,050 | — | \$ 29,656 | \$ 233,822 | \$ 31,099 | — | \$ 6,703 | \$ 582,330 |
| <i>Senior Vice-President & General Manager, Global Business Operations</i> | | | | | | | | | |

- (1) The bonus paid to Mr. Turner in 2006 was a sign-on bonus paid upon his joining the Company on August 28, 2006.
- (2) The compensation cost for stock awards is related to grants of restricted stock units. Compensation cost is measured based on the intrinsic value of the shares at each measurement date. For more information regarding the methods used in determining compensation expense under SFAS No. 123(R), refer to the notes to the Company's consolidated financial statements included in the Company's 2006 Annual Report on Form 10-K for the year ended December 31, 2007 (the "2007 Annual Report on Form 10-K").
- (3) Compensation cost for stock options is calculated in accordance with SFAS No. 123(R). The Company uses the Black-Scholes model to calculate stock option-based compensation expense. For more information regarding the assumptions used in determining compensation expense under SFAS No. 123(R), refer to the notes to the Company's consolidated financial statements included in the 2007 Annual Report on Form 10-K.
- (4) Non-Equity Compensation includes two bonus plans for 2007 and 2006. The Company has a quarterly profit reward plan available to all employees, based on achievement of certain operating income targets. In 2007, Messrs. Dutton, Lanza, MacKnight and Turner each received \$1,042 under this plan and Mr. Viefhues received \$452 under this plan. In 2006, Messrs. Dutton, MacKnight and Viefhues each received \$1,823 under this plan and Mr. Turner received \$500 under this plan. The Company also has a bonus plan for executive officers, senior management and certain other employees. For 2007, Messrs. Dutton, MacKnight and Turner did not receive any amounts and Mr. Lanza received \$10,293 under this plan. For 2006, the plan set targeted levels of net income, days sales outstanding and inventory turns, and bonus amounts were determined based on achievement against the targets. For 2006, Mr. Dutton received \$138,116, Mr. MacKnight received \$87,005, Mr. Viefhues received \$49,108 and Mr. Turner received \$10,293, respectively.
- (5) Deferred compensation earnings have been excluded from the table above as such earnings were solely based on investment performance and did not represent preferential or above market earnings.

- (6) All other compensation includes Company matching funds for 401(k) plans, the intrinsic value realized by participation in the Company's ESPP plan and the value of excess group life policies. For Mr. Turner, the 2006 amount also includes a \$50,000 relocation allowance per his employment agreement.

Plan-based Awards Granted During the Year Ended December 31, 2007

The following table provides the specified information concerning plan-based awards made during the year ended December 31, 2007 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: | All Other Option Awards: | Exercise or Base Price of Option Per Share | Grant Date Fair Value of Stock and Option Awards (1) |
|-----------------------------|------------|---|------------|------------|---|--------|----------|-------------------------|--------------------------|--|--|
| | | Thresh-hold | Target | Max-imum | Thresh-hold | Target | Max-imum | Number of Shares of | Number of Securities | | |
| | | | | | | | | Stock or Units | Underlying Options | | |
| David L. Dutton | 01/01/07 | — | \$ 450,000 | \$ 900,000 | — | — | — | — | — | — | — |
| Chief Executive Officer and | 01/01/07 | — | \$ 2,000 | None (2) | — | — | — | — | — | — | — |
| Director | 02/05/07 | — | — | — | — | — | — | 125,000 | — | \$ 8.81 | \$ 707,250 |
| | 02/05/07 | — | — | — | — | — | 14,000 | — | — | \$ 8.81 | \$ 123,340 |
| Robert B. MacKnight | 01/01/07 | — | \$ 285,000 | \$ 570,000 | — | — | — | — | — | — | — |
| Chief Operating Officer and | 01/01/07 | — | \$ 2,000 | None (2) | — | — | — | — | — | — | — |
| President | 02/05/07 | — | — | — | — | — | — | 75,000 | — | \$ 8.81 | \$ 424,350 |
| | 02/05/07 | — | — | — | — | — | 9,000 | — | — | \$ 8.81 | \$ 79,290 |
| William I. Turner | 01/01/07 | — | \$ 192,000 | \$ 384,000 | — | — | — | — | — | — | — |
| Chief Financial Officer and | 01/01/07 | — | \$ 2,000 | None (2) | — | — | — | — | — | — | — |
| Executive Vice-President, | 02/05/07 | — | — | — | — | — | — | 20,000 | — | \$ 8.81 | \$ 113,160 |
| Finance | 02/05/07 | — | — | — | — | — | 2,000 | — | — | \$ 8.81 | \$ 17,620 |
| Ludger H. Viefhues | 01/01/07 | — | \$ 96,000 | \$ 192,000 | — | — | — | — | — | — | — |
| Executive Vice-President, | 01/01/07 | — | \$ 2,000 | None (2) | — | — | — | — | — | — | — |
| Finance | | | | | | | | | | | |
| Stephen T. Lanza | 01/01/07 | — | \$ 112,420 | \$ 224,840 | — | — | — | — | — | — | — |
| Senior Vice-President & | 01/01/07 | — | \$ 2,000 | None (2) | — | — | — | — | — | — | — |
| General Manager, Global | 02/05/07 | — | — | — | — | — | — | 26,250 | — | \$ 8.81 | \$ 148,523 |
| Business Operations | 02/05/07 | — | — | — | — | — | 3,800 | — | — | \$ 8.81 | \$ 33,478 |

- (1) Grant date fair value is calculated in accordance with SFAS No. 123(R). The Company uses the Black-Scholes model to calculate fair value to determine stock option-based compensation expense. For more information regarding the assumptions used in determining grant date fair value under SFAS No. 123(R), refer to the notes to the Company's consolidated financial statements included in the Company's 2007 Annual Report on Form 10-K.

Option awards granted in 2007 to executive officers were granted under the Company's 2005 Equity Incentive Plan and have seven-year terms. All options were granted with an exercise price equal to fair market value of the Company's common stock on the date of grant (i.e., the closing sale price as quoted on the NASDAQ Global Select Market on the date of grant). Except as set forth below, all options vest over a period of four years at a rate of 25 percent after one year and 1/48th of the initial amount granted each month thereafter, conditioned upon continued employment with the Company.

Restricted stock awards granted in 2007 to executive officers were granted under the Company's 2005 Equity Incentive Plan. Except as set forth below, all restricted stock units vest over a period of four years at a rate of 25 percent after one year and 1/16th of the initial amount granted each quarter thereafter, conditioned upon continued employment with the Company.

Options to purchase common stock and shares of restricted stock granted to Mr. Viefhues in 2006 vested over twelve months.

Equity Awards Outstanding at December 31, 2007

The following table provides information as of December 31, 2007 regarding unexercised options and unvested restricted stock units 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 | 22,500 | — | — | \$ 7.06 | 05/20/09 | — | — | — | — |
| <i>Chief Executive Officer</i> | 15,000 | — | — | \$ 15.25 | 12/16/09 | — | — | — | — |
| <i>and Director</i> | 40,000 | — | — | \$ 10.44 | 01/02/11 | — | — | — | — |
| | 200,000 | — | — | \$ 7.65 | 12/13/11 | — | — | — | — |
| | 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 | — | — | — | — |
| | 33,853 | 47,397 (1) | — | \$ 11.92 | 04/04/13 | — | — | — | — |
| | — | — | — | — | — | 21,875 (8) | \$ 203,875 | — | — |
| | — | 125,000 (2) | — | \$ 8.81 | 02/05/14 | — | — | — | — |
| | — | — | — | — | — | 14,000 (9) | \$ 123,340 | — | — |
| Robert B. MacKnight | 75,000 | — | — | \$ 8.33 | 08/20/11 | — | — | — | — |
| <i>Chief Operating Officer</i> | 175,000 | — | — | \$ 7.65 | 12/13/11 | — | — | — | — |
| <i>and President</i> | 30,000 | — | — | \$ 3.08 | 11/08/12 | — | — | — | — |
| | 4,474 | — | — | \$ 2.85 | 01/14/13 | — | — | — | — |
| | 22,500 | — | — | \$ 2.23 | 04/10/13 | — | — | — | — |
| | 60,000 | — | — | \$ 6.95 | 01/22/12 | — | — | — | — |
| | 1,449 | — | — | \$ 8.80 | 09/09/13 | — | — | — | — |
| | 1,000 | — | — | \$ 12.29 | 12/29/13 | — | — | — | — |
| | 532 | — | — | \$ 12.00 | 03/01/14 | — | — | — | — |
| | 75,000 | — | — | \$ 11.03 | 03/12/14 | — | — | — | — |
| | 75,000 | — | — | \$ 9.25 | 03/08/15 | — | — | — | — |
| | 21,145 | 13,855 (3) | — | \$ 7.19 | 07/01/12 | — | — | — | — |
| | 27,083 | 37,917 (1) | — | \$ 11.92 | 04/04/13 | — | — | — | — |
| | — | — | — | — | — | 14,375 (8) | \$ 133,975 | — | — |
| | — | 75,000 (2) | — | \$ 8.81 | 02/05/14 | — | — | — | — |
| | — | — | — | — | — | 9,000 (9) | \$ 79,290 | — | — |
| William I. Turner | 5,000 | — | — | \$ 2.83 | 05/22/13 | — | — | — | — |
| <i>Chief Financial Officer</i> | 17,000 | — | — | \$ 10.23 | 05/19/14 | — | — | — | — |
| <i>and Executive Vice-</i> | 8,500 | 8,500 (4) | — | \$ 6.98 | 05/25/15 | — | — | — | — |
| <i>President, Finance</i> | 4,250 | 12,750 (5) | — | \$ 8.76 | 06/21/13 | — | — | — | — |
| | 40,000 | 80,000 (6) | — | \$ 7.63 | 08/28/13 | — | — | — | — |
| | — | 20,000 (2) | — | \$ 8.81 | 02/05/14 | — | — | — | — |
| | — | — | — | — | — | 2,000 (9) | \$ 17,620 | — | — |

| Name and Title | Option Awards | | | | | Stock Awards | | | |
|---------------------------------|---------------|------------|-----|----------|----------|--------------|-----------|------|----|
| | I | II | III | IV | V | VI | VII | VIII | IX |
| Ludger H. Viefhues | 150,000 | — | — | \$ 10.44 | 01/02/11 | — | — | — | — |
| <i>Executive Vice-President</i> | 100,000 | — | — | \$ 7.65 | 12/13/11 | — | — | — | — |
| <i>Finance</i> | 30,000 | — | — | \$ 3.08 | 11/08/12 | — | — | — | — |
| | 4,211 | — | — | \$ 2.85 | 01/14/13 | — | — | — | — |
| | 6,868 | — | — | \$ 2.23 | 04/10/13 | — | — | — | — |
| | 1,364 | — | — | \$ 8.80 | 09/09/13 | — | — | — | — |
| | 1,000 | — | — | \$ 12.29 | 12/29/13 | — | — | — | — |
| | 500 | — | — | \$ 12.00 | 03/01/14 | — | — | — | — |
| | 75,000 | — | — | \$ 11.03 | 03/12/14 | — | — | — | — |
| | 75,000 | — | — | \$ 9.25 | 03/08/15 | — | — | — | — |
| | 48,750 | — | — | \$ 11.92 | 04/04/13 | — | — | — | — |
| Stephen T. Lanza | 62,499 | 37,501 (7) | — | \$ 7.90 | 06/23/12 | — | — | — | — |
| <i>Senior Vice-President</i> | 9,375 | 13,125 (1) | — | \$ 11.92 | 04/04/13 | — | — | — | — |
| <i>& General Manager,</i> | — | 26,250 (2) | — | \$ 8.81 | 02/05/14 | — | — | — | — |
| <i>Global Business Ops</i> | — | — | — | — | — | 4,875 (8) | \$ 45,435 | — | — |
| | — | — | — | — | — | 3,800 (9) | \$ 33,478 | — | — |

Table Legend

Option Awards

- I** Number of Securities Underlying Unexercised Options Exercisable
- II** Number of Securities Underlying Unexercised Options Unexercisable
- 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 Shares or Units of Stock That Have Not Vested
- VII** Market Value of Shares or Units of Stock That Have Not Vested
- VIII** Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested
- IX** Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested

- (1) For this option award, 25% of the initial grant vests on April 4, 2007, and 1/48th of the initial amount vests each month thereafter.
- (2) For this option award, 25% of the initial grant vests on February 5, 2008, and 1/48th of the initial amount vests each month thereafter.
- (3) For this option award, 25% of the initial grant vested on July 1, 2006, and 1/48th of the initial amount vests/vested each month thereafter.
- (4) For this option award, 25% of the initial grant vested on May 25, 2006, and 1/4th of the initial amount vests each year thereafter.
- (5) For this option award, 25% of the initial grant vests on June 21, 2007, and 1/4th of the initial amount vests each year thereafter.
- (6) For this option award, 25% of the initial grant vests on August 28, 2007, and 1/48th of the initial amount vests each month thereafter.
- (7) For this option award, 25% of the initial grant vests on June 23, 2006, and 1/4th of the initial amount vests each year thereafter.
- (8) For this restricted stock unit award, 25% of the initial grant vests on May 1, 2007, and 1/16th of the initial amount vests each quarter thereafter.
- (9) For this restricted stock unit award, 25% of the initial grant vests on February 5, 2008, and 1/16th of the initial amount vests each quarter thereafter.

Equity Awards Exercised or Vested During the Year Ended December 31, 2007

The following table provides the specified information concerning exercises of options to purchase common stock by, and restricted stock units that vested during the year ended December 31, 2007 with respect to, the persons named in the Summary Compensation Table above.

| Name and Title | Option Awards | | Stock Awards | |
|---|---------------------------------------|----------------------------|--------------------------------------|---------------------------|
| | Number of Shares Acquired On Exercise | Value Realized On Exercise | Number of Shares Acquired On Vesting | Value Realized On Vesting |
| David L. Dutton <i>Chief Executive Officer and Director</i> | 28,500 | \$ 12,854 | 13,125 | \$ 128,449 |
| Robert B. MacKnight <i>Chief Operating Officer and President</i> | — | — | 8,625 | \$ 84,409 |
| William I. Turner <i>Chief Financial Officer and Executive Vice-President, Finance</i> | 40,000 | \$ 294,000 | — | — |
| Ludger H. Viefhues <i>Executive Vice-President, Finance</i> | 57,504 | \$ 471,319 | 17,000 | \$ 171,020 |
| Stephen T. Lanza <i>Senior Vice-President & General Manager, Global Business Operations</i> | — | — | 2,925 | \$ 28,625 |

Number of shares acquired on exercise includes all shares acquired upon exercise of the option, or portion of the option, without deducting shares withheld to satisfy tax obligations, sold to pay the exercise price or otherwise disposed of. Value realized is calculated by multiplying the difference between the market value, deemed to be the closing market price of the Company's common stock on the NASDAQ Global Select Market on the exercise date, and exercise price by the number of shares acquired upon exercise.

Non-Qualified Deferred Compensation

| Name and Title | Executive Contributions in Last Fiscal Year (1) | Registrant Contributions in Last Fiscal Year | Aggregate Earnings in Last Fiscal Year (2) | Aggregate Withdrawals/ Distributions | Aggregate Balance at Last Fiscal Year End |
|---|--|---|---|---|--|
| David L. Dutton <i>Chief Executive Officer and Director</i> | — | — | — | — | — |
| Robert B. MacKnight <i>Chief Operating Officer and President</i> | \$ 220,079 | — | \$ 16,920 | — | \$ 280,986 |
| William I. Turner <i>Chief Financial Officer and Executive Vice-President, Finance</i> | — | — | — | — | — |
| Ludger H. Viefhues <i>Executive Vice-President, Finance</i> | \$ 183,595 | — | \$ 16,671 | — | \$ 324,685 |
| Stephen T. Lanza <i>Senior Vice-President & General Manager, Global Business Operations</i> | \$ 7,437 | — | \$ 1,858 | — | \$ 17,713 |

- (1) Executive contributions to the deferred compensation plan of \$7,437 for Mr. Lanza, \$220,079 for Mr. MacKnight and \$183,595 for Mr. Viefhues have also been included in the amount reported as salary for the year ended December 31, 2007 in the summary compensation table above.
- (2) For 2007, deferred compensation earnings were solely based on the market performance of the investments, selected at the direction of the individual employee, and did not represent preferential or above market earnings.

Effective January 1, 2006, the Company adopted a deferred compensation plan. 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 2007, there were no discretionary contributions made by the Board of Directors.

Under the Plan, the Company is obligated to deliver on a future date the deferred compensation credited to a Participant’s account, adjusted for any positive or negative investment results from investment alternatives selected by the Participant under the Plan (the “Obligations”). The Obligations are unsecured general obligations of the Company and rank in parity with other unsecured and unsubordinated indebtedness of the Company. The Obligations are not transferable, except upon death of a Participant. There is no trading market for the Obligations.

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 Chief Executive Officer, and has also entered into Executive Change in Control Agreements with Mr. MacKnight and Mr. Turner. (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, as follows:

| Name and Title | Type of Severance Event (I) | Continuation of Salary Benefit | Continuation of Insurance Benefit | Accelerated Vesting of Stock Awards |
|--|-----------------------------|--------------------------------|-----------------------------------|-------------------------------------|
| David L. Dutton | I. | \$ 450,000 | \$ 17,401 | \$ 948,097 |
| <i>Chief Executive Officer and Director</i> | II. | \$ 900,000 | \$ 34,802 | \$ 948,097 |
| Robert B. MacKnight | I. | \$ 285,000 | \$ 9,641 | \$ 713,155 |
| <i>Chief Operating Officer and President</i> | II. | \$ 570,000 | \$ 19,283 | \$ 713,155 |
| William I. Turner | I. | \$ 240,000 | \$ 12,608 | \$ 633,297 |
| <i>Chief Financial Officer and Executive Vice-President, Finance</i> | II. | \$ 480,000 | \$ 25,217 | \$ 633,297 |

(1) The Severance Agreements with each of the executive vice presidents identify two types of events that would trigger the benefits described above. Each such event and the material consequences thereof under the Severance Agreements are further described below.

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) the performance by the relevant executive officer 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 by the relevant executive officer or (iii) the commission by the relevant officer of a crime involving dishonesty, breach of trust or physical or emotional harm to any person), then, upon signing a general release, the executive is entitled to receive continuing payment of his then-current base salary and continued coverage under the Company's medical and dental plan, for a severance period of 12 months for the Chief Executive Officer, and nine months for the other executive officers. The Chief Executive Officer is entitled to this same 12-month severance benefit in the event his employment is terminated by the Company without good cause, in the absence of a Change in Control.

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 cause" (defined to include a significant reduction in the executive's base salary, the assignment of duties which reflect a material adverse change in his responsibility or status, and transfer of his place of employment by 50 miles or more), and gives 30 days written notice of termination to the Company, then, upon signing a general release, the executive is entitled to receive continuing payment of his then-current base salary and continued coverage under the Company's medical and dental plan, for a severance period of 24 months for the Chief Executive Officer (limited to 18 months for continuation of medical and dental benefits), and 18 months for the other executive officers.

In addition, the Severance Agreements provide for accelerated vesting of all of the executive officer's unvested stock options following a Change in Control in the event of a termination that triggers severance benefits. 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 in Control” is defined in the Severance Agreements, by reference to the 2005 Equity Incentive Plan, as an acquisition by any person of beneficial ownership of more than 50% of the Company’s voting stock, certain mergers or other business combinations involving the Company, the sale, exchange or transfer of all or substantially all of the assets of the Company, or a liquidation or dissolution of the Company.

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 Chief Operating Officer, Chief Financial Officer and Controller. 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 five 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 five 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 2007, other than as described in the following sentence, its executive officers, directors and 5% stockholders complied with all Section 16(a) filing requirements. The Company was delinquent in filing 21 Form 4 filings during 2007.

REPORT OF THE COMPENSATION COMMITTEE ON EXECUTIVE COMPENSATION

The Compensation 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 Compensation Committee has reviewed and discussed it with management. Based on this review and discussion, the Compensation Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Proxy Statement for the Company's 2008 Meeting of Stockholders.

COMPENSATION COMMITTEE

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

April 16, 2008

PROPOSAL ONE

ELECTION OF DIRECTORS

The Company has a classified Board of Directors consisting of two Class I directors (John Bolger and Kenneth Kannappan), three Class II directors (Dr. Hans-Georg Betz, David Dutton and Kenneth Smith) and two Class III directors (Dr. Jochen Melchior and Shigeru Nakayama). Class I, II and III directors will serve until the Annual Meetings of Stockholders to be held in 2010, 2008, and 2009, 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 (3) years to succeed those directors whose terms expire on the Annual Meeting date.

The term of the Class II directors will expire on the date of the upcoming Annual Meeting. Accordingly, three persons are to be elected to serve as Class II directors of the Board of Directors at the Meeting. Management's nominees for election by the stockholders to those three positions are the current Class II members of the Board of Directors, Dr. Hans-Georg Betz, David Dutton and Kenneth Smith. Unless otherwise directed by stockholders, the proxyholders will vote all shares represented by proxies held by them for the election of the management nominees. In the event that either Dr. Betz, Mr. Dutton or Mr. Smith 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 three nominees for Class II director receiving the highest number of votes will be elected as Class II 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, for the Company's current directors, including the Class II nominees to be elected at this Meeting, information with respect to their ages as of December 31, 2007 and their background.

| <u>Name</u> | <u>Age</u> | <u>Title</u> | <u>Director Since</u> |
|---|------------|---------------------|-----------------------|
| <i>Class I directors whose terms expire at the 2010 Annual Meeting of Stockholders:</i> | | | |
| John C. Bolger | 61 | Director | December 2006 |
| Kenneth Kannappan | 48 | Director | July 1998 |
| <i>Class II directors whose terms expire at the 2008 Annual Meeting of Stockholders:</i> | | | |
| <i>Nominees for reelection at the Annual Meeting:</i> | | | |
| Dr. Hans-Georg Betz | 61 | Director | January 2001 |
| David L. Dutton | 47 | Director | December 2001 |
| Kenneth G. Smith | 58 | Director | August 1994 |
| <i>Class III directors whose terms expire at the 2009 Annual Meeting of Stockholders:</i> | | | |
| Dr. Jochen A. Melchior | 65 | Director (Chairman) | January 2001 |
| Shigeru Nakayama | 72 | Director | May 1996 |

Dr. Jochen A. Melchior has served as a director and Chairman since January 2001. Dr. Melchior served as a member of the Management Board of STEAG AG from June 1987 until December 2004, and as Chairman of the Management Board and Chief Executive Officer of STEAG AG from November 1995 until December 2004. From November 1995 until December 2004, Dr. Melchior also served as Chairman of the Supervisory Board of STEAG Electronic Systems AG. Dr. Melchior currently serves as a member of the Supervisory Boards of AXA Service AG, National-Bank AG, Kloeckner + Co. AG, and Universitaetsklinikum Essen. He serves as Chairman of the Supervisory Board of Tecon Technologies AG.

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, as Chairman of the Management Board and Chief Executive Officer of STEAG Electronic Systems AG from January 1996 to July 2001, and as a member of the Management Board of STEAG Electronic Systems AG from October 1992 to July 2001. Dr. Betz served as a member of the Management Board of STEAG AG from January 1997 to July 2001.

John C. Bolger has been 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 of Cogent, Inc. since 2004; Mission West Properties, Inc. since 1998; and Wind River Systems, Inc. since 2000; all of which are public companies. 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.

David L. Dutton has served as Mattson's Chief Executive Officer since June 2005 and as a director since December 2001. Prior to that, Mr. Dutton served as Mattson's Chief Executive Officer and President since October 2001. 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.

Kenneth Kannappan has served as a director since July 1998. Mr. Kannappan has served as the President and Chief Executive Officer of Plantronics, Inc., a telecommunications equipment manufacturer, since March 1998. From 1995 to 1998, Mr. Kannappan held various executive positions at Plantronics, Inc. From 1991 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.

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.

Kenneth G. Smith has served as a director since August 1994. Mr. Smith was 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.

Board Meetings and Committees

During the year ended December 31, 2007, the Board of Directors held five meetings. During 2007, each director attended at least 75% of the meetings of the Board and of each of the Committees on which he served. The Board of Directors has determined that Messrs. Betz, Bolger, Kannappan, Melchior, Nakayama and Smith are each an independent director for purposes of the applicable NASDAQ listing standards. The Board of Directors of the Company has a standing Audit Committee, Compensation Committee and 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 2007, 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 nine meetings during 2007.

The principal functions of the Compensation Committee are to set the salary and bonus earned by the Chief Executive Officer 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 2007, the Compensation 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 four meetings during 2007.

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 2007, the Nominating and Governance Committee consisted of Dr. Betz, Mr. Nakayama, and Mr. Smith. 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 2007.

Compensation of Directors

The following table provides compensation information for the year ended December 31, 2007 for each non-employee member of the Company’s Board of Directors:

| Name | Fees | | Option Awards | Non-Equity Incentive Plan Compensation | Change in Pension Value and Nonqualified | All Other Compensation | Total |
|------------------------|------------------------|--------------|---------------|--|--|------------------------|------------|
| | Earned or Paid in Cash | Stock Awards | | | Deferred Compensation Earnings | | |
| Dr. Hans-Georg Betz | \$ 51,000 | \$ 2,878 | \$ 56,292 | — | — | — | \$ 110,170 |
| John C. Bolger | \$ 57,000 | — | \$ 47,729 | — | — | — | \$ 104,729 |
| Kenneth Kannapan (1) | — | \$ 2,878 | \$ 58,102 | — | — | — | \$ 60,980 |
| Dr. Jochen A. Melchior | \$ 59,000 | \$ 2,878 | \$ 68,391 | — | — | — | \$ 130,269 |
| Shigeru Nakayama | \$ 40,000 | \$ 2,878 | \$ 50,841 | — | — | — | \$ 93,719 |
| Kenneth G. Smith | \$ 53,000 | \$ 2,878 | \$ 58,102 | — | — | — | \$ 113,980 |

(1) Mr. Kannapan received \$48,000 in fees during the year ended December 31, 2007, which have been excluded from this table, as all of such fees were contributed to his non-qualified deferred compensation account.

In 2007, the Chairman of the Board received a \$55,000 annual retainer, other non-employee directors received a \$35,000 annual retainer, and all non-employee directors received \$1,000 per Board meeting attended. The Chairman of the Audit Committee received an additional \$10,000 annual retainer, the Chairman of the Compensation Committee received an additional \$7,000 annual retainer, and all committee members received \$1,000 per committee meeting attended. The Company reimburses its non-employee directors for travel expenses and other out-of-pocket expenses associated with attending meetings.

The Company’s 2005 Equity Incentive Plan allows for the grant of options and other forms of equity to the Company’s non-employee directors. Currently, each non-employee director who has continuously served on the

Board for six months as of the date of the Annual Meeting of Stockholders will be granted 2,000 restricted stock units and an option to purchase 10,000 shares or, in the case of the Chairman, 2,000 restricted stock units and an option to purchase 14,000 shares, on the date of each Annual Meeting of Stockholders. In addition, each member of the Audit Committee who attends at least 75% of the Committee's meetings during the prior year is granted an option to purchase an additional 2,000 shares on the date of the Annual Meeting of Stockholders.

Option award amounts are presented based on their grant date fair market value. Grant date fair value is calculated in accordance with SFAS No. 123(R). The Company uses the Black-Scholes model to calculate fair value to determine stock option-based compensation expense. For more information regarding the assumptions used in determining grant date fair value under SFAS No. 123(R), refer to the notes to the Company's consolidated financial statements included in the Company's 2007 Annual Report on Form 10-K.

Policy and Procedure for Director Nomination

When there is a vacancy on the Board of Directors, the Nominating and Governance Committee is responsible for evaluating candidates to fill such vacancy. The Nominating and Governance Committee is responsible for reviewing the qualifications, independence and skill of all candidates for election to the Board of Directors. The Nominating and Governance Committee does not currently have a formalized policy with regard to the assessment of director candidates. The Nominating and Governance Committee believes that is appropriate not to have any such formalized policy in order to afford the Committee with the maximum flexibility to assess and select director candidates based on the criteria deemed most relevant by the Committee at such time. The Nominating and Governance Committee intends to consider adopting such a policy.

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 Nominating and Governance Committee-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."

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.

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 John Horn, 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 Corporate Secretary under procedures approved by the independent directors. The Corporate 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 Corporate Secretary may, in 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 Corporate Secretary may, in his discretion, forward only representative correspondence.

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.

Certain Relationships and Related Transactions, and Director Independence

Other than the transactions described immediately below, during the year ended December 31, 2007 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 5% 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.

In Japan, through May 2007 the Company contracted outsource installation and repair services and sold spare parts through an unrelated party, Mattson Service Company (MSC). A director of the Company, Shigeru Nakayama, held a minority, non-controlling interest in MSC, but no longer does so. In 2007, 2006 and 2005, the value of spare parts and services transactions between the Company and MSC were \$0.5 million, \$4.2 million and \$2.9 million, respectively. The Company's management believes that the payments of commissions to MSC related to the sales of spare parts to customers in Japan and the purchases of contract installation and repair services from MSC were on terms that represent the fair market value of these transactions.

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.

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. 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. Kannappan, Dr. Melchior Mr. Nakayama and Mr. Smith.

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 auditors. 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 comprised entirely of directors who are 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 2007, 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, 2008. 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 in 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 interests 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 nonvotes 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, 2008.

Audit and Related Fees

The following table presents fees paid by the Company for professional services rendered by PricewaterhouseCoopers LLP (“PwC”) for the years ended December 31, 2007 and 2006.

| | <u>Fiscal 2007</u> | <u>Fiscal 2006</u> |
|--------------------|---------------------|---------------------|
| Audit Fees | \$ 1,365,011 | \$ 1,607,315 |
| Audit-Related Fees | 110,000 | — |
| Tax Fees | — | — |
| All Other Fees | — | — |
| Total Fees | <u>\$ 1,475,011</u> | <u>\$ 1,607,315</u> |

Audit Fees were for 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 were for 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 and work related to adopting FIN48.

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

All Other Fees were for services other than the services reported 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 auditors. 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 auditors and management periodically report to the Audit Committee regarding the extent of services provided by the independent auditors 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 "independent auditors"). The Audit Committee is also responsible for the selection of the Company's independent auditors, and approves all professional services performed by the independent auditors. 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 the charter as amended is included herein as *Appendix One*. The Audit Committee Charter is also available on the Company's website. The members of the Audit Committee at December 31, 2007 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 as they apply to audit committee members. The Board has determined that Mr. 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 auditors have the responsibility to express an opinion on the financial statements and on the 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 auditors. We rely on the information provided to us and on the representations made by management and the independent auditors.

In this context, we held nine meetings during 2007. The meetings were designed, among other things, to facilitate and encourage communication among the Audit Committee, management and the Company's independent auditors. PwC performed the audit of the Company's financial statement for 2007 as its independent auditors and has been selected by the Audit Committee to perform the audit for 2008. We discussed with the Company's management and PwC the overall scope of and plan for the 2007 audit before it was performed by PwC. We met with PwC to discuss the results of their examination.

We have reviewed and discussed with management and PwC the audited consolidated financial statements for the year ended December 31, 2007 contained in the Annual Report on Form 10-K for the year ended December 31, 2007. We also discussed with the independent auditors matters required to be discussed with audit committees under auditing standards generally accepted in the United States of America, including, among other things, matters related to the conduct of the audit of the Company's consolidated financial statements and the matters required to be discussed by Statement on Auditing Standards No. 61, as amended (Communication with Audit Committees).

The Company's independent auditors also provided to us the written disclosures and a letter required by

Independence Standards Board Standard No. 1 (Independence Discussions with Audit Committees), and we discussed with the independent auditors 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 auditors 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, 2007 be included in the Company's Annual Report on Form 10-K.

April 16, 2008

AUDIT COMMITTEE

John C. Bolger, Chairman
Kenneth Kannappan
Kenneth G. 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 23, 2008, and (ii) must satisfy the conditions established by the Securities and Exchange Commission for stockholder proposals to be included in the Company's Proxy Statement for that meeting.

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 2008 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 16, 2008. IF YOU RECEIVE PRINTED COPIES OF THE PROXY MATERIALS BY MAIL, YOU CAN ALSO VOTE BY MAIL.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read "John R. Horn", written over a horizontal line.

John R. Horn, Secretary

April 16, 2008

APPENDIX ONE

MATTSON TECHNOLOGY, INC. CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

I. STATEMENT OF POLICY

This Charter specifies the scope of the responsibilities of the Audit Committee (the “Committee”) of the Board of Directors (the “Board”) of Mattson Technology, Inc. (the “Company”) and the manner in which those responsibilities shall be performed, including its structure, processes and membership requirements.

The primary purpose of the Committee is to oversee the accounting and financial reporting processes of the Company and the audits of the Company’s financial statements. The Committee shall also review the qualifications, independence and performance, and approve the terms of engagement, of the Company’s independent auditor, review the performance of the Company’s internal audit function (if applicable) and prepare any reports required of the Committee under rules of the Securities and Exchange Commission (“SEC”). The Committee is not responsible for determining whether the Company’s financial statements are accurate or in accordance with accounting principles generally accepted in the United States.

The Company shall provide appropriate funding, as determined by the Committee, to permit the Committee to perform its duties under this Charter, to compensate its advisors and to compensate any registered public accounting firm engaged for the purpose of rendering or issuing an audit report or related work or performing other audit, review or attest services for the Company. The Committee, at its discretion, has the authority to initiate investigations, and hire legal, accounting or other outside advisors or experts to assist the Committee, as it deems necessary to fulfill its duties under this Charter. The Committee may also perform such other activities consistent with this Charter, the Company’s Bylaws and governing law, as the Committee or the Board deems necessary or appropriate.

II. ORGANIZATION AND MEMBERSHIP REQUIREMENTS

The Committee shall comprise three or more directors selected by the Board, each of whom shall satisfy the independence and experience requirements of The Nasdaq Stock Market, provided that one director who does not meet the independence criteria of Nasdaq, but is not a current employee or officer, or an immediate family member of an employee or officer, may be appointed to the Committee, subject to the approval of the Board pursuant to, and subject to the limitations under, the “exceptional and limited circumstances” exceptions as provided under the rules of Nasdaq. In addition, the Committee shall not include any member who:

- has participated in the preparation of the financial statements of the Company or any current subsidiary at any time during the past three (3) years; or
- accepts any consulting, advisory, or other compensatory fee, directly or indirectly, from the Company, other than in his or her capacity as a member of the Committee, the Board, or any other committee of the Board; or
- is an affiliate of the Company or of any subsidiary of the Company, other than a director who meets the independence requirements of The Nasdaq Stock Market.

Each member of the Committee must be able to read and understand fundamental financial statements, including a balance sheet, income statement and cash flow statement. In addition, at least one member shall have past employment experience in finance or accounting, professional certification in accounting, or other comparable experience or background resulting in the individual being financially sophisticated, which may include being or having been a chief executive, chief financial or other senior officer with financial oversight responsibilities.

The members of the Committee shall be appointed by the Board on the recommendation of the Nominating Committee and shall serve until their successors are duly elected and qualified or their earlier resignation or removal. Any member of the Committee may be replaced by the Board on the recommendation of the Nominating

Committee. Unless a chairman is elected by the full Board, the members of the Committee may designate a chairman by majority vote of the full Committee membership.

III. MEETINGS

The Committee shall meet as often as it determines, but not less frequently than quarterly. The Committee may form and delegate authority to subcommittees, or to one or more members of the Committee, when appropriate. The Committee shall meet with management, internal auditors and the independent auditor in separate executive sessions as appropriate. The Committee shall meet with the independent auditor and management on a quarterly basis to review the Company's financial statements and financial reports. The Committee shall maintain written minutes of its meetings, which minutes will be filed with the minutes of the meetings of the Board.

IV. COMMITTEE AUTHORITY AND RESPONSIBILITIES

To fulfill its responsibilities and duties, the Committee shall:

A. Oversight of the Company's Independent Auditor

1. Be directly and solely responsible for the appointment, compensation, retention and oversight of any independent auditor (including resolution of disagreements between management and the independent auditor regarding financial reporting) engaged by the Company for the purpose of preparing or issuing an audit report or related work, with each such auditor reporting directly to the Committee.
2. Periodically review and discuss with the independent auditor (i) the matters required to be discussed by Statement on Auditing Standards No. 61, as amended, and (ii) any formal written statements received from the independent auditor consistent with and in satisfaction of Independence Standards Board Standard No. 1, as amended, including without limitation, descriptions of (x) all relationships between the auditor and the Company, (y) any disclosed relationships or services that may impact the independent auditor's objectivity and independence and (z) whether any of the Company's senior finance personnel were recently employed by the independent auditor.
3. Consult with the independent auditor to assure the rotation of the lead audit partner having primary responsibility for the audit and the audit partner responsible for reviewing the audit every five (5) years, consider issues related to the timing of such rotation and the transition to new lead and reviewing partners, and consider whether, in order to assure continuing auditor independence, there should be regular rotation of the audit firm, and report to the Board on its conclusions.
4. Approve in advance the engagement of the independent auditor for all audit services and non-audit services, based on independence, qualifications and, if applicable, performance, and approve the fees and other terms of any such engagement; provided, however, that (i) the Committee may establish pre-approval policies and procedures for any engagement to render such services, provided that such policies and procedures (x) are detailed as to particular services, (y) do not involve delegation to management of the Committee's responsibilities hereunder and (z) provide that, at its next scheduled meeting, the Committee is informed as to each such service for which the independent auditor is engaged pursuant to such policies and procedures, and (ii) the Committee may delegate to one or more members of the Committee the authority to grant pre-approvals for such services, provided that (a) the decisions of such member(s) to grant any such pre-approval shall be presented to the Committee at its next scheduled meeting and (b) the Committee has established policies and procedures for such pre-approval of services consistent with the requirements of clauses (i)(x) and (y) above
5. Meet with the independent auditor prior to the audit to discuss the planning and staffing of the audit.
6. Approve as necessary the termination of the engagement of the independent auditor.

7. Regularly review with the independent auditor any significant difficulties encountered during the course of the audit, any restrictions on the scope of work or access to required information, and any significant disagreement among management and the independent auditor in connection with the preparation of the financial statements. Review with the independent auditor any accounting adjustments that were noted or proposed by the auditor but that were “passed” (as immaterial or otherwise), any communications between the audit team and the independent auditor’s national office respecting auditing or accounting issues presented by the engagement, any “management” or “internal control” letter or schedule of unadjusted differences issued, or proposed to be issued, by the auditor to the Company, or any other material written communication provided by the auditor to the Company’s management.
8. Review with the independent auditor the critical accounting policies and practices used by the Company, all alternative treatments of financial information within generally accepted accounting principles (“GAAP”) that the independent auditor has discussed with management, the ramifications of the use of such alternative disclosures and treatments and the treatment preferred by the independent auditor.

B. Review of Financial Reporting, Policies and Processes

1. Review and discuss with management and the independent auditor the Company’s annual audited financial statements and any certification, report, opinion or review rendered by the independent auditor, and recommend to the Board whether the audited financial statements should be included in the Company’s annual report on Form 10-K.
2. Review and discuss with management and the independent auditor the Company’s quarterly financial statements; provided that such review may be conducted by the Chairman of the Committee.
3. Review and discuss earnings press releases; provided that such review may be conducted by the Chairman of the Committee.
4. Periodically meet separately with management, with internal auditors and with the independent auditor.
5. Review with management and the independent auditor any significant judgments made in management’s preparation of the financial statements and the view of each as to appropriateness of such judgments.
6. Review with management its assessment of the effectiveness and adequacy of the Company’s internal control structure and procedures for financial reporting (“Internal Controls”), review annually with the independent auditor the attestation to and report on the assessment made by management, and consider with management, the internal auditors and the independent auditor whether any changes to the Internal Controls are appropriate in light of management’s assessment or the independent auditor’s attestation.
7. Review and discuss with management and the independent auditor any off-balance sheet transactions or structures and their effect on the Company’s financial results and operations, as well as the disclosure regarding such transactions and structures in the Company’s public filings.
8. Review with management and the independent auditor the effect of regulatory and accounting initiatives on the financial statements. Review any major issues regarding accounting principles and financial statement presentations, including any significant changes in selection of an application of accounting principles. Consider and approve, if appropriate, changes to the Company’s auditing and accounting principles and practices as suggested by the independent auditor or management.
9. Review any special audit steps adopted in light of material control deficiencies. Review with the independent auditor and management the extent to which changes or improvements in financial or

accounting practices, as approved by the Committee, have been implemented.

10. If the Company has internal auditors: (a) Review the appointment and replacement of the internal auditors; (b) Review the significant reports to management prepared by the internal auditors; and (c) Discuss with management and the internal auditors the internal auditors' responsibilities, budget and staffing and the planned scope of internal audits.

C. Risk Management, Related Party Transactions, Legal Compliance and Ethics

1. Review with the chief executive and chief financial officer of the Company any report on significant deficiencies in the design or operation of the Internal Controls that could adversely affect the Company's ability to record, process, summarize or report financial data, any material weaknesses in Internal Controls identified to the auditors, and any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's Internal Controls.
2. Review and approve any related-party transactions, after reviewing each such transaction for potential conflicts of interests and other improprieties.
3. Establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters. Adopt, as necessary, appropriate remedial measures or actions with respect to such complaints or concerns.
4. Adopt a Code of Conduct for all employees and directors, which meets the requirements of Item 406 of the SEC's Regulation S-K, and provide for and review prompt disclosure to the public of any change in, or waiver of, such Code of Conduct.
5. As requested by the Board, review and investigate conduct alleged by the Board to be in violation of the Company's Code of Conduct, and adopt as necessary or appropriate, remedial, disciplinary, or other measures with respect to such conduct.
6. Discuss with management and the independent auditor any correspondence with regulators or governmental agencies that raise material issues regarding the Company's financial statements or accounting policies.
7. Discuss with management the Company's (a) insurance programs, and (b) major financial and business risk exposures and the steps management has taken to monitor and control such exposures.
8. Review with the Company's general counsel and report to the Board on litigation, material government investigations and compliance with applicable legal requirements and the Company's Code of Conduct.
9. Prepare the report required by the rules of the SEC to be included in the Company's annual proxy statement.
10. Regularly report to the Board on the Committee's activities, recommendations and conclusions.
11. Review and reassess the Charter's adequacy at least annually.
12. Review 401(k) plan audit on an annual basis.
13. Assess senior finance management's performance and competence, obtaining feedback from internal audit and external auditors, and provide results to Compensation Committee.

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

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints David L. Dutton and John R. Horn (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 9, 2008, at the Annual Meeting of Stockholders to be held on June 3, 2008 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 16, 2008, 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 II 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 **WITHHOLD AUTHORITY**
(except as written to the contrary below)
Dr. Hans-Georg Betz
David L. Dutton
Kenneth G. Smith

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, 2008.

FOR **AGAINST** **ABSTAIN**

3. To transact such other business as may properly come before the meeting or any adjournment thereof.

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: _____ 2008

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.