

SCHEDULE 14A INFORMATION

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

Filed by the Registrant ☒

Filed by a Party other than Registrant ☐

Check the appropriate box:

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

MATTSON TECHNOLOGY, INC.
(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

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

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

2) Aggregate number of securities to which transaction applies:

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

4) Proposed maximum aggregate value of transaction:

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- ☐ Fee paid previously with preliminary materials.
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1) Amount Previously Paid:

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 21, 2006**

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 21, 2006, at 10:00 a.m. local time for the following purposes:

1. To elect two (2) Class III 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, 2006.
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 May 17, 2006 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.

By Order of the Board of Directors,

Ludger Viefhues, Secretary

Fremont, California
May 22, 2006

<p>You are cordially invited to attend the meeting. However, whether or not you plan to attend the meeting in person, please complete, date and sign the accompanying proxy and mail it promptly in the return envelope to assure that your shares are represented at the meeting. If you later desire to revoke your proxy, you may do so at any time before it is exercised.</p>

**Mattson Technology, Inc.
47131 Bayside Drive
Fremont, California 94538**

**PROXY STATEMENT FOR
ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD JUNE 21, 2006**

GENERAL INFORMATION

Your proxy in the enclosed form is solicited by the directors of Mattson Technology, Inc., a Delaware corporation (the "Company"), for use at the Annual Meeting of Stockholders to be held on June 21, 2006 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. The date of this Proxy Statement is May 22, 2006, the approximate date on which this Proxy Statement and accompanying form of proxy were first sent or given to stockholders.

The shares represented by any proxy in the enclosed form 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.

Copies of proxy solicitation material will be furnished to brokerage houses, fiduciaries, and custodians holding shares in their names which are beneficially owned by others to forward to such beneficial owners. The Company may reimburse such persons for their cost of forwarding the solicitation material to such beneficial owners. Original solicitation of proxies by 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. The Company reserves the right, if deemed desirable or necessary, to retain a proxy solicitation firm to deliver soliciting materials to stockholders of record and beneficial owners and to assist the Company in collecting proxies from such persons. The costs of these services, exclusive of out-of-pocket costs, is not expected to exceed \$10,000. Except as described above, the Company does not intend to solicit proxies other than by mail. The Company will bear the costs of the solicitation of proxies for the Meeting.

SHARES OUTSTANDING AND VOTING RIGHTS

Only holders of shares of common stock of record as of the close of business on May 17, 2006 are entitled to vote at the Meeting. On the record date, there were issued and outstanding 52,447,148 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 the enclosed proxy 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) a later-dated proxy, (ii) a written revocation sent to and 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 15, 2006 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 Executive 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 52,411,695 shares of common stock outstanding as of March 15, 2006. Beneficial ownership is determined under the rules and regulations of the Securities and Exchange Commission. Shares of common stock subject to options or warrants that are presently exercisable or exercisable within 60 days of March 15, 2006 are deemed outstanding for the purpose of computing the shares owned and percentage ownership of the person or entity holding options or warrants, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person or entity. Entries denoted by an asterisk represent an amount less than 1%.

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	6,445,591 (1)	12.3%
The TCW Group, Inc., on behalf of the TCW Business Unit 865 South Figueroa Street Los Angeles CA, 90017	4,121,139 (2)	7.9%
FMR Corp. 82 Devonshire Street Boston, MA 02109	2,958,628 (3)	5.6%
Dalton, Greiner, Hartman, Maher & Co LLC 565 Fifth Avenue, Suite 2101 New York NY 10017	2,649,015 (4)	5.1%
Dr. Jochen Melchior	75,275 (5)	*
Dr. Hans-Georg Betz	48,389 (6)	*
Kenneth Kannappan	79,500 (7)	*
Shigeru Nakayama	84,854 (8)	*
Kenneth G. Smith	85,125 (9)	*
William Turner	51,500 (10)	*
David L. Dutton	633,360 (11)	1.2%
Robert B. MacKnight	511,613 (12)	*
Ludger H. Viefhues	500,836 (13)	*
Directors and executive officers as a group (9 persons)	2,070,452 (14)	4.0%

* Less than 1%.

- (1) According to Schedule 13G filed with the Securities and Exchange Commission on February 14, 2006 by NWQ Investment Management Company, LLC ("NWQ"), as of December 31, 2005 NWQ had sole voting power over 6,260,591 shares and sole dispositive power over 6,445,591 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 13, 2006 by The TCW Group, Inc. on behalf of the TCW Business Unit (the "TCW Business Unit"), the aggregate number of shares of the Company's common stock beneficially owned by the TCW Business Unit is 4,121,139, and the TCW Business Unit has the shared power to vote of 2,839,569 shares and the shared power to dispose of 4,121,139 shares.

- (3) According to Schedule 13G filed with the Securities and Exchange Commission on February 14, 2006 by FMR Corp. ("FMR"), as of December 31, 2005 FMR had sole voting power over 1,060,018 shares and sole dispositive power over 2,958,628 shares of the Company's common stock, as a result of acting as investment advisor to various investment companies and as investment manager of institutional accounts.
- (4) According to Schedule 13G filed with the Securities and Exchange Commission on February 14, 2006 by Dalton, Greiner, Hartman, Maher & Co LLC ("DGHM"), as of December 31, 2005 DGHM had sole voting power over 2,610,315 shares and sole dispositive power over 2,649,015 shares of the Company's common stock.
- (5) Dr. Melchior: includes 75,000 shares subject to options exercisable within 60 days of March 15, 2006.
- (6) Dr. Betz: includes 47,500 shares subject to options exercisable within 60 days of March 15, 2006.
- (7) Mr. Kannappan: consists of 79,500 shares subject to options exercisable within 60 days of March 15, 2006.
- (8) Mr. Nakayama: consists of 84,854 shares subject to options exercisable within 60 days of March 15, 2006.
- (9) Mr. Smith: consists of 85,125 shares subject to options exercisable within 60 days of March 15, 2006.
- (10) Mr. Turner: consists of 51,500 shares subject to options exercisable within 60 days of March 15, 2006.
- (11) Mr. Dutton: includes 614,855 shares subject to options exercisable within 60 days of March 15, 2006.
- (12) Mr. MacKnight: includes 502,455 shares subject to options exercisable within 60 days of March 15, 2006.
- (13) Mr. Viefhues: includes 483,947 shares subject to options exercisable within 60 days of March 15, 2006.
- (14) Includes 2,024,736 shares subject to options exercisable within 60 days of March 15, 2006.

PROPOSAL ONE

ELECTION OF DIRECTORS

The Company has a classified Board of Directors consisting of two Class I directors (William Turner and Kenneth Kannappan), three Class II directors (Dr. Hans-Georg Betz, David Dutton and Kenneth G. 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 2007, 2008, and 2006, 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 III directors will expire on the date of the upcoming Annual Meeting. Accordingly, two persons are to be elected to serve as Class III directors of the Board of Directors at the Meeting. Management's nominees for election by the stockholders to those two positions are the current Class III members of the Board of Directors, Dr. Jochen Melchior and Shigeru Nakayama. 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. Melchior or Mr. Nakayama becomes unavailable or unable to serve as a director of the Company prior to the voting, the proxyholders will refrain from voting for the unavailable nominee and will vote for a substitute nominee in the exercise of their best judgment.

Vote Required and Recommendation of the Board of Directors

If a quorum is present for voting at the Annual Meeting, the two nominees for Class III director receiving the highest number of votes will be elected as Class III 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 our current directors, including the Class III nominees to be elected at this Meeting, information with respect to their ages as of December 31, 2005 and their background.

Name	Age		Director Since
<i>Class I directors whose terms expire at the 2007 Annual Meeting of Stockholders:</i>			
Kenneth Kannappan	46	Director	July 1998
William Turner	49	Director	November 2002
<i>Class II directors whose terms expire at the 2008 Annual Meeting of Stockholders:</i>			
Dr. Hans-Georg Betz	59	Director	January 2001
David Dutton	45	Director	December 2001
Kenneth G. Smith	56	Director	August 1994
<i>Class III directors whose terms expire at the 2006 Annual Meeting of Stockholders:</i>			
<i>Nominees for reelection at the Annual Meeting:</i>			
Dr. Jochen Melchior	63	Director (Chairman)	January 2001
Shigeru Nakayama	70	Director	May 1996

Dr. Jochen 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, KHS AG, Universitaetsklinikum Essen and WCM AG. He serves as Chairman of the Supervisory Board of LOGIKA AG and as Vice-Chairman of the Supervisory Board of Preventicum GmbH.

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.

David Dutton has served as a director since December 2001. Mr. Dutton has served as the Company's Chief Executive Officer and President since October 2001. Prior to being elected Chief Executive Officer and President, Mr. Dutton had served as the President of the Company's Plasma Products Division. Mr. Dutton joined the Company in 1994 as General Manager in the Strip/Plasma Etch division. From 1998 to 2000, Mr. Dutton served as Executive Vice President and Chief Operating Officer of the Company. From 1993 to 1994, Mr. Dutton was Engineering Manager for Thin Films Processing at Maxim Integrated Products, Inc. From 1984 to 1993, Mr. Dutton served as an engineer and then manager in plasma etch processing and yield enhancement at Intel Corp.

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. and as Chairman of the Board of Integrated Device Technology, Inc., a manufacturer of communications integrated circuits.

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.

William Turner has served as a director since November 2002. Mr. Turner also serves as Chairman of the Company's Audit Committee. From 1983 to 1997, Mr. Turner was employed by KLA-Tencor Corporation ("KLA"). Mr. Turner was the Vice President, Finance of KLA from 1996 to 1997, and was the Corporate Controller of KLA from 1989 to 1996.

Board Meetings and Committees

During the year ended December 31, 2005, the Board of Directors held nine meetings. During 2005, 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, Kannappan, Melchior, Nakayama, Smith and Turner 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 2005, the Audit Committee consisted of Mr. Turner, Dr. Betz, Mr. Kannappan and Mr. Smith, each of whom is independent for purposes of the NASDAQ listing standards. The Audit Committee held twelve meetings during 2005.

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 “Report of the Compensation Committee on Executive Compensation.” During 2005, 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 two meetings during 2005.

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 2005, 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 Committee did not meet during 2005.

Compensation of Directors

Non-employee directors are paid \$7,000 per Board of Directors meeting attended. The Chairman of the Board is paid \$10,000 per meeting attended. The Company also reimburses its outside directors for travel expenses and other out-of-pocket expenses associated with attending meetings. Non-employee directors are paid \$1,000 or, in the case of the committee chairman, \$2,000 per meeting of each committee of the Board attended.

The Company’s 2005 Equity Incentive Plan (the “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 is granted an initial option to purchase 30,000 shares on the date of appointment or election to the Board. In addition, each non-employee director of the Company who has continuously served on the Board for six months as of the date of the Annual Meeting of Stockholders is granted an option to purchase an additional 15,000 shares or, in the case of the Chairman, an option to purchase an additional 20,000 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.

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 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 Ludger Viefhues, Secretary, Mattson Technology, Inc., 47131 Bayside Parkway, M/S 2064 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 or her 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 or her discretion, forward only representative correspondence.

Director Attendance at Annual Stockholder Meeting

The Company typically schedules a Board meeting in conjunction with the Annual Stockholder Meeting. 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.

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.

EXECUTIVE COMPENSATION AND OTHER MATTERS

Executive Compensation

The following table presents information for the years ended December 31, 2003, 2004, and 2005 regarding the compensation paid to the Company's Chief Executive Officer and each of the most highly compensated executive officers who were paid over \$100,000 in the most recent fiscal year.

<u>Name and Principal Position</u>	<u>Fiscal Year</u>	<u>Annual Compensation</u>		<u>Long Term Compensation Awards/ Securities Underlying Options (#)</u>	<u>All Other Compensation (\$)(2)</u>
		<u>Salary (\$)</u>	<u>Bonus (\$)(1)</u>		
David Dutton Chief Executive Officer	2005	443,077	95	100,000	300
	2004	429,999	455,360	100,626	1,500
	2003	340,000	—	89,088	1,600
Robert MacKnight President and Chief Operating Officer	2005	337,119	95	110,000	3,541
	2004	339,346	262,135	75,532	2,052
	2003	289,000	—	66,923	6,498
Ludger Viefhues Chief Financial Officer, Executive Vice President, Finance and Secretary	2005	308,923	95	75,000	3,702
	2004	316,384	231,825	75,500	4,726
	2003	272,000	—	66,575	2,948

- (1) Bonuses are based on performance or achievement of goals and accrued for the year indicated, but may be paid after year-end. See "Report of the Compensation Committee on Executive Compensation." No bonus was paid for 2003. Bonuses in 2005 were part of a Company-wide bonus program in which each eligible employee received the same amount.
- (2) Except as otherwise described in this footnote, represents for each fiscal year the value of employer contributions to accounts of each of the named persons in the Company's 401(k) Plan. Included in 2003 for Mr. MacKnight was a payment of \$513 for a spot recognition award.

Stock Options Granted During 2005

The following table provides the specified information concerning grants of options to purchase the Company's common stock made during the year ended December 31, 2005, to the persons named in the Executive Compensation Table.

Individual Grants in Fiscal 2005						
<u>Name</u>	<u>Number of Securities Underlying Options Granted(1)</u>	<u>% of Total Options Granted to Employees in Fiscal 2005(2)</u>	<u>Exercise Price (\$/share)(3)</u>	<u>Expiration Date(4)</u>	<u>Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term(5)</u>	
					<u>5%</u>	<u>10%</u>
David Dutton.....	100,000	9.41%	\$9.25	3/8/2015	\$581,728	\$1,474,212
Robert MacKnight.....	75,000	7.06%	\$9.25	3/8/2015	\$436,296	\$1,105,659
	35,000	3.29%	\$7.19	7/1/2012	\$102,447	\$ 238,745
Ludger Viefhues.....	75,000	7.06%	\$9.25	3/8/2015	\$436,296	\$1,105,659

- (1) Options granted in 2005 to executive officers were granted under the Company's 1989 Stock Option Plan and have ten-year terms or, in the case of the grant of 35,000 options to Mr. MacKnight under the Company's 2005 Equity Incentive Plan have seven-year terms. Except as set forth below, all options vest over a period of four years at a rate of 25% after one year and 1/48th each month thereafter, conditioned upon continued employment with the Company.
- (2) The Company granted an aggregate of 1,063,052 options during the year ended December 31, 2005.
- (3) All options were granted with an exercise price equal to fair market value on the date of grant i.e. the closing sale price of the Company's common stock as quoted on the NASDAQ National Market on the date of grant.
- (4) The options in this table may terminate before their expiration upon the termination of the optionee's status as an employee or consultant or upon the optionee's disability or death. Options granted under the 2005 Equity Incentive Plan vest fully upon the optionee's disability or death.
- (5) Potential gains are net of exercise price, but before taxes associated with exercise. These amounts represent certain assumed rates of appreciation only, in accordance with the Securities and Exchange Commission's rules. Actual gains, if any, on stock option exercises are dependent on the future performance of the common stock, overall market conditions and the option holders' continued employment through the vesting period. The 5% and 10% assumed annual rates of appreciation are specified in SEC rules and do not represent the Company's estimate or projection of future stock price growth. The Company does not necessarily agree that this method can properly determine the value of an option and there can be no assurance that the potential realizable values shown in this table will be achieved. One share of stock purchased at \$9.25 in 2005 would yield profits of approximately \$5.82 per share at 5% appreciation over ten years, or approximately \$14.74 per share at 10% appreciation over the same period. One share of stock purchased at \$7.19 in 2005 would yield profits of approximately \$2.93 per share at 5% appreciation over seven years, or approximately \$6.82 per share at 10% appreciation over the same period.

Option Exercises in last Fiscal Year and Fiscal 2005 Year-End Option Values

The following table provides the specified information concerning exercises of options to purchase the Company's common stock in the year ended December 31, 2005, and unexercised options held as of December 31, 2005, by the persons named in the Executive Compensation Table above.

Aggregate Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

<u>Name</u>	<u>Shares Acquired on Exercise</u>	<u>Value Realized</u>	<u>Number of Securities Underlying Unexercised Options at December 31, 2005</u>		<u>Value of Unexercised In-the-Money Options at December 31, 2005(3)</u>	
			<u>Vested(1)</u>	<u>Unvested(2)</u>	<u>Vested(4)</u>	<u>Unvested</u>
David Dutton.....	—	—	686,096	37,084	\$1,610,899	\$276,676
Robert MacKnight.....	—	—	533,702	63,125	\$1,339,364	\$308,925
Ludger Viefhues.....	—	—	474,572	26,875	\$844,118	\$204,588

(1) Represents options which are vested and immediately exercisable. Options granted under the 2005 Equity Incentive Plan generally vest and become exercisable over a period of four years at a rate of 25% after one year and 1/48th each month thereafter. On August 15, 2005, the Company accelerated the vesting of all outstanding options with an exercise price of \$9.05 or higher ("Accelerated Options") in order to reduce the Company's future compensation expense. The Company simultaneously imposed restrictions on shares to be acquired in the future by the persons named in the Executive Compensation Table through the exercise of those Accelerated Options. The restrictions prevent the sale of such shares by such persons until the earlier of the original vesting date of the relevant options or the individual's termination of employment. The numbers of securities in this column that were freely tradable as of December 31, 2005 are as follows: 550,762 for Mr. Dutton, 432,043 for Mr. MacKnight, and 372,930 for Mr. Viefhues.

(2) Represents shares which are unvested and not exercisable.

(3) Market value of underlying securities is based on the closing price of the Company's common stock on December 30, 2005 (the last trading day of the 2005 year), which was \$10.06 per share as reported on the NASDAQ National Market. Value of Unexercised In-the-Money Options at Fiscal Year End is calculated by multiplying the difference between the market value and exercise price at year end by the number of options held at year end.

(4) Represents value related to shares that are vested and immediately exercisable. Includes value related to Accelerated Options the shares underlying which could not be sold as of December 31, 2005. Values related to shares that were freely tradable as of December 31, 2005 are as follows: \$1,546,421 for Mr. Dutton, \$1,291,005 for Mr. MacKnight, and \$795,759 for Mr. Viefhues.

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 National Market, and exercise price when exercised by the number of shares acquired upon exercise. The value of any payment by the Company for the exercise price or related taxes is not included.

Employment Contracts and Termination of Employment and Change-in-Control Arrangements

The Company has entered into a Severance and Executive Change of Control Agreement with Mr. Dutton, the Company's Chief Executive Officer, and has entered into an Executive Change of Control Agreement with its two other current executive officers, Mr. MacKnight and Mr. Viefhues (collectively, these agreements are the "Severance Agreements"). Each Severance Agreement provides that severance benefits become payable to the executive in the event that, within 12 months following a "Change of Control" of the Company (described below), the executive is terminated by the Company without good cause. In that event, 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 9 months for the other executive officers. The Chief Executive Officer is entitled to this same severance benefit in the event his employment is terminated by the Company without good cause, in the absence of a Change of Control.

In the event that, within 12 months following a Change of Control of the Company, any of these executive officers terminates his employment with the Company for "good reason" (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's unvested stock options following a Change of 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 of Control" is defined in the Severance Agreements as an acquisition by any person of beneficial ownership of 50% or more 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 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 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.

Compensation Committee Interlocks and Insider Participation

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.

Certain Relationships and Related Transactions

During the year ended December 31, 2005, there was no transaction or series of transactions to which we were or are a party in which the amount involved exceeded or exceeds \$60,000 and in which any director, executive officer, holder of more than 5% of our 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 other than the transactions described immediately below.

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.

Section 16(a) Beneficial Ownership Reporting Compliance

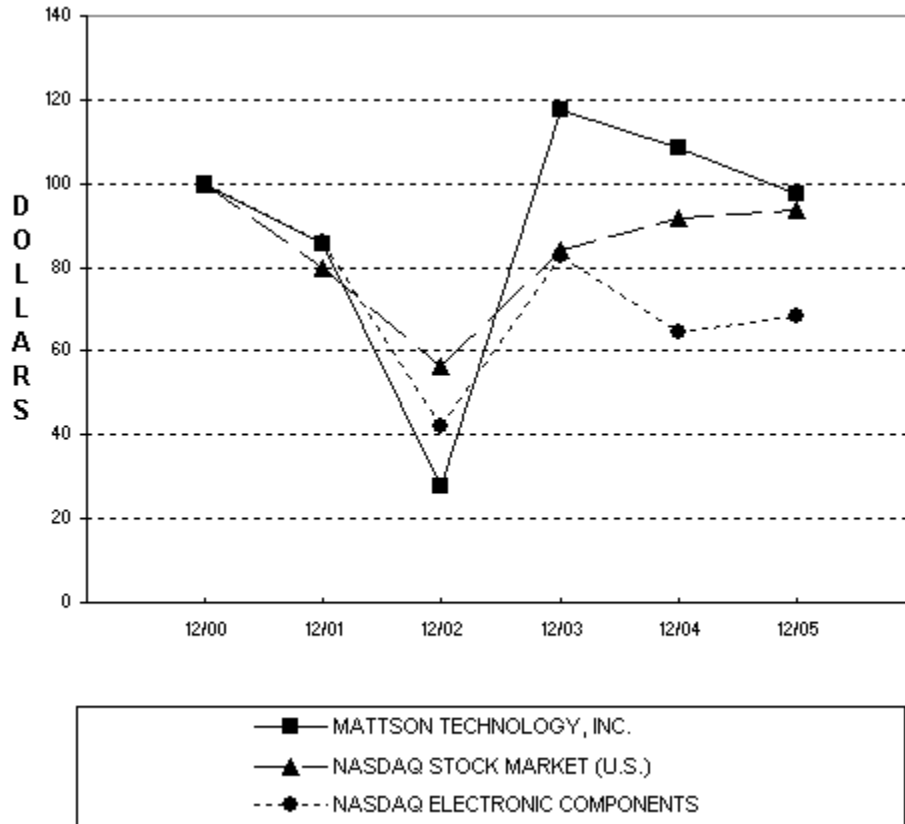
Section 16(a) of the Securities Exchange Act of 1934 requires the Company's officers and directors, and persons who own more than ten-percent of a registered class of the Company's equity securities, to file reports of ownership and changes in ownership with the Securities and Exchange Commission. Officers,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

To the Company's knowledge, based solely on review of the copies of such reports furnished to the Company and written representation from certain reporting persons that no other reports were required, the Company believes that during 2005, its executive officers, directors and 10% stockholders complied with all Section 16(a) filing requirements.

COMPARISON OF STOCKHOLDER RETURN

Set forth below is a line graph comparing the annual percentage change in the cumulative total return of the Company's common stock with the cumulative total return of the NASDAQ Stock Market Index - US and the NASDAQ Electronic Components Index for the period commencing December 31, 2000 and ending December 31, 2005.

Comparison of Cumulative Total Return From December 31, 2000 through December 31, 2005
Mattson, Total Return Index for the NASDAQ Stock Market and NASDAQ Electronic Components Index (1)



	12/31/2000	12/31/2001	12/31/2002	12/31/2003	12/31/2004	12/31/2005
MATTSON TECHNOLOGY, INC.	100.00	85.43	27.73	117.33	108.70	97.55
NASDAQ STOCK MARKET (U.S.)	100.00	79.57	56.48	84.08	91.61	93.72
NASDAQ ELECTRONIC COMPONENTS	100.00	86.02	41.97	82.46	64.71	68.19

 (1) Assumes that \$100.00 was invested in the Company's common stock and in each index at market closing prices on December 31, 2000, and that all dividends were reinvested. No cash dividends have been declared on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

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 four independent, non-employee directors and operates under a written charter adopted and approved by the Board of Directors. (The charter for the Audit Committee is available on the Company's website, and was included as *Appendix A* to the Proxy Statement for the 2004 annual meeting of stockholders.) The members of the Audit Committee during 2005 were, and currently are, William Turner (Chairman), Kenneth Kannappan, Dr. Hans-Georg Betz 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 William Turner 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 twelve meetings during 2005. The meetings were designed, among other things, to facilitate and encourage communication among the Audit Committee, management and the Company's independent auditors. PricewaterhouseCoopers LLP ("PwC") performed the audit of the Company's financial statement for 2005 as its independent auditors and has been selected by the Audit Committee to perform the audit for 2006. We discussed with the Company's management and PwC the overall scope of and plan for the 2005 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, 2005 contained in the Annual Report on Form 10-K for the year ended December 31, 2005. We discussed with management and PwC the Company's restatement of financial statements for the quarters ended March 27, June 26 and September 25, 2005 and for the fiscal years ended December 31, 2002, 2003 and 2004, which restatement is included in the Annual Report on Form 10-K for the year ended December 31, 2005. 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, among other things, and pre-approved 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, 2005 be included in the Company's Annual Report on Form 10-K.

May 22, 2006

AUDIT COMMITTEE

William Turner, Chairman
Kenneth Kannappan
Kenneth Smith
Hans-Georg Betz

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, 2005 and 2004.

	<u>Fiscal 2005 Fees</u>	<u>Fiscal 2004 Fees</u>
Audit Fees	\$ 2,065,000	\$ 1,684,000
Audit-Related Fees	140,000	64,000
Tax Fees	—	7,000
All Other Fees	—	—
Total Fees	<u>\$ 2,205,000</u>	<u>\$ 1,755,000</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 employee benefit plan audits, accounting consultations in connection with attest services that are not required by statute or regulation, and consultations concerning financial accounting and reporting standards.

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.

The Audit Committee has concluded that the provision of the non-audit services listed above is compatible with maintaining the independence of PwC. 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 Auditors

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. The Audit Committee may also pre-approve particular services on a case-by-case basis. 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 COMPENSATION COMMITTEE ON EXECUTIVE COMPENSATION

The Compensation Committee 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.

Compensation Philosophy

In structuring the Company's compensation programs, the Compensation Committee's goals are to align compensation with the Company's business objectives and performance and to enable it to attract, retain and reward executive officers and other key employees who contribute to the long-term success of the Company. The Compensation Committee also seeks to link executive compensation with the creation of long-term stockholder value. Consistent with these goals, the Company's compensation programs include a mix of salary, bonus, stock options and restricted stock. In particular, stock options and restricted stock are used to link executive incentives and the creation of stockholder value.

In addressing compensation issues, the Committee is influenced by several factors which arise from the Company's current position and industry. The Company competes against many companies that are substantially larger than the Company and sells primarily to very large customers. The Company must be in a position to attract and maintain a management team with sufficient experience and credibility with customers to compete. Moreover, the Company has grown in size and complexity, and the Company must have a management team which has the ability to address that growth and successfully manage a much larger business. The Company also is involved in a highly cyclical industry that can experience significant slowdowns and declines in financial performance and stock price which are not related to the performance of management.

Base Salary. The Compensation Committee reviews annually each executive officer's base salary. When reviewing base salaries, the Compensation Committee considers individual and corporate performance, levels of responsibility, prior experience, breadth of knowledge and pay practices of comparable companies.

Bonus. The Company's bonus plan provides for bonuses to be awarded to key employees based on specific goals achieved by the Company and the relative level of achievement of goals by the key employees. The bonus plan is designed such that bonuses when combined with salaries create total compensation which is competitive with other companies against which the Company competes in hiring and retaining key employees. Bonus awards depend on the extent to which Company and individual performance objectives are achieved. For 2005, bonuses were determined by the Company's net income from operations and certain other metrics related to Company and individual performance. In 2005, the Company's executive officers received no bonuses other than bonuses pursuant to a Company-wide bonus program in which each eligible employee received the same amount.

Options and Restricted Stock. The purpose of the Company's 2005 Equity Incentive Plan is to provide employees of the Company with an opportunity to share, along with stockholders of the Company, in the long-term performance of the Company. The Committee makes periodic grants of stock options and restricted stock to eligible employees, generally on an annual basis and upon commencement of employment or following a significant change in job responsibilities. Stock options and restricted stock generally vest over a four-year period, and stock options expire seven or ten years from the date of grant. The exercise price of options is generally 100% of fair market value of the underlying stock on the date of grant. In determining the number of stock options and shares of restricted stock to be granted, the Committee considers individual performance, overall contribution to the Company, retention, the number of stock options held, and grant data from comparable companies.

Section 162(m) of the Internal Revenue Code (the "Code") imposes limitations on the deductibility for federal income tax purposes of compensation over \$1 million paid to certain executive officers in a taxable year. Compensation above \$1 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. The Committee believes that at the present time it is unlikely that the compensation paid to any executive officer in a taxable year which is subject to the deduction limit will exceed \$1 million. In addition, no

employee may receive in any fiscal year options to purchase in excess of 500,000 shares. The Compensation 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 Compensation Committee intends to continue to evaluate the effects of the statute and any Treasury regulations and the advisability of qualifying its executive compensation for deductibility of such compensation. The Compensation Committee’s policy is to qualify its executive compensation for deductibility under applicable tax laws to the extent practicable.

Chief Executive Officer Compensation

The Compensation Committee uses the same procedures described above in setting the annual salary, bonus, stock option and restricted stock awards for the Chief Executive Officer. The Chief Executive Officer’s salary is determined based on comparisons with competitive companies as described above. In determining the number of stock options and shares of restricted stock to be granted to the Chief Executive Officer, the Committee considers individual performance, overall contribution to the Company, retention, the number of stock options held, and grant data from comparable companies.

Conclusion

As a significant portion of the Company’s compensation program is linked to Company performance, the Committee believes that compensation is closely tied to increases in long-term stockholder value.

COMPENSATION COMMITTEE

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

May 22, 2006

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, 2006. 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.

See “Report of the Audit Committee” for further information concerning services provided by and fees paid to PwC in 2004 and 2005.

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, 2006.

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 January 22, 2007, 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 2006 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.

By Order of the Board of Directors,

Ludger Viefhues, Secretary

May 22, 2006

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 Dutton and Ludger Viefhues (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 May 17, 2006, at the Annual Meeting of Stockholders to be held on June 21, 2006 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 May 22, 2006, 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 III directors of the Company to hold office for a three-year term and until their successors are elected and qualified.

☐ **FOR** all nominees listed below
(except as written to the contrary below)

☐ **WITHHOLD AUTHORITY**

Dr. Jochen Melchior
Shigeru Nakayama

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, 2006.

☐ **FOR**

☐ **AGAINST**

☐ **ABSTAIN**

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

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

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

Dated: _____ 2006

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.