

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**FORM S-8**  
**REGISTRATION STATEMENT**

*Under*  
*The Securities Act of 1933*

**Mattson Technology, Inc.**  
(Exact name of Registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**77-0208119**  
(I.R.S. Employer  
Identification Number)

47131 Bayside Parkway  
Fremont, California 94538  
(Address, including zip code, of Registrant's principal executive offices)

**Mattson Technology, Inc.**  
**Nonqualified Deferred Compensation Plan**  
(Full titles of the Plan)

Ludger Viefhues  
Executive Vice President-Finance, Chief Financial Officer and Secretary  
Mattson Technology, Inc.  
47131 Bayside Parkway  
Fremont, California 94538  
(510) 657-5900  
(Name, address, including zip code, and telephone number, including area code, of agent for service)

*Copies to:*  
**John R. Horn, Esq.**  
**Vice President and General Counsel**  
**Mattson Technology, Inc.**  
**47131 Bayside Parkway**  
**Fremont, California 94538**  
**(510) 657-5900**

**CALCULATION OF REGISTRATION FEE**

<b>Title of Securities to be Registered</b>	<b>Amount to be Registered</b>	<b>Proposed Maximum Offering Price Per Share</b>	<b>Proposed Maximum Aggregate Offering Price</b>	<b>Amount of Registration Fee (2)</b>
Nonqualified Deferred Compensation Obligations (1) .....	\$10,000,000	100%	\$10,000,000	\$1,070

- (1) The Deferred Compensation Obligations are unsecured obligations of the Registrant to pay deferred compensation in the future in accordance with the terms of the Mattson Technology, Inc. Nonqualified Deferred Compensation Plan.
- (2) Estimated pursuant to rule 457(h) under the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee.

**MATTSON TECHNOLOGY, INC.**  
**REGISTRATION STATEMENT ON FORM S-8**

**PART II**

**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

**Item 3. Incorporation of Documents by Reference.**

The following documents and information filed with the Securities and Exchange Commission (the "Commission") by Mattson Technology, Inc. (the "Company") are incorporated herein by reference:

- (a) The Company's annual report on Form 10-K filed pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), containing audited financial statements for the Company's fiscal year ended December 31, 2004, as filed with the Securities and Exchange Commission on March 23, 2005.
- (b) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the Company's annual report on Form 10-K referred to in (a) above.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, and prior to the filing of a post-effective amendment which indicates that all securities offered under this registration statement have been sold or which deregisters all securities then remaining unsold, are incorporated by reference in this registration statement from the date of filing of such documents.

**Item 4. Description of Securities.**

The following description of the Deferred Compensation Obligations of the Company under the Company's Nonqualified Deferred Compensation Plan (the "Plan") is qualified in its entirety by reference to the Plan, which is included as an exhibit to this registration statement.

Under the Plan, the Company provides eligible employees who participate in the Plan and members of its Board of Directors who are not employees the opportunity to defer a specified percentage of their base salary in the case of employees and retainer fees for participation on the Company's Board and attendance in committee meetings for nonemployee directors (collectively, "Compensation"). The amount of Compensation to be deferred by each participating employee or nonemployee board member (each, a "Participant") is based on elections by each Participant in accordance with the terms of the Plan. In addition, the Company may make discretionary contributions to the accounts of one or more Participants.

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 (each, an "Obligation," and collectively, 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 the Participant. There is no trading market for the Obligations.

Each Obligation is payable upon a Participant's separation from service with the Company (including terminations due to disability, death or retirement). The Obligations paid upon separation from service are

distributed in the form of a single lump sum payment or in installment periods, depending upon the value of the Participant's account (and in some cases upon the years of service with the Company) and, if applicable, the election made by such Participant. A Participant may specify a withdrawal (a "Scheduled In-Service Withdrawal") of all of his or her account attributable to Compensation deferred for such plan year, if the withdrawal date is more than two years out from the first day of the Plan year for which the deferral applies. If the Participant separates from service prior to the date on which a Scheduled In-Service Withdrawal would otherwise be made or commence, the election is null and void.

The Company can amend, modify or suspend the Plan in whole or in part at any time, except that no amendment, modification or suspension shall have any retroactive effect to reduce any amounts allocated to a Participant's account. The Company may terminate the Plan at any time.

**Item 5. Interests of Named Experts and Counsel.**

None.

**Item 6. Indemnification of Directors and Officers.**

Section 102(b) of the Delaware General Corporation Law authorizes a corporation to provide in its Certificate of Incorporation that a director of the corporation shall not be personally liable to a corporation or its stockholders for monetary damages for breach or alleged breach of the director's "duty of care." While this statute does not change the directors' duty of care, it enables corporations to limit available relief to equitable remedies such as injunction or rescission. The statute has no effect on a director's duty of loyalty or liability for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, illegal payment of dividends or stock redemptions or repurchases, or for any transaction from which the director derives an improper personal benefit. As permitted by the statute, the Company has adopted provisions in its Certificate of Incorporation which eliminate to the fullest extent permissible under Delaware law the personal liability of its directors to the Company and its stockholders for monetary damages for breach or alleged breach of their duty of care.

Section 145 of the General Corporation Law of the State of Delaware provides for the indemnification of officers, directors, employees and agents of a corporation. The Bylaws of the Company provide for indemnification of its directors, officers, employees and agents to the full extent permitted by Delaware law, including those circumstances in which indemnification would otherwise be discretionary under Delaware law. The Company's Bylaws also empower it to enter into indemnification agreements with its directors and officers and to purchase insurance on behalf of any person whom it is required or permitted to indemnify. The Company has entered into agreements with its directors and certain of its executive officers that require the Company to indemnify such persons to the fullest extent permitted under Delaware law against expenses, judgments, fines, settlements and other amounts actually and reasonably incurred (including expenses of a derivative action) in connection with any proceeding, whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was a director or an executive officer of the Company or any of its affiliated enterprises. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder.

Section 145 of the General Corporation Law of the State of Delaware provides for indemnification in terms sufficiently broad to indemnify such individuals, under certain circumstances, for liabilities (including reimbursement of expenses incurred) arising under the Securities Act of 1933, as amended (the "Securities Act").

**Item 7. Exemption from Registration Claimed.**

Not applicable.

**Item 8. Exhibits.**

<b>Exhibit Number</b>	<b>Description of Document</b>
4.1	Mattson Technology, Inc. Nonqualified Deferred Compensation Plan.
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, PC as to the validity of the securities being registered.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Wilson Sonsini Goodrich & Rosati, PC (included in Exhibit 5.1).
24.1	Powers of Attorney (included on signature page).

**Item 9. Undertakings.**

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-3 or Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be

deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, State of California, on December 13, 2005.

MATTSON TECHNOLOGY, INC.

By: /s/ Ludger Viefhues

Ludger Viefhues

Executive Vice President-Finance, Chief

Financial Officer and Secretary

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David Dutton and Ludger Viefhues, and each of them individually, as his attorney-in-fact, with full power of substitution, for him and in any and all capacities, to sign any and all amendments to this Registration Statement on this Form S-8 and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
<u>/s/ David Dutton</u> David Dutton	Chief Executive Officer and Director (Principal Executive Officer)	December 13, 2005
<u>/s/ Ludger Viefhues</u> Ludger Viefhues	Executive Vice President-Finance, Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)	December 13, 2005
<u>/s/ Dr. Jochen Melchior</u> Dr. Jochen Melchior	Chairman of the Board	December 13, 2005
<u>/s/ William Turner</u> William Turner	Director	December 13, 2005
<u>/s/ Shigeru Nakayama</u> Shigeru Nakayama	Director	December 13, 2005
<u>/s/ Kenneth Kannappan</u> Kenneth Kannappan	Director	December 13, 2005
<u>/s/ Dr. Hans-Georg Betz</u>	Director	December 13, 2005

Dr. Hans-Georg Betz

/s/ Kenneth G. Smith

Kenneth G. Smith

Director

December 13, 2005

## **Index to Exhibits**

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