UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 29, 2008

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _______________ to _______________

Commission file number: 000-24838

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 of principal executive offices, zip code)

(510) 657-5900
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such report s), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☑ Non-accelerated filer ☐ Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

Number of shares of common stock outstanding as of July 25, 2008: 49,467,106.

MATTSON TECHNOLOGY, INC.

TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

Item 1. ***Financial Statements (unaudited)***

MATTSON TECHNOLOGY, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited, in thousands, except par value)

	June 29, 2008	December 31, 2007
ASSETS		
Current assets:		
Cash and cash equivalents	$ 101,411	$ 125,533
Short-term investments	34,328	27,034
Accounts receivable, net	28,304	36,011
Advance billings	9,175	2,576
Inventories	57,546	51,073
Inventories - delivered systems	4,178	—
Prepaid expenses and other current assets	8,181	10,996
Total current assets	243,123	253,223
Property and equipment, net	32,500	28,600
Goodwill	18,076	18,076
Intangibles, net	6,824	7,080
Other assets	10,774	10,791
Total assets	$ 311,297	$ 317,770
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 16,240	$ 18,097
Accrued liabilities	22,845	26,900
Deferred revenue	12,198	7,207
Total current liabilities	51,283	52,204
Income taxes payable, noncurrent	15,153	14,147
Other liabilities	5,827	6,136
Total liabilities	72,263	72,487
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock, 2,000 shares authorized; none issued and outstanding	—	—
Common stock, par value $0.001, 120,000 authorized shares; 53,650 shares issued and 49,469 shares outstanding in 2008; 53,517 shares issued and 49,655 shares outstanding in 2007	54	54
Additional paid-in capital	626,273	623,527
Accumulated other comprehensive income	23,620	19,032
Treasury stock, 4,181 shares in 2008 and 3,852 shares in 2007, at cost	(37,987)	(35,374)
Accumulated deficit	(372,926)	(361,956)
Total stockholders' equity	239,034	245,283
Total liabilities and stockholders' equity	$ 311,297	$ 317,770

The accompanying notes are an integral part of these condensed consolidated financial statements.

MATTSON TECHNOLOGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited, in thousands, except per share amounts)

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
Net sales	$ 41,790	$ 86,544	$ 90,445	$ 156,485
Cost of sales	23,345	44,909	51,166	83,622
Gross profit	18,445	41,635	39,279	72,863
Operating expenses:				
Research, development and engineering	9,215	8,893	17,061	18,004
Selling, general and administrative	15,592	17,090	32,367	33,069
Amortization of intangibles	128	128	256	255
Restructuring charges	748	-	748	-
Total operating expenses	25,683	26,111	50,432	51,328
Income (loss) from operations	(7,238)	15,524	(11,153)	21,535
Interest income	837	1,775	2,062	3,370
Interest expense	(76)	—	(76)	(44)
Other income (expense), net	145	248	(1,247)	1,299
Income (loss) before income taxes	(6,332)	17,547	(10,414)	26,160
Provision for income taxes	422	6,000	556	6,962
Net income (loss)	$ (6,754)	$ 11,547	$ (10,970)	$ 19,198
Net income (loss) per share:				
Basic	$ (0.14)	$ 0.22	$ (0.22)	$ 0.37
Diluted	$ (0.14)	$ 0.22	$ (0.22)	$ 0.36
Shares used in computing net income (loss) per share:				
Basic	49,419	52,531	49,391	52,546
Diluted	49,419	53,627	49,391	53,573

The accompanying notes are an integral part of these condensed consolidated financial statements.

MATTSON TECHNOLOGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited, in thousands)

	Six Months Ended	
	June 29, 2008	**July 1, 2007**
Cash flows from operating activities:		
Net income (loss)	$ (10,970)	$ 19,198
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Allowance for doubtful accounts	(252)	(1,204)
Amortization of intangibles	256	255
Depreciation	3,849	3,067
Inventory valuation charge	1,421	552
Stock-based compensation	2,371	1,972
Other non-cash items	58	431
Changes in assets and liabilities:		
Accounts receivable	8,130	634
Advance billings	(6,599)	3,580
Inventories	(9,728)	5,114
Inventories - delivered systems	(4,178)	1,879
Prepaid expenses and other current assets	2,995	(8,106)
Other assets	(64)	(733)
Accounts payable	(2,270)	3,006
Accrued liabilities	(4,518)	(2,267)
Deferred revenue	4,741	(7,496)
Income taxes payable, noncurrent and other liabilities	792	4,588
Net cash provided by (used in) operating activities	(13,966)	24,470
Cash flows from investing activities:		
Purchases of available-for-sale investments	(21,707)	(24,001)
Sales and maturities of available-for-sale investments	14,450	36,138
Purchases of property and equipment	(4,645)	(3,211)
Sales of property and equipment	691	474
Net cash provided by (used in) investing activities	(11,211)	9,400
Cash flows from financing activities:		
Proceeds from stock plans, net of shares withheld for employee taxes	375	1,436
Purchases of treasury stock	(2,613)	(10,000)
Net cash used in financing activities	(2,238)	(8,564)
Effect of exchange rate changes on cash and cash equivalents	3,293	1,007
Net increase (decrease) in cash and cash equivalents	(24,122)	26,313
Cash and cash equivalents, beginning of period	125,533	91,416
Cash and cash equivalents, end of period	$ 101,411	$ 117,729

The accompanying notes are an integral part of these condensed consolidated financial statements.

Note 1. Basis of Presentation

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by such accounting principles for complete financial statements. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair statement of financial position and operations have been included. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements of Mattson Technology, Inc. (the Company or Mattson) for the year ended December 31, 2007, which are included in the Company's Annual Report on Form 10-K.

The Company's current year will end December 31, 2008 and include 52 weeks. The Company closes its fiscal quarters on the Sunday closest to March 31, June 30, and September 30, and on December 31. The latest fiscal quarter ended June 29, 2008. The results of operations for the three and six months ended June 29, 2008 are not necessarily indicative of results that may be expected for future quarters or for the entire year ending December 31, 2008.

The consolidated financial statements include the accounts of the Company and its subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation.

Management Estimates

The preparation of the condensed consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Recent Accounting Pronouncements

With the exception of those discussed below, there have been no recent accounting pronouncements or changes in accounting pronouncements during the six months ended June 29, 2008, as compared to the recent accounting pronouncements described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, that are of significance, or potential significance, to us.

In December 2007, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standard (SFAS) No. 141R, *Business Combinations*. This standard establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any non-controlling interest in the acquiree and the goodwill acquired in a business combination. This standard also establishes disclosure requirements that will enable users to evaluate the nature and financial effects of a business combination. SFAS No. 141R is effective for the Company for acquisitions made after December 31, 2008. The Company does not anticipate that the adoption of this pronouncement will have a significant impact on its financial statements, however, the implementation of SFAS No. 141R may have a material impact on financial statements for businesses acquired by the company post-adoption.

In the first quarter of 2008, the Company adopted SFAS No. 157, *Fair Value Measurements* for all financial assets and financial liabilities and for all non-financial assets and non-financial liabilities recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). SFAS No. 157 defines fair value, establishes a framework for measuring fair value, and enhances fair value measurement disclosure. The adoption of SFAS No. 157 did not have a significant impact on the Company's financial statements, and the resulting fair values calculated under SFAS No. 157 after adoption were not significantly different than the fair values that would have been calculated under previous guidance. See Note 3 for further details on fair value measurements.

In February 2008, the FASB issued FASB Staff Position (FSP) No. 157-2, *Effective Date of FASB Statement No. 157*. FSP No.157-2 delays the effective date of SFAS No. 157 for all non-financial assets and non-financial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), until the beginning of the first quarter of fiscal 2009. The Company is currently evaluating the impact that SFAS No. 157 will have on its consolidated financial statements when it is applied to non-financial assets and non-financial liabilities that are not measured at fair value on a recurring basis beginning in the first quarter of 2009. The major categories of non-financial assets and non-financial liabilities that are measured at fair value, for which the company has not yet applied the provisions of SFAS No. 157 are goodwill and intangible assets.

In the first quarter of 2008, the Company adopted SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, which permits entities to elect to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. This election is irrevocable. The adoption of SFAS No. 159 did not have a significant impact on the Company's financial statements. Currently, the Company has not expanded its eligible items subject to the fair value option under SFAS No. 159.

In April 2008, the FASB issued FSP No. 142-3, *Determination of the Useful Life of Intangible Assets*. FSP 142-3 amends the factors that should be considered in developing assumptions about renewal or extension used in estimating the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets*. This standard is intended to improve the consistency between the useful life of a recognized intangible asset under SFAS No. 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS No. 141R and other Generally Accepted Accounting Principles (GAAP). FSP No.142-3 is effective for financial statements issued for fiscal years beginning after December 15, 2008. The measurement provisions of this standard will apply only to intangible assets of the Company acquired after January 1, 2009.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles*. SFAS No. 162 supersedes the existing hierarchy contained in the U.S. auditing standards. The existing hierarchy was carried over to SFAS No. 162 essentially unchanged. The Statement becomes effective 60 days following the Securities and Exchange Commission's approval of the Public Company Accounting Oversight Board amendments to the auditing literature. The new hierarchy is not expected to change current accounting practice in any area.

Note 2. Balance Sheet Details

	June 29, 2008	December 31, 2007
	(thousands)	
Cash and cash equivalents:		
Cash in bank	$ 18,267	$ 40,685
Money market funds	54,827	55,939
Commercial paper	28,317	28,909
	$ 101,411	$ 125,533
Short-term investments:		
United States agency securities	$ 3,565	$ 4,451
United States corporate bonds	30,763	22,583
	$ 34,328	$ 27,034

All short-term investments are marked to market with unrealized gains (losses) recorded under other comprehensive income. See Note 14. The maturities of short-term investments as of June 29, 2008 and December 31, 2007 are shown below:

	June 29, 2008	December 31, 2007
	(thousands)	
Due within one year	$ 26,564	$ 14,419
Due in one to two years	7,764	12,615
	$ 34,328	$ 27,034

	June 29, 2008	December 31, 2007
	(thousands)	
Inventories, net:		
Purchased parts and raw materials	$ 32,986	$ 27,727
Work-in-process	10,465	10,934
Finished goods	14,095	12,412
	$ 57,546	$ 51,073

As of June 29, 2008 and December 31, 2007, the reserve for excess and obsolete inventories was $7.4 million and $7.3 million, respectively.

The Company's policy is to assess the valuation of all inventories, including manufacturing raw materials, work-in-process, finished goods and spare parts, in each reporting period. Although the Company attempts to forecast future inventory demand, given the competitive pressures and cyclically of the semiconductor industry, there may be significant unanticipated changes in demand or technological developments that could have a significant impact on the value of the Company's inventories and reported operating results.

	June 29, 2008	December 31, 2007
	(thousands)	
Property and equipment, net:		
Machinery and equipment	$ 59,286	$ 52,328
Furniture and fixtures	12,419	11,842
Leasehold improvements	15,411	14,757
	87,116	78,927
Less: accumulated depreciation	(54,616)	(50,327)
	$ 32,500	$ 28,600
Accrued liabilities:		
Warranty	$ 6,162	$ 9,174
Accrued compensation and benefits	8,776	8,193
Other	7,907	9,533
	$ 22,845	$ 26,900
Other liabilities:		
Deferred revenue, noncurrent	$ 4,125	$ 4,375
Other	1,702	1,761
	$ 5,827	$ 6,136

Note 3. Fair Value

SFAS No. 157 clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, SFAS No. 157 establishes a three-tier value hierarchy, which prioritizes the inputs used in measuring fair value as follows: (Level 1) observable inputs such as quoted prices in active markets; (Level 2) inputs other than the quoted prices in active markets that are observable either directly or indirectly; and (Level 3) unobservable inputs in which there is little or no market data, which require the Company to develop its own assumptions. This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. On a recurring basis, the Company measures certain financial assets and liabilities at fair value, including marketable securities and equity instruments offsetting deferred compensation.

The Company's cash equivalents and investment instruments are classified within Level 1 or Level 2 of the fair value hierarchy because they are valued using quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency. The types of instruments valued based on quoted market prices in active markets include most U.S. government and agency securities, money market securities and equity instruments offsetting deferred compensation, which are included in other assets in the condensed consolidated balance sheets. Such instruments are generally classified within Level 1 of the fair value hierarchy. The types of instruments valued based on other observable inputs include investment-grade corporate bonds, mortgage-backed and asset-backed products, state, municipal and provincial obligations. Such instruments are generally classified within Level 2 of the fair value hierarchy.

Assets Measured at Fair Value on a Recurring Basis

Assets measured at fair value on a recurring basis are shown in the table below by their corresponding balance sheet caption and consisted of the following types of instruments at June 29, 2008:

	Fair Value Measurements at Reporting Date Using		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	**Significant Other Observable Inputs (Level 2)**	**Total Balance**
		(thousands)	
Cash and cash equivalents:[1]			
Money market funds	$ 54,827	$ -	$ 54,827
Commercial paper	-	28,317	28,317
Short-term investments:			
United States agency securities	3,565	-	3,565
United States corporate bonds	-	30,763	30,763
Other assets:			
Equity instruments offsetting deferred compensation liability	988	-	988
Total assets measured at fair value	$ 59,380	$ 59,080	$ 118,460

(1) Excludes Cash in bank of $18.3 million, at June 29, 2008.

Note 4. Restructuring Charges

On June 26, 2008, in response to the continuing downturn in the wafer fabrication industry, the Company announced a reduction in force in selected organizations. The Company eliminated approximately 25 positions, or about 5% of its global workforce. The Company recorded $0.7 million as restructuring charges in connection with the reorganization. These charges are comprised of severance expenses. As of June 29, 2008, no payments had been made against this accrued restructuring reserve. The Company anticipates that all severance payments against this reserve will be completed by the second quarter of 2009.

Note 5. Guarantees

The warranty offered by the Company on its system sales is 12 months for most systems sales, except where previous customer agreements stated otherwise, and excludes certain consumable maintenance items. A provision for the estimated cost of warranty, based on historical costs, is recorded as cost of sales when the revenue is recognized. The Company's warranty obligations require it to repair or replace defective products or parts, generally at a customer's site, during the warranty period at no cost to the customer. The actual system performance and/or field expense profiles may differ from historical experience, and in those cases, the Company adjusts its warranty accruals accordingly.

The following table summarizes changes in the product warranty accrual for the three and six months ended June 29, 2008 and July 1, 2007:

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
	(thousands)		(thousands)	
Balance at beginning of period	$ 7,878	$ 14,304	$ 9,174	$15,113
Accrual for warranties issued during the period	1,028	2,341	2,228	3,631
Changes in liability related to pre-existing warranties	145	(36)	(461)	1,419
Settlements made during the period	(2,889)	(3,059)	(4,779)	(6,613)
Balance at end of period	$ 6,162	$ 13,550	$ 6,162	$13,550

During the ordinary course of business, the Company’s bank provides standby letters of credit or other guarantee instruments on behalf of the Company to certain parties as required. The maximum potential amount that the Company could be required to pay is $1.6 million, representing standby letters of credit outstanding as of June 29, 2008. The Company has not recorded any liability in connection with these guarantee arrangements beyond that required to appropriately account for the underlying transaction being guaranteed. The Company does not believe, based on historical experience and information currently available, that it is probable that any amounts will be required to be paid under these guarantee arrangements.

The Company is a party to a variety of agreements, pursuant to which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in the context of contracts under which the Company may agree to hold the other party harmless against losses arising from a breach of representations or with respect to certain intellectual property, operations or tax-related matters. The Company’s obligations under these agreements may be limited in terms of time and/or amount, and in some instances the Company may have defenses to asserted claims and/or recourse against third parties for payments made by the Company. It is not possible to predict the maximum potential amount of future payments under these or similar agreements due to the conditional nature of the Company’s obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by the Company under these agreements have not had a material effect on the Company’s financial position or results of operations. The Company believes if it were to incur a loss in any of these matters, such loss would not have a material effect on the Company’s financial position or results of operations.

Note 6. Commitments and Contingencies

In 2005, the Company entered into a new lease agreement for its existing corporate headquarters building in Fremont, California. The lease is for a period of 10 years, commenced on May 31, 2007, and has an initial annual base rent cost of approximately $1.4 million, with annual base rent increases of approximately 3.5%. The Company has one five-year option to extend the lease at market lease rates in effect on the expiration date. Additionally, insurance, real property taxes and operating expenses are to be paid by the Company. The Company is responsible for an additional minimum lease payment at the end of the lease term of approximately $1.5 million, subject to adjustment, which is being accounted for in accordance with SFAS No. 13, *Accounting for Leases*, and will be accrued on a straight-line basis over the lease term. The Company has provided the landlord a letter of credit for $1.5 million to secure this obligation. The letter of credit amount may be increased to reflect any adjustments made to a restoration cost obligation provision included in the lease.

The Company was leasing two buildings previously used to house its manufacturing and administrative functions related to wet surface preparation products in Exton, Pennsylvania. The Company ended the lease for the manufacturing building as of June 5, 2008. The Company received approximately $0.2 million, net of legal fees, as part of the lease termination agreement. The lease for the administrative building will expire March 31, 2019, with a current rental cost of approximately $0.9 million annually. The Company expects to make payments related to the administrative building lease over the next eleven years, less any sublet amounts. The lease agreement for the administrative building allows for subleasing the premises without the approval of the landlord. In January 2008, the administrative building was sublet for a period of approximately three years, until December 2010, with an option for the subtenant to extend for an additional three years. In determining the facilities lease loss, various other assumptions were made, including the time period over which the buildings will be vacant, expected sublease terms and expected sublease rates. Total future expected lease payments of approximately $10.5 million were assumed in determining the facilities lease loss on the administrative building. As of June 29, 2008 and December 31, 2007, the Company had an accrual balance of $0.8 million and $1.0 million, respectively, related to these leases. Adjustments to the accrual for the administrative building lease will be made in future periods, if necessary, as soon as evidence of any adjustment can be reasonably estimated as future events and circumstances become known.

In connection with the acquisition of Vortek Industries, Ltd. (Vortek) in 2004, the Company became party to an agreement between Vortek and the Canadian Minister of Industry (the Minister) relating to an investment in Vortek by Technology Partnerships Canada. Under that agreement, as amended, the Company or Vortek (renamed Mattson Technology, Canada, Inc or "MTC") agreed to various covenants, including (a) payment by the Company of a royalty to the Minister of 1.4% of revenues from Flash RTP products, up to a total of CAD 14,269,290 (approximately $14.1 million at June 29, 2008), and (b) MTC maintaining a specified average workforce of employees in Canada through October 27, 2009. If the Company, or MTC, does not satisfy its obligations, the Minister may demand payment of liquidated damages in the amount of CAD 14,269,290 less any royalties paid by MTC or the Company to the Minister.

In the ordinary course of business, the Company is subject to claims and litigation, including claims that it infringes third party patents, trademarks and other intellectual property rights. Although the Company believes that it is unlikely that any current claims or actions will have a material adverse impact on its operating results or its financial position, given the uncertainty of litigation, the Company cannot be certain of this. Moreover, the defense of claims or actions against the Company, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

From time to time, the Company is party to legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these matters is not presently determinable and cannot be predicted with certainty, management does not believe that the outcome of any of these matters or any of the above mentioned legal claims will have a material adverse effect on the Company's financial position, results of operations or cash flows.

Note 7. Common Stock Repurchase Program

In March 2007, the Company's Board of Directors authorized the repurchase of up to $20 million of the Company's shares of common stock through open-market purchases or private transactions. In October 2007, the Company's Board of Directors authorized the repurchase of up to an additional $30 million of the Company's shares of common stock.. As of June 29, 2008, a total of 3.8 million shares had been repurchased under this program at a weighted-average purchase price of $9.20. As of June 29, 2008, the Company had $15.0 million available for future repurchases of the Company's common stock under these authorizations.

Note 8. Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with the provisions of SFAS No. 123R, *Share-Based Payment*. SFAS No. 123R establishes accounting for stock-based awards exchanged for employee services. Accordingly, stock-based compensation cost is measured at grant date, based on the fair value of the award, and is recognized as expense over the requisite service period for the employee.

The effects of recording stock-based compensation for the three and six months ended June 29, 2008 and July 1, 2007 were as follows:

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
	(thousands, except per share amounts)			
Stock-based compensation by type of award:				
Stock options	$ 836	$ 824	$ 1,935	$ 1,635
Restricted stock units	271	153	395	313
Employee stock purchase plan	25	16	41	24
Total stock-based compensation	1,132	993	2,371	1,972
Tax effect on stock-based compensation	—	—	—	—
Effect on net income (loss)	$ 1,132	$ 993	$ 2,371	$ 1,972
Stock-based compensation by category of expense:				
Cost of sales	$ 39	$ 37	$ 56	$ 65
Research, development and engineering	126	125	238	235
Selling, general and administrative	967	831	2,077	1,672
Effect on net income (loss)	$ 1,132	$ 993	$ 2,371	$ 1,972

The Company has not capitalized any stock-based compensation as inventory or deferred system profit at June 29, 2008 and December 31, 2007 as such amounts were inconsequential. Compensation expense for the six months ended June 29, 2008 included an additional $350,000 related to a stock option modification that occurred in 2006. Since the error is not material to prior periods and is not considered material to the current period, an adjustment was made to increase selling, general and administrative expense and additional paid-in capital for this amount in the first quarter of 2008.

Valuation Assumptions

The Company estimates the fair value of stock options using a Black-Scholes valuation model, consistent with the provisions of SFAS No. 123R. The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option valuation model and the straight-line attribution approach with the following weighted-average assumptions:

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
Expected dividend yield	—	—	—	—
Expected stock price volatility	53%	72%	55%	75%
Risk-free interest rate	3.3%	5.0%	2.9%	4.7%
Expected life of options	5 years	5 years	5 years	5 years

Option-pricing models require the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying stock. The expected life of each option was determined by analyzing historical exercise and post-vest forfeiture patterns. The risk-free interest rate was determined using the rates for United States Treasury notes for similar terms. The expected stock price volatility assumption was determined using the historical volatility of the Company's common stock.

Stock Options

As of June 29, 2008, the unrecorded deferred stock-based compensation balance related to stock options was $6.9 million after estimated forfeitures and will be recognized over an estimated weighted-average amortization period of 2.8 years. As of December 31, 2007, the Company had an unrecorded deferred stock-based compensation balance related to stock options of $7.4 million after estimated forfeitures. SFAS No. 123R requires forfeitures to be estimated at the time of grant and revised if necessary in subsequent periods if actual forfeitures differ from those estimates. In the three months ended June 29, 2008 and July 1, 2007, the Company's Board of Directors approved the grant of approximately 236,000 and 85,000 stock options, respectively, with an estimated total grant-date fair value of $0.5 million and $0.5 million, respectively, after estimated forfeitures. In the six months ended June 29, 2008 and July 1, 2007, the Company's Board of Directors approved the grant of approximately 747,000 and 789,000 stock options, respectively, with an estimated total grant-date fair value of $1.9 million and $4.0 million, respectively, after estimated forfeitures.

Restricted Stock Units

As of June 29, 2008, the unrecorded deferred stock-based compensation balance related to non-vested restricted stock units with time-based vesting was $1.9 million after estimated forfeitures and will be recognized over an estimated weighted-average amortization period of 2.9 years. As of December 31, 2007, the Company had an unrecorded deferred stock-based compensation balance related to non-vested restricted stock units with time-based vesting of $1.5 million after estimated forfeitures. During the three months ended June 29, 2008 and July 1, 2007, the Company's Board of Directors approved the grant of approximately 13,000 and 21,000 restricted stock units with time-based vesting, respectively, with an estimated total grant-date fair value of $0.1 million and $0.2 million, respectively, after estimated forfeitures. During the six months ended June 29, 2008 and July 1, 2007, the Company's Board of Directors approved the grant of approximately 135,000 and 93,000 restricted stock units with time-based vesting, respectively, with an estimated total grant-date fair value of $0.7 million and $0.7 million, respectively, after estimated forfeitures. The grant-date fair value of these restricted stock units was based on the closing market price of the Company's common stock on the date of award.

Performance-Based Restricted Stock Units

During the six months ended June 29, 2008, the Company's Board of Directors approved the grant of 635,000 performance-based restricted stock units to certain executives, officers and senior-level management. During the second quarter of 2008, 111,000 of these restricted stock units were cancelled, leaving 524,000 units outstanding at June 29, 2008. These restricted stock units vest in four equal tranches upon the achievement of four sequentially increasing revenue performance targets. Vesting is also contingent upon certain operating profit margin and stock price thresholds being met. If any of the conditions have not been met by the close of the Company's 2011 fiscal year, then the corresponding units will be forfeited. In accordance with SFAS No. 123R, the stock price threshold condition was incorporated into the measurement of fair value on the grant date.

As of June 29, 2008, the Company has determined that the first two revenue targets and the operating profit margin target are probable of being achieved, while the final two revenue targets are not probable of being achieved because they require significant growth in revenue and market share. Accordingly, the Company is recognizing the compensation cost associated with the first two tranches over the longer of the derived service period of the stock price target and the estimated service period of the performance targets. For the final two tranches, if and when the Company determines that the related targets are probable of being achieved, the Company will begin recognizing compensation cost in the period that such assessment is made in accordance with SFAS No. 123R.

The fair value of the 635,000 performance-based restricted stock units with market conditions was determined using a Monte Carlo valuation methodology with the following weighted-average assumptions: volatility of the Company's common stock of 50 percent; dividend yield of 0 percent, and risk-free interest rate of 2.3 percent. The fair value of the performance-related component of the performance shares was equivalent to the grant-date fair value of the Company's common stock.

The following table summarizes the combined activity under all of the Company's equity incentive plans for the indicated periods, including 10,000 shares outstanding under the Company's CFM Technologies, Inc. plans as of June 29, 2008:

	Awards Available For Grant	Stock Options Outstanding	Weighted-Average Exercise Price	Restricted Stock Units Outstanding	Weighted-Average Grant Date Fair Value
	(thousands)	(thousands)		(thousands)	
Balances at December 31, 2007	3,288	6,118	$ 9.39	172	$ 10.69
Stock options:					
Granted	(747)	747	5.77	—	—
Exercised	-	(21)	2.69	—	—
Cancelled or forfeited	428	(428)	9.10	—	—
Restricted stock units:					
Granted	(1,348)	—	—	770	3.92 (1)
Released	31	—	—	(42)	9.41
Cancelled or forfeited	289	—	—	(165)	4.50 (1)
Balances at June 29, 2008	1,941	6,416	$ 9.01	735	$ 4.01

(1) The weighted-average grant date fair value for restricted stock units granted in the six months ended June 29, 2008 excludes 317,500 shares with a weighted average grant date fair value of $3.35 related to the final two tranches of performance-based restricted stock units, as the Company's management has determined that achievement of the performance conditions related to these two tranches is not deemed probable as of June 29, 2008. The weighted-average grant date fair value for restricted stock units canceled in the six months ended June 29, 2008 excludes 55,000 shares with a weighted average grant date fair value of $3.32 which also related to the final two tranches of performance-based restricted stock units.

Restricted stock units granted through 2007 generally vest 1/4 of the units granted on the first anniversary of the date of grant, and 1/16 of the initial units granted per quarter thereafter. Beginning in 2008, restricted stock units with time-based vesting generally vest 1/4 of the units granted on each anniversary of the date of grant. 2005 Plan awards of restricted stock units are counted against the total number of shares of common stock available for grant under the plan at 1.75 shares for every one share subject thereto. The value of the restricted stock units was based on the closing market price of the Company's common stock on the date of award.

Supplemental disclosure information about the Company's stock options and restricted stock units with time-based vesting is as follows (in thousands, except weighted-average values):

	Three Months Ended				Six Months Ended			
	June 29, 2008		July 1, 2007		June 29, 2008		July 1, 2007	
Stock options:	(thousands, except weighted-average fair values)							
Weighted-average grant date fair value	$	2.63	$	6.21	$	2.89	$	5.73
Intrinsic value of options exercised	$	42	$	836	$	58	$	1,010
Cash received from options exercised	$	36	$	1,136	$	56	$	1,226
Restricted stock units with time based vesting:								
Weighted-average grant date fair value	$	4.99	$	10.03	$	5.77	$	9.08

Supplemental disclosure information about the Company's stock options outstanding as of June 29, 2008 is as follows:

	Shares	Weighted-Average Exercise Price		Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value	
	(thousands)			(in years)	(thousands)	
Options exercisable at June 29, 2008	4,764	$	9.36	3.8	$	1,260
Options expected to vest at June 29, 2008	1,652	$	8.02	5.9	$	5
Options outstanding at June 29, 2008	6,416	$	9.01	4.4	$	1,265

The aggregate intrinsic value in the table above represents the total pretax intrinsic value, based on the Company's closing stock price of $4.98 as of June 29, 2008, which would have been received by the option holders had all option holders exercised their options as of that date. The total number of shares of common stock subject to in-the-money options which were exercisable as of June 29, 2008 was 0.5 million. The Company settles employee stock option exercises with newly issued common shares.

Note 9. Reportable Segments

SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*, establishes standards for reporting information about operating segments, geographic areas and major customers in financial statements. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Chief Executive Officer of the Company is the Company's chief decision maker. As the Company's business is completely focused on one industry segment, the design, manufacturing and marketing of advanced fabrication equipment for the semiconductor manufacturing industry, management believes that the Company has one reportable segment. The Company's revenues and profits are generated through the sales of products and services for this one segment.

The following shows net sales by geographic areas based on the installation locations of the systems and the location of services rendered:

	Three Months Ended				Six Months Ended			
	June 29, 2008		July 1, 2007		June 29, 2008		July 1, 2007	
	(thousands)	%	(thousands)	%	(thousands)	%	(thousands)	%
United States	$ 3,033	7	$ 4,539	5	$ 8,538	9	$ 9,714	6
Taiwan	9,447	23	28,415	33	28,217	31	41,252	26
Korea	4,169	10	20,480	24	10,900	12	37,107	24
Japan	15,014	36	18,718	21	23,957	27	34,134	22
Other Asia	7,507	18	7,720	9	12,907	14	16,869	11
Europe and others	2,620	6	6,672	8	5,926	7	17,409	11
	$ 41,790	100	$ 86,544	100	$ 90,445	100	$ 156,485	100

In the three months ended June 29, 2008, three customers accounted for 20%, 12% and 11% of net sales, respectively. In the three months ended July 1, 2007, three customers accounted for 18%, 14% and 13% of net sales, respectively. In the six months ended June 29, 2008, three customers accounted for 19%, 12% and 11% of net sales, respectively. In the six months ended July 1, 2007, two customers accounted for 17% and 13% of net sales, respectively. As of June 29, 2008, three customers accounted for 20%, 16% and 13% of net accounts receivable. As of December 31, 2007, three customers accounted for 28%, 12% and 10% of net accounts receivable.

Geographical information relating to the Company's property and equipment, net, as of June 29, 2008 and December 31, 2007 is as follows:

	June 29, 2008		December 31, 2007	
	(thousands)	%	(thousands)	%
United States	$ 18,706	58	$ 15,118	53
Germany	12,078	37	11,122	39
Canada	1,421	4	2,050	7
Others	295	1	310	1
	$ 32,500	100	$ 28,600	100

Note 10. DNS Patent Infringement Suit Settlement

On June 24, 2002, the Company entered into a settlement agreement and a license agreement with Dainippon Screen Manufacturing Co., Ltd. (DNS), under which DNS agreed to make payments to the Company totaling between $75 million (minimum) and $105 million (maximum), relating to past damages, partial reimbursement of attorney fees and costs, and license fees.

In May 2008, DNS paid the Company the last royalty payment under the license agreement of $6.4 million for royalties due through January 15, 2008. In June 2007, DNS paid the Company a royalty payment of $8.6 million for royalties through March 31, 2007. Royalty payments received by the Company are recorded as royalty revenue and recognized as net sales in the period they are reported to the Company by DNS, which is generally in the second quarter of each year.

As of June 29, 2008, DNS has made payments aggregating $95.1 million under the terms of the settlement and license agreements. The Company recognized $6.4 million and $8.6 million of royalty revenue for the three months and six months ended June 29, 2008 and July 1, 2007, respectively.

Note 11. Derivative Instruments and Hedging Activities

The Company has utilized foreign currency forward exchange contracts to hedge against future movements in foreign exchange rates that affect certain existing and forecasted foreign currency denominated sales and purchase transactions. The Company does not use derivative financial instruments for speculative or trading purposes. With respect to forward foreign currency exchange contracts, the Company did not have any hedging activities for the three and six months ended June 29, 2008. The Company recorded a gain of $0.2 million, in other income (expense), net for the six months ended July 2, 2007. As of June 29, 2008, the Company had no outstanding forward foreign exchange contracts.

Note 12. Income Taxes

The provision for income taxes for the six months ended June 29, 2008 primarily consisted of a $1.1 million provision for foreign taxes, which was partially reduced by a discrete item resulting in a foreign tax benefit of $0.5 million. The Company recorded no Federal or states tax provision for the first and second quarter of 2008. The provision for income taxes for the six months ended July 1, 2007 primarily consisted of a $3.8 million discrete charge recorded in the second quarter related to a ruling in the second quarter on the applicability of tax law in one of the Company's foreign locations, a $1.6 million provision for Federal and state income taxes and a $1.6 million provision for foreign taxes. On a quarterly basis, the Company evaluates its expected income tax expense or benefit based on its year to date operations, and records an adjustment in the current quarter. The net tax provision is the result of the mix of profits earned by the Company and its subsidiaries in tax jurisdictions with a broad range of income tax rates.

At December 31, 2007, the Company had $29.6 million of unrecognized tax benefits. Of this total, $11.9 million represents the amount of unrecognized tax benefits that, if recognized, would favorably affect the effective income tax rate in any future periods. For the six months ended June 29, 2008, there have been no material changes to the amount of unrecognized tax benefits. Included in the balance of unrecognized tax benefits at June 29, 2008 is $5.3 million related to tax positions and estimated interest and penalties for which it is reasonably possible that the statute of limitations will expire in various jurisdictions within the next twelve months.

The Company's practice is to recognize interest and/or penalties related to unrecognized tax benefits in income tax expense. At December 31, 2007, the Company had $1.1 million accrued for estimated interest and $0.1 million accrued for estimated penalties. For the six months ended June 29, 2008, recorded income tax expense included estimated interest of $0.3 million..

The Company and its subsidiaries are subject to United States federal income tax as well as to income taxes in Germany and various other foreign and state jurisdictions. The Company's Federal and state income tax returns are generally not subject to examination by tax authorities for years before 2002. The Company's German income tax returns are currently under examination for the tax years 2001 to 2004. The final outcome of this examination is not yet known. Management does not anticipate any adjustments, however, which would result in material changes to the Company's financial position, results of operations, or cash flows.

Note 13. Net Income Per Share

Net income per share is calculated in accordance with SFAS No. 128, *Earnings Per Share*, which requires dual presentation of basic and diluted net income per share on the face of the income statement. Basic earnings per share is computed by dividing income available to common stockholders by the weighted-average number of shares of common stock outstanding for the period. Diluted net income per share is computed using the weighted-average number of shares of common stock outstanding plus the effect of all dilutive securities representing potential shares of common stock outstanding during the period.

The following table summarizes the incremental shares of common stock from these potentially dilutive securities, calculated using the treasury stock method:

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
	(thousands)		(thousands)	
Weighted average shares outstanding - Basic	49,419	52,531	49,391	52,546
Diluted potential common shares from stock options and restricted stock units	-	1,096	-	1,027
Weighted average shares outstanding - Diluted	49,419	53,627	49,391	53,573

There were no stock options or restricted stock units factored into the computation of diluted shares in 2008 since the Company has incurred a net loss in the six months ended June 29, 2008. Total stock options outstanding of 3.8 million for the three and six months ended July 1, 2007, were excluded from the computations in 2007, as their inclusion would be antidilutive.

Note 14. Comprehensive Income

The balance of accumulated comprehensive income is as follows:

	June 29, 2008	December 31, 2007
	(thousands)	
Cumulative translation adjustments	$ 23,519	$ 18,825
Unrealized investment gain	101	207
	$ 23,620	$ 19,032

The following are the components of comprehensive income (loss):

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
	(thousands)		(thousands)	
Net income (loss)	$ (6,754)	$ 11,547	$ (10,970)	$ 19,198
Cumulative translation adjustments	(338)	720	4,694	1,597
Unrealized investment gain (loss)	(169)	-	(106)	9
Comprehensive income (loss)	$ (7,261)	$ 12,267	$ (6,382)	$ 20,804

Note 15. Goodwill

The Company reviews its goodwill and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable, and also reviews goodwill annually in accordance with SFAS No. 142, *Goodwill and Other Intangibles*. The values assigned to goodwill and intangible assets are usually based on estimates and judgments regarding expectations for the success and life cycle of products and technologies acquired. A severe decline in expectations, given the competitive pressures and cyclicality of the semiconductor industry, could result in significant impairment charges, which could have a material adverse effect on the Company’s business, financial condition and results of operations.

One potential indicator of goodwill impairment is whether the Company's fair value, as measured by its market capitalization, has remained below its net book value for a significant period of time. During the second quarter of 2008, the lowest closing price for the Company's shares of common stock was $4.58, as reported by the Nasdaq Global Select Market, which corresponds to a market capitalization of $227 million. As of June 29, 2008, however, the Company's market capitalization had recovered to approximately $246 million, compared to the Company's June 29, 2008 net book value of $239 million. Based on the Company's review of the events that occurred during the second quarter of 2008, the Company has determined that there were no events or changes in circumstances which would have triggered an impairment review. Whether the Company's market capitalization triggers an impairment charge in any future period will depend on the underlying reasons for the decline in stock price, the significance of the decline, and the length of time the stock price has been depressed.

Item 2. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

This quarterly report on Form 10-Q contains forward-looking statements, which are subject to the Safe Harbor provisions created by the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management's current expectations and beliefs, including estimates and projections about our industry. Our forward-looking statements may include statements that relate to our future revenue, customer demand, market share, competitiveness, margins, product development plans and levels of research and development (R&D activity), outsourcing plans and operating expenses, tax expenses, the expected effects, cost and timing of restructurings and consolidation of operations and facilities, economic conditions in general and in our industry, and the sufficiency of our financial resources to support future operations and capital expenditures. Forward-looking statements typically are identified by use of terms such as "anticipates," "expects," "intends," "plans," "seeks," "estimates," "believes," and similar expressions, although some forward-looking statements are expressed differently. These statements are not guarantees of future performance and are subject to numerous risks, uncertainties, and assumptions that are difficult to predict. Such risks and uncertainties include those set forth in Part II, Item 1A under "Risk Factors" and Item 2 under "Management's Discussion and Analysis of Financial Condition and Results of Operations." Our actual results could differ materially from those anticipated by these forward-looking statements. The forward-looking statements in this report speak only as of the time they are made and do not necessarily reflect our outlook at any other point in time. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events, or for any other reason.

Documents to Review In Connection With Management's Analysis of Financial Condition and Results of Operations

This discussion should be read in conjunction with the Condensed Consolidated Financial Statements and Notes presented in this Form 10-Q and the consolidated financial statements and notes in our last filed Annual Report on Form 10-K, for the year ended December 31, 2007 (our 2007 Form 10-K).

Overview

Mattson Technology, Inc. (the Company or Mattson) is a leading supplier of semiconductor wafer processing equipment used in the fabrication of integrated circuits (ICs or chips). Mattson produces dry strip equipment, etch equipment and rapid thermal processing (RTP) equipment for the wafer chip fabrication industry. Our manufacturing equipment utilizes innovative technology to deliver advanced processing capabilities and high productivity for the front-end-of-line and back-end-of-line fabrication of current and next-generation ICs. Our tools, technologies and expertise are enablers in the semiconductor industry's transition to larger 300-millimeter wafers, sub-65 nanometer design rules and the use of new materials, such as copper, low capacitance dielectrics and barrier metals.

Our business depends upon capital expenditures by manufacturers of semiconductor devices. The level of capital expenditures by these manufacturers depends upon the current and anticipated market demand for such devices. Because the demand for semiconductor devices is highly cyclical, the demand for wafer processing equipment is also highly cyclical. The cyclicality and uncertainties regarding overall market conditions continue to present significant challenges to us and impair our ability to forecast near-term revenue. Given that many of our costs are fixed in the short-term, our ability to quickly modify our operations in response to changes in market conditions is limited. Part of our strategy is to outsource selected non-critical functions in manufacturing, spare parts logistics, subsystem design and other areas to third parties specializing in these areas. This allows us to concentrate our resources on our core technologies in strip, etch and RTP, reduce our cost structure and achieve greater flexibility to expand and contract manufacturing capacity as market conditions require.

Going forward, the success of our business will be dependent on numerous factors, including, but not limited to, the market demand for semiconductors and semiconductor wafer processing equipment and our ability to (a) significantly grow the Company, either organically or through acquisitions, in order to enhance our competitiveness and profitability, (b) develop and bring to market new products that address our customers' needs, (c) grow customer loyalty through collaboration with and support of our customers and (d) maintain a cost structure that will enable us to operate effectively and profitably throughout changing industry cycles.

Results of Operations

The following table sets forth our condensed consolidated results of operations for the periods indicated, along with amounts expressed as a percentage of net sales, and comparative information regarding the absolute and percentage changes in these amounts:

	Three Months Ended				Increase (Decrease)	
	June 29, 2008		July 1, 2007			
	(thousands)	%	(thousands)	%	(thousands)	%
Net sales	$ 41,790	100.0	$ 86,544	100.0	$ (44,754)	(51.7)
Cost of sales	23,345	55.9	44,909	51.9	(21,564)	(48.0)
Gross profit	18,445	44.1	41,635	48.1	(23,190)	(55.7)
Operating expenses:						
Research, development and engineering	9,215	22.0	8,893	10.3	322	3.6
Selling, general and administrative	15,592	37.3	17,090	19.8	(1,498)	(8.8)
Amortization of intangibles	128	0.3	128	0.1	-	n/m (1)
Restructuring charges	748	1.8	-	-	748	n/m (1)
Total operating expenses	25,683	61.4	26,111	30.2	(428)	(1.6)
Income (loss) from operations	(7,238)	(17.3)	15,524	17.9	(22,762)	n/m (1)
Interest income	837	2.0	1,775	2.0	(938)	(52.8)
Interest expense	(76)	(0.2)	-	-	(76)	n/m (1)
Other income (expense), net	145	0.3	248	0.3	(103)	(41.5)
Income (loss) before income taxes	(6,332)	(15.2)	17,547	20.2	(23,879)	n/m (1)
Provision for income taxes	422	1.0	6,000	6.9	(5,578)	(93.0)
Net income (loss)	$ (6,754)	(16.2)	$ 11,547	13.3	$ (18,301)	n/m (1)

	Six Months Ended				Increase (Decrease)	
	June 29, 2008		July 1, 2007			
	(thousands)	%	(thousands)	%	(thousands)	%
Net sales	$ 90,445	100.0	$ 156,485	100.0	$ (66,040)	(42.2)
Cost of sales	51,166	56.6	83,622	53.4	(32,456)	(38.8)
Gross profit	39,279	43.4	72,863	46.6	(33,584)	(46.1)
Operating expenses:						
Research, development and engineering	17,061	18.8	18,004	11.5	(943)	(5.2)
Selling, general and administrative	32,367	35.8	33,069	21.1	(702)	(2.1)
Amortization of intangibles	256	0.3	255	0.2	1	0.4
Restructuring charges	748	0.8	-	-	748	n/m (1)
Total operating expenses	50,432	55.7	51,328	32.8	(896)	(1.7)
Income (loss) from operations	(11,153)	(12.3)	21,535	13.8	(32,688)	n/m (1)
Interest income	2,062	2.3	3,370	2.1	(1,308)	(38.8)
Interest expense	(76)	(0.1)	(44)	-	(32)	72.7
Other income (expense), net	(1,247)	(1.4)	1,299	0.8	(2,546)	n/m (1)
Income (loss) before income taxes	(10,414)	(11.5)	26,160	16.7	(36,574)	n/m (1)
Provision for income taxes	556	0.6	6,962	4.4	(6,406)	(92.0)
Net income (loss)	$ (10,970)	(12.1)	$ 19,198	12.3	$ (30,168)	n/m (1)

(1) Not meaningful

Net Sales and Deferred Revenue

Net Sales of $41.8 million for the three months ended June 29, 2008 (second quarter of 2008) were down $44.8 million, or 52%, from the same period in 2007. We received the final royalty payment related to our settlement of the patent infringement lawsuit with Dainippon Screen Manufacturing Co., Ltd. ("DNS"). Net Sales for the second quarter included DNS royalties of $6.4 million, compared to $8.6 million in the same period of 2007. Net sales for the second quarter of 2008 excluding DNS royalties decreased by $42.5 million from the same period of 2007, primarily due to a $40.7 million decline in systems sales and a $1.8 million decline in spares sales. The shortfall in revenue for the three months ended June 29, 2008 was due to the continuing weakness in the memory market, which caused delays of systems shipments to certain customers' fabrication plants. In addition, lower production levels at customers' fabrication plants have also caused spares and service sales to be less than had been anticipated. International sales, predominantly to customers based in Europe and Asia, including China, Japan, Korea, Singapore and Taiwan, accounted for 93% of net sales in the second quarter of 2008, compared to 95% for the second quarter of 2007. We anticipate that international sales will continue to account for a significant portion of our net sales.

Net Sales of $90.4 million for the six months ended June 29, 2008, were down $66 million or 42% from the same period in 2007. Net Sales included DNS royalties of $6.4 million, compared to $8.6 million received for the same period in 2007. Systems sales were down $65.0 million during the same period. International sales predominantly to customers based in Europe and Asia, including China, Japan, Korea, Singapore and Taiwan, accounted for 91% of net sales in the six months ended June 29, 2008, compared to 94% for the same period in 2007.

Deferred revenue at June 29, 2008 increased to $12.2 million from $7.2 million at December 31, 2007, primarily due to a $6.4 million net increase in deferred revenue for system shipments which were fully deferred in accordance with our revenue recognition policy and a $1.4 million net decrease in deferred revenue for the recognition of a portion of system shipments in accordance with our policy.

Gross Profit and Gross Profit Margin

In the second quarter of 2008, gross profit of $18.4 million, decreased by $23.2 million when compared to the second quarter of 2007. The main reasons for the decline were $20.3 million of lower systems revenue, $2.2 million of lower DNS royalty revenue, $1.2 million of lower spares revenue, $0.7 million due to unabsorbed manufacturing costs and $0.6 million due to higher direct manufacturing costs. These unfavorable impacts were partially offset by $1.0 million in higher net deferral revenue and $0.7 million in favorable installation spending as a result of lower system shipments. The decline in revenue, due to the continuing weakness in the memory market resulted in lower systems margins, and the under absorption in manufacturing costs. Higher direct manufacturing costs were the result of recording of additional inventory reserves when compared to the second quarter of 2007.

Gross profit margin in the second quarter of 2008 decreased by 4 percentage points compared to the second quarter of 2007. Excluding DNS Royalties, gross profit margin decreased by 8.3 percentage points, primarily due to lower gross profit margin of 3.0 percentage points from system and spares sales, 0.9 percentage points from manufacturing under absorption and 0.8 percentage points from manufacturing direct costs. These unfavorable margin impacts were partially offset by 1.3 percentage points from the net deferral of systems revenue and 0.9 percentage points from favorable installation spending.

Gross profit of $39.3 million in the six months ended June 29, 2008 decreased by $33.6 million compared to the same period in 2007, primarily due to $31.0 million on systems sales, $2.1 million on higher manufacturing direct costs, $1.4 million on higher manufacturing under absorption, $2.2 million on lower DNS royalty revenue, and $1.5 million on the net deferral of systems revenue in accordance with our revenue recognition policy. These unfavorable impacts were offset by $1.9 million higher margins on favorable warranty reserve releases, $1.6 million on spares sales and $0.7 million in favorable installation spending as a result of lower system shipments. As stated above, the weakness in the memory market resulted in lower systems margins and the under absorption of manufacturing costs. The higher direct manufacturing cost was primarily due to the recording of additional inventory reserves when compared to the same period in 2007.

Gross profit margin in the six months ended June 29, 2008 decreased by 3.2 percentage points compared to the same period of 2007. Excluding DNS Royalties, gross profit margin decreased by 4.3 percentage points, primarily due to lower gross profit margin of 2.7 percentage points from manufacturing direct costs mainly from additional inventory reserves, 2.3 percentage points from manufacturing under absorption, and 0.5 percentage points from the net deferral of systems revenue. These unfavorable impacts were partially offset by 1.6 percentage points from favorable warranty reserve releases primarily as a result of lower trends in labor and material spending as the installed base increases for our core products.

The wafer fabrication industry is currently experiencing lower revenues especially in the memory segment which historically represents our largest segment. The weakness in the market has also been exacerbated by the weak macro economic conditions.

Due to intense competition, we continue to face pricing pressure that can affect our gross profit margin. Our gross profit margin has varied over the years and will continue to be affected by many factors, including competitive pressures, product mix, economies of scale, material and other costs, overhead absorption levels and our revenue recognition requirements.

Research, Development and Engineering

Research, development and engineering (RD&E) expenses increased by $0.3 million for the second quarter of 2008 compared to the same period of 2007, primarily due to $1.0 million higher depreciation on new lab tools, $0.2 million higher salary expenses due to additional headcount and $0.2 million in one- time property tax benefits in the second quarter of 2007 offset by a favorable impact of $1.3 million from lower material expenses as some products have been beta released and moved into later stages of product development.

RD&E expenses decreased by $0.9 million for the six months ended June 29, 2008 compared to the same period of 2007, primarily due to lower material expenses of $2.1 million as some of our new products transitioned into later stages of product development, partially offset by higher depreciation on new lab tools of $0.8 million, higher salary expense of $0.1 million due to additional headcount, and other one-time benefits in the prior period.

Selling, General and Administrative

Selling, General and Administrative (SG&A) expenses for the second quarter of 2008 decreased by $1.5 million when compared to the same period in 2007, primarily due to $1.5 million of lower salary expenses, as a result of attrition, $0.6 million of reduced contract field engineer expense and consulting services, and $0.4 million of lower commissions to our sales representatives. These reductions were partially offset by bad debt reserve releases in the second quarter of 2007 of $1.1 million, and expenses related to a severance agreement with the previous chief financial officer of $0.2 million. As the wafer fabrication industry is in a severe downturn, the company is consciously reducing discretionary expenses in selected office support organizations while continuing to invest in new product research and development activities, and placing more evaluation tools in the field.

SG&A expenses for the six months ended June 29, 2008 decreased by $0.7 million when compared to the same period in 2007. SG&A expenses in the first quarter of 2007 included a $1.6 million benefit which related to the release of amounts previously accrued as we completed all remaining obligations under a foreign government-funded capital development project. SG&A expenses other than this benefit decreased by $2.3 million for the six months ended June 29, 2008 compared to the same period of 2007, primarily as the result of a $1.7 million decrease in employee compensation related expenses and a $0.8 million decrease in outside services, partially offset by a $0.4 million increase related to stock-based compensation as determined in accordance with SFAS No. 123(R).

Restructuring Expenses

In response to the continuing downturn in the wafer fabrication industry, we announced a reduction in force in selected organizations on June 26, 2008. The purpose of this workforce reduction was to reduce the cost structure in selected areas while allowing the company to continue critical investments in new products and strategic initiatives. We eliminated approximately 25 positions, or about 5% of the global workforce. We recorded $0.7 million in severance expenses. We anticipate that we will disburse all of the severance payments to employees by the second quarter of 2009. The estimated annual savings from the restructuring efforts are expected to be $1.9 million, which will be re-invested in our new product development activities.

Interest and Other Income (Expense), Net

Interest income decreased by $0.9 million in the second quarter of 2008 compared with the same period of 2007, primarily due to lower average interest rates earned in 2008. Other expense, net for the second quarter of 2008 included realized foreign currency exchange gains of $0.2 million, offset by other miscellaneous expense of $0.1 million. Other income, net for the second quarter of 2007 included realized foreign currency exchange gains of $0.4 million primarily from the settlement of a foreign exchange contract, partially offset by miscellaneous other expenses of $0.2 million.

Interest income decreased by $1.3 million for the six months ended June 29, 2008 compared with the same period of 2007, primarily due to the lowering of the interest rates by the Federal Reserve. Other expense, net for the six months ended June 29, 2008, included realized foreign currency exchange losses of $0.9 million primarily due to the weakening dollar, and miscellaneous other expense of $0.3 million. Other income, net for the same period in 2007, included realized foreign currency exchange gains of $0.7 million, certain payments and legal settlements related to two previous lines of business of $1.0 million and miscellaneous other expenses of $0.4 million.

Provision for Income Taxes

The provision for income taxes for the six months ended June 29, 2008 primarily consisted of a $1.1 million provision for foreign taxes, which was partially reduced by a discrete item resulting in a foreign tax benefit of $0.5 million. We recorded no Federal or states tax provision for the first and second quarter of 2008 primarily due to projected losses incurred in the United States. jurisdiction. The provision for income taxes for the six months ended July 1, 2007 primarily consisted of a $3.8 million discrete charge recorded in the second quarter of 2007 related to a ruling in the second quarter on the applicability of tax law in one of our foreign locations, a $1.6 million provision for Federal and state income taxes and a $1.6 million provision for foreign taxes. On a quarterly basis, we evaluate our expected income tax expense or benefit based on our year to date operations, and record an adjustment in the current quarter. The net tax provision is the result of the mix of profits earned by the Company and its subsidiaries in tax jurisdictions with a broad range of income tax rates.

Our valuation allowance at June 29, 2008 is primarily attributable to Federal and state deferred tax assets, as well as certain foreign deferred tax assets. We believe that sufficient uncertainty exists with regard to the realizability of these tax assets such that a valuation allowance is necessary. Factors considered in providing a valuation allowance include the lack of a significant history of consistent profits and the lack of carry-back capacity to realize these assets. Based on the absence of objective evidence, we are unable to assert that it is more likely than not that we will generate sufficient taxable income to realize these remaining net deferred tax assets.

Critical Accounting Policies

Management's Discussion and Analysis of Financial Condition and Results of Operations discusses our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. On an on-going basis, management evaluates its estimates and judgments, including those related to reserves for excess and obsolete inventory, warranty obligations, bad debts, intangible assets, income taxes, restructuring costs, contingencies and litigation. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. These form the basis for making judgment about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Consistent with our 2007 Form 10-K, we consider certain accounting policies for the following areas as critical to our business operations and an understanding of our results of operations:

- Inventories and Inventory Valuation
- Goodwill and Other Intangible Assets
- Impairment of Long-Lived Assets
- Warranty
- Stock-based Compensation
- Income Taxes

- Revenue Recognition

There have been no material changes from the methodology applied by management for critical accounting estimates previously disclosed in our 2007 Form 10-K.

Liquidity and Capital Resources

Our cash, cash equivalents and short-term investments were $135.7 million at June 29, 2008, a decrease of $16.8 million from $152.5 million at December 31, 2007. We believe that these balances, including interest to be earned thereon, and anticipated cash flows from operating activities will be sufficient to fund our working and other capital requirements over the course of the next twelve months. In the normal course of business, we evaluate the merits of acquiring technology or businesses, or establishing strategic relationships with or investing in these businesses. We may use available cash, cash equivalents and marketable security investments to fund such activities in the future. In the event additional needs for cash arise, we may raise additional funds from a combination of sources, including the potential issuance of debt or equity securities.

Cash Flows from Operating Activities

Net cash used in operations during the six months ended June 29, 2008 was $14.0 million, primarily due to an $11.0 million net loss, a $9.7 million increase in net inventories, a $4.2 million increase in inventories - delivered systems and a $6.8 million decrease in accrued liabilities and accounts payable, which were partially offset by a $4.7 million increase in deferred revenue, $3.8 million in depreciation, a $3.0 million decrease in prepaid expenses and other current assets, $2.4 million in stock compensation expenses and a $1.5 million decrease in accounts receivable net of advanced billings. The increase in inventory was mostly due to finished goods inventory for the tools pushed out of the quarter, evaluation inventory shipped to customers and increases in spares inventory for customer satisfaction purposes. Approximately 15% of our inventory balances relate to evaluation tools already placed in the field in customer fabrication plants. Another 13% of inventory balances relate to new products that are currently being built for shipment to the field. The increases in inventories – delivered systems and deferred revenue were due to an increase in systems shipped during the quarter where revenue was deferred in accordance with our revenue recognition policies. The decrease in prepaid expenses of $3.0 million was primarily due to decreases in our prepaid value added tax balances as we received tax refunds. The decrease in accrued liabilities was primarily due to a decrease in our value added tax liabilities of $2.4 million due to refunds received and decrease in warranty reserves of $3.0 million as a result of lower revenue volumes.

Net cash provided by operations during the six months ended July 1, 2007 was $24.5 million, primarily due to net income of $19.2 million, decreases in accounts receivable and advanced billings of $4.2 million due to increased collection efforts compared to the previous quarter, decreases in inventories and inventories – delivered systems of $7.0 million, a $3.0 million increase in accounts payable, depreciation of $3.1 million and stock-based compensation of $2.0 million, partially offset by an $8.1 million increase in prepaid expenses and other current assets, a $7.5 million decrease in deferred revenue, a $2.3 million decrease in accrued liabilities and a reduction in allowance for doubtful accounts of $1.2 million.

We expect that cash provided by operating activities may fluctuate in future periods as a result of a number of factors including fluctuations in our net sales and operating results, amount of revenue deferred, collection of accounts receivable and timing of payments.

Cash Flows from Investing Activities

Net cash used in investing activities during the six months ended June 29, 2008 of 2008 was $11.2 million, due to purchases of $21.7 million of available-for-sale investments and capital spending of $4.6 million, partially offset by proceeds of $14.5 million from sales and maturities of available-for-sale investments.

Net cash provided by investing activities during the six months ended July 1, 2007 was $9.4 million, due to proceeds of $36.1 million from sales and maturities of available-for-sale investments and proceeds of $0.5 million from sales of property and equipment, partially offset by purchases of available-for-sale investments of $24.0 million and capital spending of $3.2 million on lab tools for our new products.

Cash Flows from Financing Activities

Net cash used in financing activities during the six months ended June 29, 2008 was $2.2 million, attributable to purchases of treasury stock of $2.6 million as part of our common stock repurchase program, which was partially offset by net proceeds of $0.4 million from stock plans.

Net cash used in financing activities during the six months ended July 1, 2007 was $8.6 million, attributable to purchases of treasury stock of $10.0 million, which was partially offset by net proceeds of $1.4 million from stock plans.

During the six months ended June 29, 2008, the net effect of the exchange rate on cash and cash equivalents, primarily on cash balances maintained in Euro was $3.3 million.

Off-Balance-Sheet Arrangements

As of June 29, 2008, we did not have any significant "off-balance-sheet" arrangements, as defined in Item 303 (a)(4)(ii) of Regulation S-K.

Contractual Obligations

Under accounting principles generally accepted in the United States of America, certain obligations and commitments are not required to be included in our consolidated balance sheets. These obligations and commitments, while entered into in the normal course of business, may have a material impact on our liquidity. For further discussion of our contractual obligations, see our 2007 Form 10-K.

Recent Accounting Pronouncements and Accounting Changes

With the exception of those discussed below, there have been no recent accounting pronouncements or changes in accounting pronouncements during the three months ended June 29, 2008, as compared to the recent accounting pronouncements described in our 2007 Form 10-K, that are of significance, or potential significance, to us.

In December 2007, the FASB issued SFAS No. 141R, *Business Combinations*. This standard establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any non-controlling interest in the acquiree and the goodwill acquired in a business combination. This standard also establishes disclosure requirements that will enable users to evaluate the nature and financial effects of a business combination. SFAS No. 141R is effective for acquisitions made after December 31, 2008. We do not anticipate that the adoption of this pronouncement will have a significant impact on our financial statements, however, the implementation of SFAS No. 141R may have a material impact on our financial statements for businesses we acquire post-adoption.

In the first quarter of 2008, we adopted SFAS No. 157, *Fair Value Measurements* for all financial assets and financial liabilities and for all non-financial assets and non-financial liabilities recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). SFAS No. 157 defines fair value, establishes a framework for measuring fair value, and enhances fair value measurement disclosure. The adoption of SFAS No. 157 did not have a significant impact on our consolidated financial statements, and the resulting fair values calculated under SFAS No. 157 after adoption were not significantly different than the fair values that would have been calculated under previous guidance. See Note 3 to the accompanying condensed consolidated financial statements for further details on our fair value measurements.

In February 2008, the FASB issued FASB Staff Position (FSP) No. 157-2, *Effective Date of FASB Statement No. 157*. FSP 157-2 delays the effective date of SFAS No. 157 for all non-financial assets and non-financial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), until the beginning of the first quarter of fiscal 2009. We are currently evaluating the impact that SFAS No. 157 will have on our consolidated financial statements when it is applied to non-financial assets and non-financial liabilities that are not measured at fair value on a recurring basis beginning in the first quarter of 2009. The major categories of non-financial assets and non-financial liabilities that are measured at fair value, for which the company has not yet applied the provisions of SFAS No. 157 are goodwill and intangible assets.

In the first quarter of 2008, we adopted SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, which permits entities to elect to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. This election is irrevocable. The adoption of SFAS No. 159 did not have a significant impact on our financial statements. Currently, we have not expanded our eligible items subject to the fair value option under SFAS No. 159.

In April 2008, the FASB issued FSP No. 142-3, *Determination of the Useful Life of Intangible Assets*. FSP No. 142-3 amends the factors that should be considered in developing assumptions about renewal or extension used in estimating the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets*. This standard is intended to improve the consistency between the useful life of a recognized intangible asset under SFAS No. 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS No. 141R and other Generally Accepted Accounting Principles (GAAP). FSP No. 142-3 is effective for financial statements issued for fiscal years beginning after December 15, 2008. The measurement provisions of this standard will apply only to intangible assets acquired after January 1, 2009.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles*. SFAS No. 162 supersedes the existing hierarchy contained in the U.S. auditing standards. The existing hierarchy was carried over to SFAS No. 162 essentially unchanged. The Statement becomes effective 60 days following the Securities and Exchange Commission's approval of the Public Company Accounting Oversight Board amendments to the auditing literature. The new hierarchy is not expected to change current accounting practice in any area.

Item 3. *Quantitative and Qualitative Disclosures About Market Risk*

Interest Rate Risk

We are exposed to financial market risks, including changes in foreign currency exchange rates and interest rates. Historically, much of our revenues and capital spending has been transacted in U.S. dollars.

Our exposure to market risk for changes in interest rates relates to our investment portfolio. We do not currently use derivative financial instruments in our investment portfolio, or hedge for these interest rate exposures. We place our investments with high credit quality issuers and, by policy, limit the amount of credit exposure to any one issuer. The portfolio includes only marketable securities with active secondary or resale markets to ensure portfolio liquidity. By policy, we limit our exposure related to longer-term investments.

Our interest rate risk relates primarily to our investment portfolio, which consisted of $83.1 million in cash equivalents and $34.3 million in short-term marketable securities as of June 29, 2008. An immediate sharp increase in interest rates could have a material adverse affect on the fair value of our investment portfolio. Conversely, an immediate sharp decline in interest rates could seriously harm interest earnings of our investment portfolio. For example, due to the sharp reduction in average interest rates in the United States in the first six months of 2008 compared to the same period of 2007, our average yield on our investment portfolio declined by approximately 1.5% in the first six months of 2008, which primarily caused a $1.3 million reduction in interest income.

Foreign Currency Risk

The functional currency of our foreign subsidiaries is their local currencies. Accordingly, all assets and liabilities of these foreign operations are translated using exchange rates in effect at the end of the period, and revenues and costs are translated using average exchange rates for the period. Gains or losses from translation of foreign operations where the local currencies are the functional currency are included as a component of accumulated other comprehensive income. Foreign currency transaction gains and losses are recognized in the consolidated income statements as they are incurred. Because much of our revenues and capital spending are transacted in U.S. dollars, we are subject to fluctuations in foreign currency exchange rates that could materially adversely affect our overall financial position, results of operations or cash flows, depending on the strength of the U.S. dollar relative to the currencies of other countries in which we operate. The U.S. dollar when compared to other currencies primarily the Euro has strengthened in the second quarter of 2008, resulting in realized foreign currency exchange gains of $0.2 million, when compared to gains of $0.4 million for the same period in 2007. Other expense, net for the six months ended June 29, 2008 included realized foreign currency exchange losses of $0.9 million, which was primarily due to the effect of a weaker U.S. dollar on transactions with our foreign operations, compared to realized foreign currency exchange gains of $0.7 million for same period of 2007.

Cumulative translation adjustments included in comprehensive income for the six months ended June 29, 2008 were $4.7 million primarily due to the weakening of the U.S. dollar in the first quarter of 2008, which favorably impacted the net assets used in our foreign operations and held in local currencies, resulting in an increase in cumulative translation adjustments to $23.5 million at June 29, 2008, compared to $18.8 million at December 31, 2007.

We did not have any hedging activities for the six months ended June 29, 2008. During January 2007, we settled one forward foreign exchange contract outstanding as of December 31, 2006 for the purchase in total of US$23.7 million in exchange for 2.8 billion Japanese Yen (weighted average contract rate of 118 Yen to US$1.00) upon maturity and realized a total foreign exchange gain of $0.6 million, which was recorded in the first quarter of 2007 under other income, net. There were no forward foreign exchange contracts outstanding as of June 29, 2008.

Item 4. *Controls and Procedures*

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, as of the end of the quarterly period covered by this report. Our disclosure controls and procedures are intended to ensure that the information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as the principal executive and financial officers, respectively, to allow final decisions regarding required disclosures. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

It should be noted that any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system will be met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events.

Quarterly Evaluation of Changes in Internal Control over Financial Reporting

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, also conducted an evaluation of our internal control over financial reporting to determine whether any change occurred during the second quarter of 2008 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, our management concluded that there was no such change during that quarter.

PART II. OTHER INFORMATION

Item 1. *Legal Proceedings*

In the ordinary course of business, we are subject to claims and litigation, including claims that we infringe third party patents, trademarks and other intellectual property rights. Although we believe that it is unlikely that any current claims or actions will have a material adverse impact on our operating results or our financial position, given the uncertainty of litigation, we cannot be certain of this. Moreover, the defense of claims or actions against us, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

Our involvement in any patent dispute, other intellectual property dispute or action to protect trade secrets and know-how could result in a material adverse effect on our business. Adverse determinations in current litigation or any other litigation in which we may become involved could subject us to significant liabilities to third parties, require us to grant licenses to or seek licenses from third parties and prevent us from manufacturing and selling our products. Any of these situations could have a material adverse effect on our business.

Item 1A. ***Risk Factors***

Other Items in this Quarterly Report on Form 10-Q describe risks and uncertainties associated with our business, including risks and uncertainties that could cause actual results to differ materially from the results expressed or implied by forward-looking statements contained in this Quarterly Report and in other statements we make publicly. A more complete description of a number of primary risk factors associated with our business, and which could cause our results to differ materially from the results expressed or implied by our forward-looking statements contained in this Quarterly Report on Form 10-Q or elsewhere, is set forth in our Annual Report on Form 10-K for the year ended December 31, 2007, filed with the SEC on February 25, 2008. In addition to the risk factors described in the 10-K, the following risk factor applies.

We May Record Impairment Charges Which Would Adversely Impact Our Results of Operations

We review our goodwill, intangible assets and long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amounts of these assets may not be recoverable, and also review goodwill annually in accordance with SFAS No. 142, Goodwill and Other Intangibles. During the year ended December 31, 2006, we recorded an impairment charge of $2.6 million to write down the remaining net book value of the Radiant technology acquired from Vortek Industries Ltd. in October of 2004.

One potential indicator of goodwill impairment is whether the Company's fair value, as measured by its market capitalization, has remained below its net book value for a significant period of time. As of July 29, 2008, the Company's market capitalization was approximately $228 million, which was below the Company's June 29, 2008 net book value of $239 million. Whether the Company's market capitalization triggers an impairment charge will depend on the underlying reasons for the decline in stock price, the significance of the decline, and the length of time the stock price has been depressed.

In the event that we determine in a future period that an impairment exists for any reason, we would record an impairment charge in the period such determination is made, which would adversely impact our financial position and results of operations.

Item 2. ***Unregistered Sales of Equity Securities and Use of Proceeds***

Issuer Repurchases of Equity Securities

In March 2007, our Board of Directors approved a common stock repurchase plan (Repurchase Plan) that authorized the repurchase of up to $20.0 million of our outstanding shares of common stock through open-market purchases or private transactions pursuant to a plan in conformity with Rule 10(b)5-1. As of December 31, 2007, we have completed all repurchases under this initial authorization, at a weighted-average cost of $9.97 per share.

In October 2007, our Board of Directors expanded our Repurchase Plan, authorizing the repurchase of up to an additional $30 million of the Company's shares of common stock through open-market purchases or private transactions. The size and timing of future repurchases will depend on the Company's share price. As of June 29, 2008, a total of 3.8 million shares have been repurchased against the original and expanded Repurchase Plan, at a weighted-average purchase price of $9.20.

For the three months ended June 29, 2008, there were no repurchases of the Company's shares of common stock but the Company has the authorization to repurchase up to an additional $15 million of the Company's shares of common stock under the Repurchase Plan.

Item 4. ***Submission of Matters to a Vote of Security Holders***

Our Annual Meeting of Stockholders was held on June 3, 2008. Out of 49,351,385 shares of Common Stock (as of the record date of April 9, 2008) entitled to vote at the meeting, 45,233,868 shares were present in person or by proxy.

At the meeting, our stockholders elected Dr. Hans-Georg Betz, David L. Dutton and Kenneth G. Smith as Class II directors to hold office for a three-year term and until their successors are elected and qualified. The nominees received the following votes:

Nominee	For	Withheld
Dr. Hans-Georg Betz	44,866,395	367,473
David L. Dutton	44,049,067	1,184,801
Kenneth G. Smith	44,049,066	1,184,802

At the meeting, our stockholders approved a proposal to ratify the appointment of PricewaterhouseCoopers LLP as the Company's independent registered public accountants for the year ending December 31, 2008. The proposal received the following votes:

For	Against	Abstain	Broker Non-Vote
45,196,692	32,455	4,721	-

Item 6. ***Exhibits***

Exhibit Number	Description
3.1(1)	Amended and Restated Certificate of Incorporation of the Company.
3.2(2)	Third Amended and Restated Bylaws of the Company.
4.7	Amendment No. 2 to Rights Agreement between the Company and Mellon Investor Services, LLC, as rights agent.
10.1	Form of performance-based Restricted Stock Units Agreement between Mattson Technology, Inc. and certain employees
31.1	Certification of Chief Executive Officer Pursuant to Sarbanes-Oxley Act Section 302(a).
31.2	Certification of Chief Financial Officer Pursuant to Sarbanes-Oxley Act Section 302(a).
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350.
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350.

(1) Incorporated by reference from Mattson Technology, Inc. Current Report on Form 8-K filed on January 30, 2001.
(2) Incorporated by reference from Mattson Technology, Inc. Quarterly Report on Form 10-Q filed on August 14, 2002.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

MATTSON TECHNOLOGY, INC.
(Registrant)

Dated: August 1, 2008

By: /s/ DAVID DUTTON
David Dutton
President and Chief Executive Officer
(Principal Executive Officer)

Dated: August 1, 2008

By: /s/ ANDY MORING
Andy Moring
Executive Vice President – Finance and Chief Financial Officer
(Principal Financial and Accounting Officer)