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 April 1, 2012

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	**77-0208119**
(State or Other Jurisdiction of Incorporation or Organization)	(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 reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). 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 ☑

At May 1, 2012 there were 62,656,088 shares of the registrant's common stock outstanding.

MATTSON TECHNOLOGY, INC.

TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

ITEM 1. *FINANCIAL STATEMENTS*

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

	Three Months Ended	
	April 1, 2012	**April 3, 2011**
Net sales	$ 50,504	$ 47,049
Cost of sales	33,570	34,168
Gross profit	16,934	12,881
Operating expenses:		
Research, development and engineering	6,630	6,515
Selling, general and administrative	10,867	11,512
Restructuring charges	720	(65)
Total operating expenses	18,217	17,962
Loss from operations	(1,283)	(5,081)
Interest income (expense), net	31	(21)
Other income (expense), net	382	(1,506)
Loss before income taxes	(870)	(6,608)
Provision for (benefit from) income taxes	249	(334)
Net loss	$ (1,119)	$ (6,274)
Net loss per share:		
Basic and diluted	$ (0.02)	$ (0.12)
Shares used in computing net loss per share:		
Basic and diluted	58,420	50,287

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

MATTSON TECHNOLOGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(unaudited, in thousands)

	Three Months Ended	
	April 1, 2012	April 3, 2011
Net loss	$ (1,119)	$ (6,274)
Other comprehensive income, net of tax		
Foreign currency translation adjustments	104	1,828
Unrealized investment gain	15	2
Other comprehensive income	119	1,830
Comprehensive loss	$ (1,000)	$ (4,444)

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

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

	April 1, 2012	December 31, 2011
ASSETS		
Current assets:		
Cash and cash equivalents	$ 35,558	$ 31,073
Restricted cash	1,877	1,877
Accounts receivable, net of allowance for doubtful accounts of $711 as of April 1, 2012 and $684 as of December 31, 2011	19,870	25,278
Advance billings	4,318	5,071
Inventories	30,816	29,203
Prepaid expenses and other current assets	7,005	9,024
Total current assets	99,444	101,526
Property and equipment, net	10,352	10,552
Intangibles, net	688	750
Other assets	923	1,015
Total assets	$ 111,407	$ 113,843
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 18,331	$ 16,785
Accrued compensation and benefits	5,889	5,781
Deferred revenue-current	9,582	12,117
Other current liabilities	9,814	10,666
Total current liabilities	43,616	45,349
Deferred revenues, non-current	2,983	3,158
Other long-term liabilities	5,130	5,191
Total liabilities	51,729	53,698
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 shares authorized; 62,656 shares issued and 58,475 shares outstanding as of April 1, 2012; 62,547 shares issued and 58,366 shares outstanding as of December 31, 2011	63	63
Additional paid-in capital	650,643	650,110
Accumulated other comprehensive income	20,591	20,472
Treasury stock, 4,181 shares as of April 1, 2012 and December 31, 2011	(37,986)	(37,986)
Accumulated deficit	(573,633)	(572,514)
Total stockholders' equity	59,678	60,145
Total liabilities and stockholders' equity	$ 111,407	$ 113,843

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)

	Three Months Ended	
	April 1, 2012	April 3, 2011
Cash flows from operating activities:		
Net loss	$ (1,119)	$ (6,274)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Allowance for doubtful accounts	(117)	177
Depreciation and amortization	882	1,665
Stock-based compensation	405	728
Deferred income taxes	105	-
Other non-cash items	6	-
Changes in assets and liabilities:		
Accounts receivable	5,585	5,914
Advance billings	752	(1,636)
Inventories	(1,433)	1,152
Prepaid expenses and other current assets	2,105	1,198
Other assets	17	101
Accounts payable	1,497	(6,154)
Accrued liabilities	(933)	2,343
Deferred revenue	(2,710)	1,272
Income taxes payable, non-current and other liabilities	(88)	(380)
Net cash provided by operating activities	4,954	106
Cash flows from investing activities:		
Maturities of available-for-sale investments	-	2,151
Purchases of property and equipment	(421)	(158)
Other	-	(2)
Net cash provided by (used in) investing activities	(421)	1,991
Cash flows from financing activities:		
Proceeds from stock plans, net	127	22
Net cash provided by financing activities	127	22
Effect of exchange rate changes on cash and cash equivalents	(175)	1,423
Net increase in cash and cash equivalents	4,485	3,542
Cash and cash equivalents, beginning of period	31,073	16,863
Cash and cash equivalents, end of period	$ 35,558	$ 20,405

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

MATTSON TECHNOLOGY, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

Mattson Technology, Inc. was incorporated in California in 1988 and reincorporated in Delaware in 1997. We design, manufacture, market and globally support semiconductor wafer processing equipment used in the fabrication of integrated circuits.

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 ("U.S. GAAP") 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 (which include normal recurring adjustments) considered necessary to present fairly each of the statement of financial position as of April 1, 2012, the results of operations for the three months ended April 1, 2012 and April 3, 2011 and the statements of cash flows for the three months ended April 1, 2012 and April 3, 2011, as applicable, have been made. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with our audited consolidated financial statements for the year ended December 31, 2011, which are included in the Annual Report on Form 10-K filed with the Securities and Exchange Commission on February 22, 2012. Certain prior year amounts have been reclassified to conform to the current presentation.

The condensed consolidated financial statements include the accounts of Mattson Technology, Inc. and our wholly-owned subsidiaries. All inter-company balances and transactions have been eliminated.

The results of operations for the three months ended April 1, 2012 are not necessarily indicative of results that may be expected for the entire year ending December 31, 2012.

Fiscal Year

Our fiscal year ends on December 31. We close our first fiscal quarter on the Sunday closest to March 31. Our second and third fiscal quarters are each 13 weeks long and our fourth quarter closes on December 31.

Use of Estimates

The preparation of the condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reported periods. We evaluate our estimates on an ongoing basis, including those related to the useful lives and fair value of long-lived assets, estimates used to determine facility lease loss liabilities, measurement of warranty obligations, valuation allowances for deferred tax assets, the fair value of stock-based compensation, estimates for allowance for doubtful accounts, and valuation of excess and obsolete inventories. Our estimates and assumptions can be subjective and complex and consequently actual results could differ materially from those estimates.

Reclassifications

For presentation purposes, certain prior period amounts have been reclassified to conform to the reporting in the current period financial statements. We reclassified certain current and prior period costs, including approximately $1.1 million for the first quarter of 2011, related to our spare parts business from selling, general and administrative expense to cost of sales, as they more appropriately reflect costs associated with revenue generating activities. These reclassifications do not affect our net income, cash flows or stockholders' equity.

Liquidity and Management Plans

As of April 1, 2012 we had cash, cash equivalents and restricted cash of $37.4 million and working capital of $55.8 million**.** We believe that these balances will be sufficient to fund our working and other capital requirements over the course of the next twelve months. Historically, we have relied on a combination of fundraising from the sale and issuance of equity securities (such as our common stock offering in May 2011) and cash generated from product, service and royalty revenues to provide funding for our operations. We will continue to review our expected cash requirements and take appropriate cost reduction measures or raise additional funds, and may seek them from a combination of sources including issuance of equity or debt securities through public or private financings. These financing options may not be available on a timely basis, or on terms acceptable to us, and could be dilutive to our stockholders. If adequate funds are not available on acceptable terms, our ability to achieve our intended long-term business objectives could be limited.

Recent Accounting Pronouncements

In September 2011, the Financial Accounting Standard Board ("FASB") issued Accounting Standard Update ("ASU") No. 2011-08, *Intangibles—Goodwill and Other - Testing Goodwill for Impairment* to simplify goodwill impairment testing by permitting an assessment of qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If it is concluded that this is the case, it is necessary to perform the currently prescribed two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. We adopted this accounting guidance on January 1, 2012, and this adoption did not have a material impact on our financial statements and disclosures.

In June 2011, the FASB issued ASU No. 2011-05, which amends current comprehensive income guidance. This accounting update eliminates the option to present the components of other comprehensive income as part of the statement of stockholders' equity. Instead, we must report comprehensive income in either a single continuous statement of comprehensive income that contains two sections, net income and other comprehensive income, or in two separate but consecutive statements. In December 2011, the FASB issued additional guidance that defers the effective date of the requirement to present separate line items on the income statement for reclassification adjustments of items out of accumulated other comprehensive income into net income. The deferral is temporary until the FASB reconsiders the operational concerns and needs of financial statement users. We adopted ASU No. 2011-05 on January 1, 2012, although the adoption of this update did not have an impact on our financial statements other than to change the manner in which comprehensive income is presented.

In May 2011, the FASB issued ASU No. 2011-04, an amendment to ASC 820, *Fair Value Measurements*, providing a consistent definition and measurement of fair value, as well as similar disclosure requirements between U.S. GAAP and International Financial Reporting Standards. ASU 2011-04 changes certain fair value measurement principles, clarifies the application of existing fair value measurement and expands the ASC 820 disclosure requirements, particularly for Level 3 fair value measurements. We adopted this amendment on January 1, 2012, the adoption of which did not have a material effect on our financial statement and disclosures.

There were no other recent accounting pronouncements or changes in accounting pronouncements during the three months ended April 1, 2012, compared to the recent accounting pronouncements described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2011, that are of significance or potential significance to us.

2. BALANCE SHEET DETAILS

Restricted Cash

We had restricted cash of $1.9 million as of April 1, 2012 and December 31, 2011, which is related to secured standby letters of credit provided to certain landlords and vendors. See Note 6. *Commitments and Contingencies* of the Notes to Condensed Consolidated Financial Statements.

Components of inventories as of April 1, 2012 and December 31, 2011 are shown below:

	April 1, 2012	December 31, 2011
Inventories, net:	(thousands)	
Purchased parts and raw materials	$ 18,849	$ 17,693
Work-in-process	5,990	7,266
Finished goods	5,977	4,244
	$ 30,816	$ 29,203

Amounts in the table are presented net of inventory valuation charges for excess and or obsolete inventories. For the three months ended April 1, 2012 and April 3, 2011, we recorded net benefits of approximately $0.5 million and $0.6 million, respectively.

Components of prepaid expenses and other current assets as of April 1, 2012 and December 31, 2011 are shown below:

	April 1, 2012	December 31, 2011
Prepaid expenses and other current assets:	(thousands)	
Prepaid value-added tax	$ 2,715	$ 2,996
Retirement insurance - foreign employees	1,211	1,185
Other current assets	3,079	4,843
	$ 7,005	$ 9,024

Components of property and equipment as of April 1, 2012 and December 31, 2011 are shown below:

	April 1, 2012	December 31, 2011
Property and equipment, net:	(thousands)	
Machinery and equipment	$ 46,053	$ 45,174
Furniture and fixtures	10,095	10,002
Leasehold improvements	18,039	17,759
	74,187	72,935
Less: accumulated depreciation	(63,835)	(62,383)
	$ 10,352	$ 10,552

Components of other current liabilities as of April 1, 2012 and December 31, 2011 are shown below:

	April 1, 2012	December 31, 2011
Other current liabilities:	(thousands)	
Warranty	$ 2,693	$ 3,419
Value-added tax	1,609	2,073
Restructuring	1,422	1,230
Other	4,090	3,944
	$ 9,814	$ 10,666

3. FAIR VALUE

We measure certain assets and liabilities at fair value, which 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 a liability. The authoritative guidance on fair value measurements establishes a three-tier value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1. Quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2. Include other inputs that are directly or indirectly observable in the marketplace.
Level 3. Unobservable inputs that are supported by little or no market activities.

Our money market funds and investment instruments are classified within Level 1 of the fair value hierarchy, as these instruments are valued using quoted market prices. Specifically, we value our investments in money market securities, certificates of deposit and plan assets under our deferred compensation plan based on quoted market prices in active markets. As of April 1, 2012 and December 31, 2011, we had no assets or liabilities classified within Level 2 or Level 3 and there were no transfers of instruments between Level 1 and Level 2 regarding fair value measurement.

Cash and cash equivalents, short-term investments and restricted cash are carried at fair value. Accounts receivable and accounts payable are valued at their carrying amounts which approximate fair value due to their short-term nature.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Assets and liabilities 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 as of April 1, 2012 and December 31, 2011:

	April 1, 2012 Fair Value Measurements at Reporting Date Using		December 31, 2011 Fair Value Measurements at Reporting Date Using	
	(Level 1)	Total	(Level 1)	Total
Assets measured at fair value:	(thousands)		(thousands)	
Cash Equivalents:				
Money market funds	$ 11,035	$ 11,035	$ 13,039	$ 13,039
Other Assets:				
Equity instruments	168	168	168	168
Total assets measured at fair value	$ 11,203	$ 11,203	$ 13,207	$ 13,207
Liabilities measured at fair value:				
Other Liabilities:				
Deferred compensation	$ 168	$ 168	$ 168	$ 168

Equity instruments in the preceding table represent plan assets under our deferred compensation plan, which offset corresponding deferred compensation plan liabilities as of the dates presented.

4. INTANGIBLE ASSETS

Identified intangible assets consisted of the following as of April 1, 2012 and December 31, 2011:

	April 1, 2012	December 31, 2011
Intangibles, net:	(thousands)	
Developed technology	$ 1,250	$ 1,250
Accumulated amortization	(562)	(500)
	$ 688	$ 750

We recorded amortization expense of $0.1 million in each of the periods ended April 1, 2012 and April 3, 2011.

5. RESTRUCTURING CHARGES

In December 2011, we initiated a cost reduction plan, which included the transition of our operations in Canada to our German facility, moving our outsourced spare part logistics and call center operations in-house, workforce reductions, elimination of contractors, and renegotiating certain contracts.

The beginning restructuring reserve balance includes $0.9 million of contract termination costs established prior to 2011, which related to future rent obligations associated with two vacated leased facilities net of sublease income.

During the first quarter of 2012 we recorded $0.7 million related to the 2011 restructuring plan. To date, we have recorded $2.5 million related to this plan. We expect to incur an additional $1.0 million to $2.0 million in 2012.

The following table summarizes changes in the restructuring accrual for the three months ended April 1, 2012 and April 3, 2011:

	Three Months Ended April 1, 2012				Three Months Ended April 3, 2011			
	Employee Severance Costs	Contract Termination Costs	Other Costs	Total	Employee Severance Costs	Contract Termination Costs	Other Costs	Total
	(thousands)				(thousands)			
Beginning balance	$ 82	$ 2,661	$ -	$ 2,743	$ 94	$ 1,241	$ -	$ 1,335
Expensed	586	-	134	720	-	-	-	-
Payments	(461)	(509)	(134)	(1,104)	-	-	-	-
Reserve adjustments	53	(14)	-	39	(94)	29	-	(65)
Foreign currency changes	4	10	-	14	-	21	-	21
Ending balance	$ 264	$ 2,148	$ -	$ 2,412	$ -	$ 1,291	$ -	$ 1,291

As of April 1, 2012, $1.4 million of the restructuring balance was classified as short-term and recorded within accrued liabilities in the Condensed Consolidated Balance Sheets, and the remaining $1.0 million of the restructuring balance was classified as long-term and recorded within other liabilities in the Condensed Consolidated Balance Sheets.

6. COMMITMENTS AND CONTINGENCIES

Warranty

The warranty offered by us on our system sales is generally 12 months, except where previous customer agreements state 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. Our warranty obligations require us to repair or replace defective products or parts during the warranty period at no cost to the customer. The actual system performance and/or field warranty expense profiles may differ from historical experience, and in those cases, we adjust our warranty accruals accordingly.

The following table summarizes changes in our product warranty accrual for the three months ended April 1, 2012 and April 3, 2011:

	Three Months Ended	
	April 1, 2012	**April 3, 2011**
	(thousands)	
Beginning balance	$ 3,419	$ 2,539
Warranties issued in the period	942	1,089
Costs to service warranties	(1,213)	(993)
Warranty accrual adjustments	(455)	319
Ending balance	$ 2,693	$ 2,954

Guarantees

In the ordinary course of business, our bank provides standby letters of credit or other guarantee instruments on our behalf to certain parties as required. The standby letters of credit are secured by certificates of deposit, which are classified as restricted cash in the accompanying Condensed Consolidated Balance Sheets. We have never recorded any liability in connection with these guarantee arrangements beyond what is required to appropriately account for the underlying transaction being guaranteed. We do not believe, based on historical experience and information currently available, that it is probable that any amounts will be required to be paid under such guarantee arrangements. As of April 1, 2012, the maximum potential amount that we could be required to pay was $1.9 million, the total amount of outstanding standby letters of credit, which were secured by $1.9 million in money market collateral accounts. This amount was recorded as restricted cash as of April 1, 2012.

In connection with our acquisition of Vortek Industries, Ltd. (“Vortek”) in 2004, we became party to an agreement between Vortek and the Canadian Minister of Industries (the “Minister”) relating to an investment in Vortek by Technology Partnerships Canada. Under the agreement, as amended, we, or Vortek (renamed Mattson Technology, Canada, Inc. (“MTC”)) agreed to various terms, including (i) payment by us of a royalty to the Minister of 1.4 percent of revenues from certain Flash RTP products, up to a total of CAD 14,269,290 (approximately $14.4 million based on the applicable exchange rate as of April 1, 2012), (ii) MTC through October 27, 2009 maintaining a specified average workforce of employees in Canada, making certain investments and complying with certain manufacturing, and (iii) certain other covenants concerning protection of intellectual property rights. Under the provisions of this agreement, if MTC is dissolved, files for bankruptcy or we, or MTC, do not materially satisfy the obligations pursuant to any material terms or conditions, the Minister could demand payment of liquidated damages in the amount of CAD 14,269,290 less any royalties paid to the Minister. As of October 27, 2009, we were no longer subject to covenants (ii), as discussed above; but are still subject to the remaining terms and conditions until the earlier of payment of royalty of CAD 14,269,290 (approximately $14.4 million based on the applicable exchange rate as of April 1, 2012) or through December 31, 2020.

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

We indemnify our directors and certain employees as permitted by law, and have entered into indemnification agreements with our directors and certain senior officers. We have not recorded a liability associated with these indemnification arrangements as we historically have not incurred any material costs associated with such indemnification arrangements. Costs associated with such indemnification arrangements may be mitigated, in whole or only in part, by insurance coverage that we maintain.

Government Agencies

As an exporter, we must comply with various laws and regulations relating to the export of products and technology from the U.S. and other countries having jurisdiction over our operations. In the U.S. these laws include the International Traffic in Arms Regulations ("ITAR") administered by the State Department's Directorate of Defense Trade Controls, the Export Administration Regulations ("EAR") administered by the Bureau of Industry and Security ("BIS"), and trade sanctions against embargoed countries and destinations administered by the U.S. Department of Treasury, Office of Foreign Assets Control ("OFAC"). The EAR governs products, parts, technology and software which present military or weapons proliferation concerns, so-called "dual use" items, and ITAR governs military items listed on the United States Munitions List. Prior to shipping certain items, we must obtain an export license or verify that license exemptions are available. In addition, we must comply with certain requirements related to documentation, record keeping, plant visits and hiring of foreign nationals.

As previously reported, in 2008, we self-disclosed to BIS certain inadvertent EAR violations, and have been working with BIS to resolve these. In April 2012, we entered into a settlement agreement with BIS that resolved in full all matters contained in our voluntary self-disclosure. Under the settlement, we agreed to a civil penalty of $850,000 of which we will pay $250,000 in May 2012 with the remaining $600,000 suspended for a period of one year and will be waived provided that no violations occur during that period. We had accrued $250,000 as of April 1, 2012.

Litigation

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. The defense of claims or actions against us, even if without merit, could result in the expenditure of significant financial and managerial resources.

We record a legal liability when we believe it is both probable that a liability has been incurred, and the amount can be reasonably estimated. We monitor developments in our legal matters that could affect the estimate we have previously accrued. Significant judgment is required to determine both probability and the estimated amount.

7. EMPLOYEE STOCK AND SAVING PLANS

The following table summarizes the combined activity under all of our equity incentive plans for the three months ended April 1, 2012:

	Awards Available For Grant (thousands)	Stock Options Outstanding (thousands)	Weighted-Average Exercise Price	Restricted Stock Units Outstanding (thousands)	Weighted-Average Grant Date Fair Value
Balances at December 31, 2011	2,067	6,489	$ 4.37	246	$ 3.50
Stock options:					
Granted	(1,251)	1,251	$ 2.79	-	-
Exercised	-	(102)	$ 1.25	-	-
Cancelled or forfeited	257	(257)	$ 5.44	-	-
Restricted stock units:					
Granted	-	-	-	-	-
Released	10	-	-	(13)	$ 5.86
Cancelled or forfeited	399	-	-	(228)	$ 3.32
Balances at April 1, 2012	1,482	7,381	$ 4.11	5	$ 5.68

The following table provides information pertaining to the our stock options and restricted stock units with time-based vesting for the three months ended April 1, 2012 and April 3, 2011 (in thousands, except weighted-average fair values):

	Three Months Ended April 1, 2012	Three Months Ended April 3, 2011
Stock options:		
Weighted-average fair value of options granted	$ 1.78	$ 1.51
Intrinsic value of options exercised	$ 159	$ 54
Cash received from options exercised	$ 127	$ 38

Stock Options

Options to purchase common stock granted under the 2005 Equity Incentive Plan (the "2005 Plan") are for periods not to exceed seven years. Generally, options to purchase stock under the 2005 Plan are granted at exercise prices that are at least 100 percent of the fair market value of our common stock on the date of grant. Generally, 25 percent of the options vest on the first anniversary of the vesting commencement date, and the remaining options vest 1/36 per month for the next 36 months thereafter.

We granted options to purchase 1.3 million and 1.2 million shares of common stock during the three months ended April 1, 2012 and April 3, 2011, respectively, with an estimated total grant-date fair value of $2.2 million and $1.8 million, respectively. We settle employee stock option exercises with newly issued common stock.

The following summarizes information about stock options outstanding as of April 1, 2012:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value
	(thousands)		(in years)	(thousands)
Stock options:				
Vested and exercisable options	4,275	$ 5.25	3.0	$ 1,570
Vested and exercisable and expected to vest thereafter	6,746	$ 4.26	4.1	$ 2,427
Total outstanding options	7,381	$ 4.11	4.3	$ 2,611

The aggregate intrinsic value shown in the table above represents the total pre-tax intrinsic value, based on the closing price of our common stock of $2.77 on March 30, 2012, which would have been received by the option holders had all in-the-money option holders exercised their options as of that date. There were approximately 2.5 million shares of common stock subject to in-the-money options that were exercisable as of April 1, 2012.

Restricted Stock Units ("RSUs")

Our 2005 Plan provides for grants of time-based and performance-based RSUs, which are counted against the total number of shares of common stock available for grant under the 2005 Plan at 1.75 shares of common stock for every RSU.

Time-Based Restricted Stock Units

Generally, 25 percent of time-based RSUs vest on each anniversary date of the vesting commencement date or date of grant. On occasion and for varying purposes, we grant time-based RSUs with different vesting criteria and duration.

During the three months ending April 1, 2012 and during 2011, we did not grant any time-based RSUs.

Performance-Based Restricted Stock Units

The vesting of performance-based RSUs is contingent on our achievement of certain predetermined financial goals and in some cases, the achievement of certain market performance targets. The amount of stock-based compensation expense recognized in any one period can vary based on the achievement or anticipated achievement of specific performance goals. If a performance goal is not met or is not expected to be met, no compensation cost would be recognized on the underlying RSUs, and any previously recognized compensation expense on those RSUs would be reversed.

As of December 31, 2011, we had 0.2 million performance-based RSUs outstanding. These performance-based RSUs expired during the first quarter of 2012. We did not record any compensation expense related to these performance-based RSUs during the three months ended April 1, 2012 and April 3, 2011 since the performance targets were not met.

8. STOCK-BASED COMPENSATION

We account for stock-based compensation in accordance with the applicable authoritative guidance, which requires the measurement of stock-based compensation on the date of grant based on the fair value of the award, and the recognition of the expense over the requisite service period for the employee. Compensation related to restricted stock units is the intrinsic value on the date of grant, which is the closing price of our common stock less the employee exercise price, if any. Compensation related to stock options is determined using a stock option valuation model.

Valuation Assumptions

We use the Black-Scholes valuation model to determine the fair value of stock options. The Black-Scholes model requires the input of highly subjective assumptions, which are summarized in the table below for the three months ended April 1, 2012 and April 3, 2011:

	Three Months Ended	
	April 1, 2012	**April 3, 2011**
Expected dividend yield	-	-
Expected stock price volatility	81%	77%
Risk-free interest rate	0.8%	2.1%
Expected life of options in years	5	5

We estimate the expected life of options based on an analysis of our historical experience of employee exercise and post-vesting termination behavior considered in relation to the contractual life of the option. Expected volatility is based on the historical volatility of our common stock; and the risk-free interest rate is the rate on a U.S. Treasury Bill, with a maturity approximating the expected life of the option. We do not currently pay cash dividends on our common stock and do not anticipate doing so in the foreseeable future. Accordingly, the expected dividend yield is zero.

Our stock-based compensation in the three months ended April 1, 2012 and April 3, 2011 was as follows:

	Three Months Ended	
	April 1, 2011	**April 3, 2011**
Stock-based compensation by type of award:	(thousands)	
Stock options	$ 388	$ 680
Restricted stock units	12	38
Employee stock purchase plan	5	10
	$ 405	$ 728

	Three Months Ended	
	April 1,	**April 3,**
Stock-based compensation by category of expense:	(thousands)	
Cost of sales	$ 15	$ 34
Research, development and engineering	73	126
Selling, general and administrative	317	568
	$ 405	$ 728

We did not capitalize any stock-based compensation as inventory in the three months ended April 1, 2012 and April 3, 2011, as such amounts were not material. As of April 1, 2012, we had $3.6 million in unrecognized stock-based compensation expense, net of estimated forfeitures, related to stock options which will be recognized over a weighted-average period of 3 years.

9. GEOGRAPHIC AND CUSTOMER CONCENTRATION INFORMATION

We have one operating segment. We design, manufacture and market advanced fabrication equipment for the semiconductor manufacturing industry. The authoritative guidance on segment reporting and disclosure defines operating segment as a component of an enterprise for 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. As our business is completely focused on one industry segment, the design, manufacture and marketing of advanced fabrication equipment to the semiconductor manufacturing industry, management believes that we have one reportable segment. Our net sales and profits are generated from the sales of systems and services in this one segment. For the purposes of evaluating our reportable segments, our Chief Executive Officer is the chief operating decision maker, as defined in the applicable authoritative guidance.

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

	Three Months Ended			
	April 1, 2012		April 3, 2011	
	(thousands)	%	(thousands)	%
Net sales:				
United States	$ 10,170	20	$ 1,083	2
Korea	24,258	48	22,133	47
Taiwan	7,943	16	8,954	19
China	1,557	3	6,575	14
Other Asia	2,507	5	4,205	9
Europe and others	4,069	8	4,099	9
	$ 50,504	100	$ 47,049	100

In the three months ended April 1, 2012, one customer accounted for approximately 62 percent of net sales. In the three months ended April 3, 2011, three customers accounted for 42 percent, 14 percent and 10 percent of net sales, respectively. At April 1, 2012, two customers accounted for approximately 52 percent and 11 percent of our total net accounts receivable, respectively. At December 31, 2011, three customers accounted for approximately 48 percent, 15 percent and 13 percent of our total net accounts receivable, respectively.

Geographical information relating to our property and equipment, net, as of April 1, 2012 and December 31, 2011 was as follows:

	April 2, 2012	December 31, 2011
Property and equipment, net:	(thousands)	
United States	$ 4,943	$ 5,306
Germany	2,459	2,396
Canada	2,411	2,281
Others	539	569
	$ 10,352	$ 10,552

10. INCOME TAXES

On a quarterly basis, we evaluate our expected income tax expense or benefit based on our year-to-date operations, and we record an adjustment in the current quarter.

We recorded a $0.2 million income tax provision and a $0.3 million income tax benefit for the three months ended April 1, 2012 and April 3, 2011, respectively. The net tax provision is the result of the mix of profits earned by us, in tax jurisdictions with a broad range of income tax rates. The $0.3 million tax benefit for the three months ended April 3, 2011 includes a $0.4 million tax benefit related to the release of uncertain tax benefits due to a lapse of the statute of limitations.

11. NET LOSS PER SHARE

We present both basic and diluted net loss per share on the face of our condensed consolidated statements of operations in accordance with the authoritative guidance on earnings per share. Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding for the period. Since we had net losses in the three months ended April 1, 2012 and April 3, 2011, none of the stock options and restricted stock units were included in the computation of diluted shares for these periods, as inclusion of such shares would have been antidilutive.

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

	Three Months Ended	
	April 1, 2012	**April 3, 2011**
	(thousands)	
Weighted-average common shares outstanding - basic	58,420	50,287
Effect of diluted potential common shares from stock options and restricted stock units	-	-
Weighted-average common shares outstanding - diluted	58,420	50,287

All outstanding options to purchase our common stock and restricted stock units are potentially dilutive securities, and as of April 1, 2012 and April 3, 2011, the combined total of options to purchase common stock and restricted stock units outstanding were 7.4 million and 7.3 million, respectively.

ITEM 2.MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDIDTION 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, earnings, cash flow and cash position; growth of the industry and the size of our served available market; the timing of significant customer orders for our products; customer acceptance of delivered products and our ability to collect amounts due upon shipment and upon acceptance; end-user demand for semiconductors, including the growing mobility electronics industry; customer demand for semiconductor manufacturing equipment; our ability to timely manufacture, deliver and support ordered products; our ability to bring new products to market, to gain market share with such products and the overall mix of our products; customer rate of adoption of new technologies; risks inherent in the development of complex technology; the timing and competitiveness of new product releases by our competitors; margins; product development plans and levels of research, development and engineering activity; our ability to align our cost structure with market conditions, including outsourcing plans, operating expenses, and the expected effects, cost and timing of restructurings; tax expenses; excess inventory reserves, including the level of our vendor commitments compared to our requirements; economic conditions in general and in our industry; the impact of any litigation or investigation on our operating results or financial position; any offering and sale of securities pursuant to our shelf registration statement or otherwise; 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 this Part I, 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 event, or for any other reason. This discussion should be read in conjunction with the condensed consolidated financial statements and notes presented in this Quarterly Report on 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, 2011 (the "2011 Form 10-K").

Overview

We are a supplier of semiconductor wafer processing equipment used in the fabrication of integrated circuits ("ICs"). Our manufacturing equipment is primarily used for semiconductor manufacturing. Our manufacturing equipment utilizes innovative technology to deliver advanced processing capabilities and high productivity for the fabrication of current and next-generation ICs. We were incorporated in California in 1988 and reincorporated in Delaware in 1997.

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 semiconductor equipment industry is typically characterized by wide swings in operating results as the industry moves through its cycle. During the second half of 2011, weak market conditions caused pullbacks in expansion plans throughout the semiconductor manufacturing industry. Despite the decline in DRAM, the NAND flash memory, and logic represented growth segments in the semiconductor market.

We made progress in our strategic growth initiatives and are strengthening our product positions. In the first quarter of 2012, the paradigmE etch system was released for production at a leading semiconductor logic/foundry facility. The paradigmE was also selected by a major Asian CMOS image sensor foundry, expanding our etch position into a new growth market. Entering 2012 we have gained both market share and sales ranking in etch and strip, reaching the second–ranked supplier in the strip market based on 2011 annual sales. Our RTP tools, the Helios XP and the Millios millisecond annealing system, are now positioned at three major logic/foundry customers.

The success of our business will depend on numerous factors, including, but not limited to, the market demand for semiconductors and semiconductor wafer processing equipment. Such factors will also include our ability to (a) significantly grow the Company, 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; (d) maintain a cost structure that will enable us to operate effectively and profitably throughout changing industry cycles and (e) generate the gross profits necessary to enable us to make the necessary investments in our business.

Critical Accounting Policies and Use of Estimates

Management's discussion and analysis of financial condition and results of operations are based upon our condensed consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us 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 net sales and expenses during the reporting periods.

On an on-going basis, we evaluate our estimates and judgments, including those related to reserves for excess and obsolete inventory, warranty, 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 judgments 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.

There were no significant changes to our critical accounting policies during the three months ended April 1, 2012. For information about critical accounting policies, see Note 2. Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements, in our 2011 Form 10-K.

Results of Operations

A summary of our results of operations for three months ended April 1, 2012 and April 3, 2011 are as follows:

	Three Months Ended					
	April 1, 2012		April 3, 2011		Increase (Decrease)	
	(thousands)	%	(thousands)	%	(thousands)	%
Net sales	$ 50,504	100.0	$ 47,049	100.0	$ 3,455	7.3
Cost of sales	33,570	66.5	34,168	72.6	(598)	(1.8)
Gross profit	16,934	33.5	12,881	27.4	4,053	31.5
Operating expenses:						
Research, development and engineering	6,630	13.1	6,515	13.8	115	1.8
Selling, general and administrative	10,867	21.5	11,512	24.5	(645)	(5.6)
Restructuring charges	720	1.4	(65)	(0.1)	785	n/m [1]
Total operating expenses	18,217	36.0	17,962	38.2	255	1.4
Loss from operations	(1,283)	(2.5)	(5,081)	(10.8)	3,798	(74.7)
Interest income (expense), net	31	0.1	(21)	-	52	n/m [1]
Other income (expense), net	382	0.8	(1,506)	(3.2)	1,888	n/m [1]
Loss before income taxes	(870)	(1.6)	(6,608)	(14.0)	5,738	(86.8)
Provision for income taxes	249	0.5	(334)	(0.7)	583	n/m [1]
Net loss	$ (1,119)	(2.1)	$ (6,274)	(13.3)	$ 5,155	(82.2)

[1] *Not meaningful.*

Net Sales

A summary of our net sales for three months ended April 1, 2012 and April 3, 2011 are as follows:

	Three Months Ended				Increase (Decrease)	
	April 1, 2012		April 3, 2011			
	(thousands)	%	(thousands)	%	(thousands)	%
Net sales:						
United States	$ 10,170	20	$ 1,083	2	$ 9,087	839
International:						
Korea	24,258	48	22,133	47	2,125	10
Taiwan	7,943	16	8,954	19	(1,011)	(11)
China	1,557	3	6,575	14	(5,018)	(76)
Other Asia	2,507	5	4,205	9	(1,698)	(40)
Europe and others	4,069	8	4,099	9	(30)	(1)
	40,334	80	45,966	98	(5,632)	(12)
Total net sales	$ 50,504	100	$ 47,049	100	$ 3,455	7

Net sales were $50.5 million for the three months ended April 1, 2012, an increase of approximately $3.5 million compared to $47.0 million for the three months ended April 3, 2011. The increase in sales was primarily driven by higher sales of etch and strip systems for the production of NAND and foundry devices.

In the first quarter of 2012, international sales to customers in Asia and Europe continued to account for a significant portion of our total net sales, comprising approximately 80 percent of net sales in the first quarter of 2012, compared to 98 percent in 2011. We anticipate that international sales will continue to account for a significant portion of our net sales.

Cost of Sales and Gross Profit

A summary of our cost of sales and gross profit for three months ended April 1, 2012 and April 3, 2011 are as follows:

	Three Months Ended		Increase (Decrease)	
(in thousands, except for percentages)	April 1, 2012	April 3, 2011	Amount	%
Cost of sales	$ 33,570	$ 34,168	$ (598)	-1.8%
Gross profit	16,934	12,881	4,053	31.5%
Gross margin percentage	33.5%	27.4%		

Our cost of sales consists of the costs associated with manufacturing our products, and includes the purchase of raw materials and related overhead, labor, warranty costs, charges for excess and obsolete inventory and costs incurred by our contract manufacturers in the production of our components, major subassemblies/modules and complete systems.

Gross margin rate improved from 27.4 percent in the first quarter of 2011 to 33.5 percent in the first quarter of 2012. The increase in gross margin in 2012 was primarily due to better absorption of labor and fixed overhead costs on higher levels of production as well as lower installation and warranty costs.

Our gross margin rate has varied over the years and will continue to be affected by many factors, including competitive pressures, product mix, inventory reserves, economies of scale, material and other costs, overhead absorption levels and the timing of revenue recognition.

Research, Development and Engineering

A summary of our research, development and engineering expenses for three months ended April 1, 2012 and April 3, 2011 are as follows:

	Three Months Ended		Increase (Decrease)	
	April 1, 2012	April 3, 2011	Amount	%
(in thousands, except for percentages)				
Research, development and engineering	$ 6,630	$ 6,515	$ 115	1.8%
Percentage of net sales	13.1%	13.8%		

Research, development and engineering expenses consist primarily of salaries and related costs of employees engaged in research, development and engineering activities, costs of product development and depreciation on equipment used in the course of research, development and engineering activities.

Research, development and engineering expenses were relatively flat in the first quarter of 2012 compared to the first quarter of 2011. The slight increase was primarily due to an increase in engineering materials and outside services offset by a decrease in depreciation expense on lab tools resulting from several assets being fully depreciated as of the end of 2011.

Selling, General and Administrative

A summary of our selling, general and administrative expenses for three months ended April 1, 2012 and April 3, 2011 are as follows:

	Three Months Ended		Increase (Decrease)	
	April 1, 2012	April 3, 2011	Amount	%
(in thousands, except for percentages)				
Selling, general and administrative	$ 10,867	$ 11,512	$ (645)	-5.6%
Percentage of net sales	21.5%	24.5%		

Selling, general and administrative expenses consist primarily of personnel-related expenses, as well as legal and professional fees, facilities expenses, insurance expenses, amortization of evaluation systems and certain information technology costs.

Selling, general and administrative expenses were $10.9 million in the first quarter of 2012, a decrease of $0.6 million compared to $11.5 million in the first quarter of 2011. The decrease in selling, general and administrative expenses was primarily due to lower expenses related to evaluation tools partially offset by charges incurred related to a settlement with the Bureau of Industry and Security in connection with certain self reported export violations (see Government Agencies in Note 6 Commitments and Contingencies of Notes to our Condensed Consolidated Financial Statements) and higher than usual seasonal professional fees incurred in connection with our annual audit and SEC filings.

Restructuring Charges

In December 2011, we initiated a cost reduction plan, which included the transition of our operations in Canada to our German facility, moving our outsourced spare part logistics and call center operations in-house, workforce reductions, elimination of contractors, and renegotiating certain contracts.

The beginning restructuring reserve balance includes $0.9 million of contract termination costs established prior to 2011, which related to future rent obligations associated with two vacated leased facilities net of sublease income.

During the first quarter of 2012 we recorded $0.7 million related to the 2011 restructuring plan. To date, we have recorded $2.5 million related to this plan. We expect to incur an additional $1.0 million to $2.0 million in 2012.

Other Income (Expense), net

Other income (expense), net was $0.4 million in the first quarter of 2012, a $1.9 million increase compared to $1.5 million of other expense, net in the first quarter of 2011. The change in other income (expense), net was primarily attributable to a $1.6 million fluctuation in foreign currency exchange gain (losses) related to our foreign-denominated balances at our U.S. operations. We recorded $0.5 million foreign exchange gains in the first quarter of 2012 as a result of favorable currency exchange rates for the Japanese Yen and the Canadian dollar against the U.S. dollar. In the first quarter of 2011, we recorded $1.1 million of net foreign exchange loss due to the impact of unfavorable Euro exchange rates against the U.S. Dollar.

Provision for Income Taxes

On a quarterly basis, we evaluate our expected income tax expense or benefit based on our year-to-date operations, and we record an adjustment in the current quarter.

We recorded an income tax provision of $0.2 million and an income tax benefit of $0.3 million for the three months ended April 1, 2012 and April 3, 2011, respectively, primarily related to foreign taxes. The net tax provision is the result of the mix of profits earned by us, in tax jurisdictions with a broad range of income tax rates. The $0.3 million tax benefit for the three months ended April 3, 2011 includes a $0.4 million tax benefit related to the release of uncertain tax benefits due to a lapse of the statute of limitations.

Liquidity and Capital Resources

	Three Months Ended	
	April 1, 2012	**April 3, 2011**
	(thousands)	
Net cash provided by operating activities	$ 4,954	$ 106
Net cash provided by (used in) investing activities	(421)	1,991
Net cash provided by financing activities	127	22
Effect of exchange rate changes on cash and cash equivalents	(175)	1,423
Net increase in cash and cash equivalents	$ 4,485	$ 3,542

Our cash and cash equivalents and restricted cash were $37.4 million as of April 1, 2012, an increase of approximately $4.5 million, compared to $32.9 million as of December 31, 2011. Working capital as of April 1, 2012 was $55.8 million, compared to $56.2 million as of December 31, 2011. Stockholders' equity as of April 1, 2012 was $59.7 million, compared to $60.1 million as of December 31, 2011.

Liquidity and Capital Resources Outlook

As of April 1, 2012, we had cash, cash equivalents and restricted cash of $37.4 million and working capital of $55.8 million**.** We believe that these balances will be sufficient to fund our working and other capital requirements over the course of the next twelve months. Our operations require careful management of our cash and working capital balances. Our liquidity is affected by many factors including, among others, fluctuations in our net sales, gross profits and operating expenses, as well as changes in our operating assets and liabilities. The cyclicality of the semiconductor industry makes it difficult to predict our future liquidity needs with certainty. Any upturn in the semiconductor industry would result in short-term uses of cash to fund inventory purchases and accounts receivable. Alternatively, any renewed softening in the demand for our products or ineffectiveness of our cost reduction efforts may cause us to incur additional losses in the future and lower our cash balances. We may need additional funds to support our working capital requirements, operating expenses or for other requirements. Historically, we have relied on a combination of fundraising from the sale and issuance of equity securities (such as our common stock offering in May 2011) and cash generated from product, service and royalty revenues to provide funding for our operations. We will continue to review our expected cash requirements and take appropriate cost reduction measures to ensure that we have sufficient liquidity. We periodically review our liquidity position and may decide to raise additional funds, and may seek them from a combination of sources including issuance of equity or debt securities through public or private financings. These financing options may not be available on a timely basis, or on terms acceptable to us, and could be dilutive to our stockholders. If adequate funds are not available on acceptable terms, our ability to achieve our intended long-term business objectives could be limited.

Operating Activities

In the first quarter of 2012, net cash provided by operations was $5.0 million, comprised primarily of $1.1 million in net loss, offset by $4.8 million of cash increases reflected in the net change in assets and liabilities and non-cash charges of $1.3 million. Cash flow increases resulting from the net change in assets and liabilities primarily consisted of a $6.3 million decrease in accounts receivable and advance billings, a $2.1 million decrease in prepaid expenses and other current assets and a $0.6 million increase in accounts payable and accrued liabilities, partially offset by a $2.7 million decrease in deferred revenue and a $1.4 million increase in inventory. The increase in accounts receivable and advance billings reflects the increase in sales and business activities in the first quarter of 2012 compared to the first quarter of 2011. Non-cash charges consisted primarily of $0.8 million of depreciation and amortization and $0.4 million of stock-based compensation.

In the first quarter of 2011, net cash provided by operations was $0.1 million, consisting primarily of a net loss of $6.3 million offset by $2.6 million of non-cash charges and $3.8 million of cash flow increases reflected in the net change in assets and liabilities. Non-cash charges consisted primarily of $1.7 million of depreciation and amortization, $0.7 million of stock-based compensation and $0.2 million of allowance for doubtful accounts provision. Cash flow increases resulting from the net change in assets and liabilities primarily consisted of a $5.9 million decrease in accounts receivable, a $2.3 million increase in accrued liabilities, a $1.3 million increase in deferred revenue, $1.2 million decrease in inventories and a $1.2 million decrease in prepaid expenses and other current assets, partially offset by a $6.2 million decrease in accounts payable, a $1.6 million increase in advanced billings and a $0.4 million decrease in income taxes payable, non-current and other liabilities.

Cash provided by operations 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, inventory purchases, collection of accounts receivable and timing of payments.

Investing Activities

In the first quarter of 2012, cash used in investing activities was $0.4 million, which represent our first quarter of 2012 capital spending.

In the first quarter of 2011, net cash provided by investing activities was $2.0 million, which consisted primarily of $2.2 million of proceeds from maturities of available-for-sale investments, partially offset by $0.2 million of capital spending.

Financing Activities

In the first quarter of 2012, net cash provided by financing activities was $0.1 million, which consisted of proceeds from issuance of common stock under our employee stock plan.

Cash flows related to financing activities for the three months ended April 3, 2011 were not material.

Off-Balance Sheet Arrangements

As of April 1, 2012, 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 the U.S. GAAP, certain obligations and commitments are not required to be included in our Condensed 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 2011 Form 10-K.

Recent Accounting Pronouncements

Information with respect to recent accounting pronouncements may be found in Note 1 *Basis of Presentation and Significant Accounting Policies* in the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISKS

Interest Rate Risk

As of April 1, 2012, our portfolio consisted of $35.6 million in cash and cash equivalents. We did not have any short-term investments as of April 1, 2012. Our exposure to interest rate risk relates primarily to short-term investments, which we may purchase at different points in time, and the potential losses arising from changes in those interest rates. Our investment objective is to achieve the maximum return compatible with capital preservation and our liquidity requirements. Our strategy is to invest our cash in a manner that preserves capital, maintains sufficient liquidity to meet our cash requirements, and maximizes yields consistent with approved credit risk. We place our investments with high credit quality issuers and, by policy, limit the amount of our credit exposure to any one issuer. Our portfolio, which consisted primarily of money market funds and U.S. government and government-sponsored debt securities, includes only marketable securities with active secondary or resale markets to ensure portfolio liquidity. We classify our cash equivalents and short-term investments in accordance with authoritative guidance on accounting for investments in debt and equity securities; consider investments in instruments purchased with an original maturity of 90 days or less to be cash equivalents; and classify our short-term investments as available-for-sale.

Our cash equivalents and short-term investment portfolios consist primarily of money market funds and U.S. government and government-sponsored debt securities. Our equity instruments are reported at fair value with unrealized gains and losses, net of tax, included in accumulated other comprehensive income within stockholders' equity in the accompanying Condensed Consolidated Balance Sheets.

Based on the size of the investment portfolio as of April 1, 2012, an immediate increase or decrease in interest rates of 100 basis points would not have a material adverse effect on the fair value of our investment portfolio.

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 net sales and costs are translated using average exchange rates for the period. Gains or losses from translation of foreign operations are included as a component of accumulated other comprehensive income in the accompanying Condensed Consolidated Balance Sheets. Foreign currency transaction gains and losses are recognized in the accompanying Condensed Consolidated Statements of Operations as they are incurred. Because much of our net sales and capital spending are transacted in U.S. dollars, we are subject to fluctuations in foreign currency exchange rates that could have a material adverse effect on 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. Exchange rate fluctuations of greater than ten percent, primarily for the U.S. dollar relative to the Euro, Canadian dollar or South Korean won, could have a material impact on our financial statements. Additionally, foreign currency transaction gains and losses fluctuate depending upon the mix of foreign currency denominated assets and liabilities and whether the local currency of an entity strengthens or weakens during a period. As of April 1, 2012, our U.S. operations had approximately $1.8 million, net, in foreign denominated operating intercompany payables. It is estimated that a ten percent fluctuation in the U.S. dollar relative to these foreign currencies would lead to a profit of $0.2 million (U.S. dollar strengthening), or a loss of $0.2 million (U.S. dollar weakening) on the translation of these intercompany payables, which would be recorded as other income (expense), net in our consolidated statement of operations.

In the three months ended April 1, 2012 and April 3, 2011, we recorded foreign currency exchange gain of $0.5 million and foreign currency loss of $1.1 million, respectively, in other income (expense), net in the accompanying Condensed Consolidated Statements of Operations.

We included $0.1 million and $1.8 million foreign currency translation adjustments in the accompanying Condensed Consolidated Statement of Comprehensive Loss for three months ended April 1, 2012 and April 3, 2011, respectively. The $1.8 million foreign exchange translation adjustment in the three months ended April 3, 2011 was primarily due to the weakening of the U.S. dollar against the Euro, which favorably impacted the net assets used in our foreign operations and held in local currencies.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of 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 period covered by this Quarterly Report on Form 10-Q. Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures are effective as of April 1, 2012 to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure, and that such information is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended April 1, 2012, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

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, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

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. Moreover, the defense of claims or actions against us, even if without merits, 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

Because of the following factors, as well as other variables affecting our operating results, cash flows and financial condition, past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in the future periods. Other events that we do not currently anticipate or that we currently deem immaterial also may affect our results of operations, cash flows and financial condition.

We are dependent on our revenue and the success of our cost reduction measures to ensure adequate liquidity and capital resources during the next twelve months.

We have incurred operating losses and generated negative cash flows for the last four years. As of April 1, 2012, we had cash, cash equivalents and restricted cash of $37.4 million and working capital of $55.8 million. Our operations require careful management of our cash and working capital balances. Our liquidity is affected by many factors including, among others, fluctuations in our revenue, gross profits and operating expenses, as well as changes in our operating assets and liabilities. The cyclicality of the semiconductor industry makes it difficult for us to predict our future liquidity needs with certainty. Any upturn in the semiconductor industry would result in short-term uses of our cash to fund inventory purchases and accounts receivable, with longer-term uses for research and development or otherwise to make investments in our business. Alternatively, any renewed softening in the demand for our products or ineffectiveness of our cost reduction efforts may cause us to incur additional losses in the future and lower our cash balances.

We may need additional funds to support our working capital requirements, operating expenses or for other requirements. Historically, we have relied on a combination of fundraising from the sale and issuance of equity securities (such as our common stock offering in May 2011) and cash generated from product, service and royalty revenues to provide funding for our operations. We periodically review our liquidity position and may seek to raise additional funds from a combination of sources including issuance of equity or debt securities through public or private financings. In the event additional needs for cash arise, we may also seek to raise these funds externally through other means, such as the sale of assets. The availability of additional financing will depend on a variety of factors, including among others, market conditions, the general availability of credit to the financial services industry and our credit ratings. As a consequence, these financing options may not be available to us on a timely basis, or on terms acceptable to us, and could be dilutive to our stockholders. Our current liquidity position may result in risks and uncertainties affecting our operations and financial position, including the following:

- we may be required to reduce planned expenditures or investments;
- we may be unable to compete in our newer or developing markets;
- we may not be able to obtain and maintain normal terms with suppliers;
- suppliers may require standby letters of credit before delivering goods and services, which will result in additional demands on our cash;
- customers may delay or discontinue entering into contracts with us; and
- our ability to retain management and other key individuals may be negatively affected.

Failure to generate sufficient cash flows from operations, raise additional capital or reduce spending could have a material adverse effect on our ability to achieve our intended long-term business objectives.

We are dependent on a highly concentrated customer base, and any cancellation, reduction or delay of purchases by these customers could harm our business. Additionally, we may not achieve anticipated revenue levels if we are not selected as "vendor of choice" for new or expanded customer fabrication facilities.

We derive most of our revenues from the sale of systems to a relatively small number of customers, which makes our relationship with each customer critical to our business. For example, in the three months ending April 1, 2012 and the year ending December 31, 2011, our three largest customers accounted for a total of 74 percent, and 60 percent of our revenues, respectively. We currently depend on one customer for a significant portion of our revenues, and the loss of, or a significant reduction in, orders from this customer would significantly reduce our revenue and adversely impact our operating results. See *Item 1. Business—Customers* of our 2011 Form 10-K for a detailed description of our customer concentration. Because semiconductor manufacturers must make a substantial investment to install and integrate capital equipment into a semiconductor fabrication facility, these manufacturers will tend to choose semiconductor equipment manufacturers based on product compatibility and proven performance. Customer order cancellations could result in the loss of anticipated sales without allowing us sufficient time to reduce our inventory and operating expenses. In addition, changes in forecasts or the timing of orders from customers could expose us to the risks of inventory shortages or excess inventory. This in turn could cause our operating results to fluctuate. If customer relationships are disrupted due to an inability to deliver sufficient products or for any other reason, it could have a significant negative impact on our business.

A large percentage of our sales are concentrated among customers in the memory market. As a result, a downturn or an upturn in memory spending could impact us more than it would impact competitors who are more diversified with logic and foundry customers.

Once a semiconductor manufacturer selects a particular vendor's capital equipment, the manufacturer generally relies upon equipment from this "vendor of choice" (VOC) for the specific production line application. In addition, the semiconductor manufacturer frequently will attempt to consolidate other capital equipment requirements with the same vendors. Accordingly, we may face narrow windows of opportunity to be selected as the VOC by significant new customers. It may be difficult for us to sell to a particular customer for a significant period of time once that customer selects a competitor's product. If we are unable to achieve broader market acceptance of our systems and technology, we may be unable to maintain and grow our business and our operating results and financial condition will be adversely affected.

Although we maintain a backlog of customer orders with expected shipment dates within the next 12 months, customers may request cancellations or delivery delays. Customers in some regions place orders a few weeks before the shipment. As a result, our backlog may not be a reliable indication of future revenues. If shipments of orders in backlog are cancelled or delayed, revenues could fall below our expectations and the expectations of market analysts and investors.

We face stiff competition in the semiconductor equipment industry.

The semiconductor equipment industry is both highly competitive and subject to rapid technological change. Significant competitive factors include the following:

- system performance;
- cost of ownership;
- size of the installed base;
- breadth of product line;
- delivery speed; and
- customer support.

Competitive pressure has been increasing in several areas. In addition to increased price competition, customers are waiting to make purchase commitments based on their end-user demand, which are then placed with requests for rapid delivery dates and increased product support. Some of our major competitors are larger than we are, have greater capital resources and may have a competitive advantage over us by virtue of having:

- broader product lines;
- longer operating history;
- greater experience with high-volume manufacturing;
- substantially larger customer bases; and
- substantially greater customer support, financial, technical and marketing resources.

Growth in the semiconductor equipment industry is increasingly concentrated in the largest companies, resulting in increasing industry consolidation, such as the pending merger of Lam Research and Novellus Systems announced in December 2011. Semiconductor companies are consolidating their vendor base and prefer to purchase from vendors with a strong, worldwide support infrastructure.

In addition, to expand our sales we must often displace the systems of our competitors or sell new systems to customers of our competitors. Our competitors may develop new or enhanced competitive products that offer price or performance features that are superior to our systems. Our competitors may also be able to respond more quickly to new or emerging technologies and changes in customer requirements or to devote greater resources to the development, promotion, sale and on-site customer support of their product lines. We may not be able to maintain or expand our sales if competition increases and we are unable to respond effectively.

The cyclical nature of the semiconductor industry has caused us to experience losses and reduced liquidity, and it may continue to negatively impact our financial performance.

The semiconductor equipment industry is highly cyclical and periodically has severe and prolonged downturns, which causes our operating results to fluctuate significantly. We are exposed to the risks associated with industry overcapacity, including decreased demand for our products and increased price competition.

The semiconductor industry has historically experienced periodic downturns due to general economic changes or due to capacity growth temporarily exceeding growth in demand for semiconductor devices. Our business depends, in significant part, upon capital expenditures by manufacturers of semiconductor devices, including manufacturers that open new or expand existing facilities. Periods of overcapacity and reductions in capital expenditures by our customers cause decreases in demand for our products. This could result in significant under-utilization in our factories. If existing customer fabrication facilities are not expanded and new facilities are not built, we may be unable to generate significant new orders and sales for our systems. During periods of declining demand for semiconductor manufacturing equipment, our customers typically reduce purchases, delay delivery of ordered products and/or cancel orders, resulting in reduced revenues and backlog, delays in revenue recognition and excess inventory for us. Increased price competition may also result as we compete for the smaller demand in the market, causing pressure on our gross margin and net income.

The weakness in the global economy may continue to negatively impact our financial performance.

The recessionary conditions of 2008 and 2009 in the global economy and the slowdown in the semiconductor industry impacted customer demand for our products and correspondingly, negatively impacted our financial performance. There remains high unemployment in developed countries, concerns regarding the availability of credit, uncertainty about a sustained economic recovery in the U.S. and fears of further economic deterioration in Europe and the developing world, which in turn, may lead to a global downturn. Any of these factors could have a negative impact on our business, or our financial condition.

Demand for semiconductor equipment depends on consumer spending. Continued economic uncertainty may lead to a decrease in consumer spending and may cause certain of our customers to cancel or delay orders. In addition, if our customers have difficulties in obtaining capital or financing, this could result in lower sales. Customers with liquidity issues could lead to charges to our bad debt expense, if we are unable to collect accounts receivables. These conditions could also affect our key suppliers, which could affect their ability to supply parts to us, and result in delays of the completion of our systems and the shipment of these systems to our customers.

Because of the economic downturn and the uncertainty of a full recovery, we may have to take further actions to reduce costs, which could reduce our ability to invest in research and development at levels we believe are desirable. If we are unable to effectively align our cost structure with prevailing market conditions, we will experience additional losses and additional reductions in our cash and cash equivalents. If we are not able to suitably adapt to these economic conditions in a timely manner or at all, our performance, cash flows, results of operations and ability to access capital could be materially and adversely impacted.

We must continually anticipate technology trends, improve our existing products and develop new products in order to be competitive. The development of new or enhanced products involves significant risks, additional costs and delays in revenue recognition. Technical and manufacturing difficulties experienced in the introduction of new products could be costly and could adversely affect our customer relationships.

The markets in which our customers and we compete are characterized by rapidly changing technology, evolving industry standards and continuous improvements in products and services. Consequently, our success depends upon our ability to anticipate future technology trends and customer needs, to develop new systems and processes that meet industry standards and customer requirements and that compete effectively on the basis of price and performance.

Our development of new products involves significant risk, since the products are very complex and the development cycle is long and expensive. The success of any new system we develop and introduce is dependent on a number of factors, including our ability to correctly predict customer requirements for new processes, to assess and select the potential technologies for research and development and to timely complete new system designs that are acceptable to the market. We may make substantial investments in new technologies before we can know whether they are technically or commercially feasible or advantageous, and without any assurance that revenue from future products or product enhancements will be sufficient to recover the associated development costs. Not all development activities result in commercially viable products. We may not be able to improve our existing systems or develop new technologies or systems in a timely manner. We may exceed the budgeted cost of reaching our research, development and engineering objectives, and planned product development schedules may require extension. Any delays or additional development costs could have a material adverse effect on our business and results of operations.

Our products are complex, and we may experience technical or manufacturing inefficiencies, delays or difficulties in the prototype introduction of new systems and enhancements, or in achieving volume production of new systems or enhancements that meet customer requirements. Our inability, or the inability of our supply chain partners, to overcome such difficulties, to meet the technical specifications of any new systems or enhancements or to manufacture and ship these systems or enhancements in volume and in a timely manner would materially adversely affect our business and results of operations, as well as our customer relationships.

Our revenue recognition policies require that during the initial evaluation phase of a new product, customer acceptance needs to be obtained before we can recognize revenue on the product. Customer acceptances may not be completed in a timely manner for a variety of reasons, whether or not related to the quality and performance of our products. Any delays in customer acceptance may result in revenue recognition delays and have an adverse impact on our results of operations.

We may from time to time incur unanticipated costs to ensure the functionality and reliability of our products early in their life cycles, and such costs can be substantial. If we encounter reliability or quality problems with our new products or enhancements, we could face a number of difficulties, including reduced orders, higher manufacturing costs, delays in collection of accounts receivable and additional service and warranty expenses, all of which could materially adversely affect our business and results of operations. The costs associated with our warranties may be significant, and in the event our projections and estimates of these costs are inaccurate, our financial performance could be seriously harmed. In addition, if we experience product failures at an unexpectedly high level, our reputation in the marketplace could be damaged, and our business would suffer.

Significant fluctuations in our operating results are difficult to predict due to our lengthy sales cycle, and our results may fall short of anticipated levels, which could cause our stock price to decline.

Sales of our systems depend upon the decision of a prospective customer to increase or replace manufacturing capacity, typically involving a significant capital commitment. Accordingly, the decision to purchase our systems requires time-consuming internal procedures associated with the evaluation, testing, implementation and introduction of new technologies into our customers’ manufacturing facilities. Even after the customer determines that our systems meet their qualification criteria, we may experience delays finalizing system sales while the customer obtains approval for the purchase, constructs new facilities or expands its existing facilities. Consequently, the time between our first contact with a customer regarding a specific potential purchase and the customer’s placing its first order may last from nine to twelve months or longer. We may incur significant sales and marketing expenses during this evaluation period. In addition, the length of this period makes it difficult to accurately forecast future sales. Also, any unexpected delays in orders could impact our revenue and operating results. If sales forecasted from a specific customer are not realized, we may experience an unplanned shortfall in revenues, and our quarterly and annual revenue and operating results may fluctuate significantly from period to period.

Our quarterly and annual revenue and operating results have varied significantly in the past and are likely to vary significantly in the future, which makes it difficult for us to predict our future operating results. We incurred significant net losses between 2001 and 2003, yet were profitable for each of the years 2004 to 2007. Again, we incurred net losses between 2008 and 2011, due to declining demand as a result of the weakness in the semiconductor equipment market and the global economy. We may not achieve profitability in future years. We will need to generate significant sales to achieve profitability, and we may not be able to do so. A substantial percentage of our operating expenses are fixed in the short term and we may continue to be unable to adjust spending to compensate for shortfalls in revenues. As a result, we may continue to incur losses, which could cause the price of our common stock to decline further or remain at a low level for an extended period of time.

We are highly dependent on international sales, and face significant international business risks.

International sales accounted for 94 percent of our net sales for the year ended December 31, 2011 and 80 percent of our net sales for the three months ending April 1, 2012, respectively. We anticipate international sales will continue to account for the vast majority of our future net sales. Asia has been a particularly important region for our business, and we anticipate that it will continue to be important going forward. Our sales to customers located in Asia accounted for 84 percent of our net sales for the year ended December 31, 2011, and 72 percent of our net sales for the three months ending April 1, 2012, respectively. Because of our continuing dependence upon international sales, we are subject to a number of risks associated with international business activities, including:

- burdensome governmental controls, laws, regulations, tariffs, duties, taxes, restrictions, embargoes or export license requirements;
- unexpected changes in laws or regulations prompted by economic stress, such as protectionism, and other attempts to rectify real or perceived international trade imbalances;
- exchange rate volatility;
- the need to comply with a wide variety of foreign and U.S. customs and export laws;
- political and economic instability;
- government-sponsored competition;
- differing labor regulations;
- reduced protection for, and increased misappropriation of, intellectual property;
- difficulties in accounts receivable collections;
- increased costs for product shipments and potential difficulties from shipment delays;
- difficulties in managing distributors, representatives, contract manufacturers and suppliers;
- difficulties in staffing and managing foreign subsidiary operations; and
- natural disasters, acts of war, terrorism, widespread illness or other catastrophes affecting foreign countries.

Our sales to date have been denominated primarily in U.S. dollars; however future sales to Asian customers may be denominated in the customer's local currency. Our sales in foreign currencies are subject to risks of currency fluctuation. For U.S. dollar sales in foreign countries, our products may become less price competitive when the local currency is declining in value compared to the dollar. This could cause us to lose sales or force us to lower our prices, which would reduce our gross margins.

We are exposed to various risks relating to compliance with the regulatory environment, including export control laws and material contracts provisions, and non-compliance or non-performance with any of these items could result in adverse consequences and monetary fines or damages.

We are subject to various risks related to (1) disagreements and disputes between national and regional regulatory agencies related to international trade; (2) new, inconsistent and conflicting rules by regulatory agencies in the countries in which we operate; and (3) interpretation and application of different laws and regulations. If we are found by a court or regulatory agency to not be in compliance with the laws and regulations, our business, financial condition and results of operations could be adversely affected.

As an exporter, we must comply with various laws and regulations relating to the export of products and technology from the U.S. and other countries having jurisdiction over our operations. In the U.S. these laws include the International Traffic in Arms Regulations ("ITAR") administered by the State Department's Directorate of Defense Trade Controls, the Export Administration Regulations ("EAR") administered by the Bureau of Industry and Security ("BIS"), and trade sanctions against embargoed countries and destinations administered by the U.S. Department of Treasury, Office of Foreign Assets Control ("OFAC"). The EAR governs products, parts, technology and software which present military or weapons proliferation concerns, so-called "dual use" items, and ITAR governs military items listed on the United States Munitions List. Prior to shipping certain items, we must obtain an export license or verify that license exemptions are available. In addition, we must comply with certain requirements related to documentation, record keeping, plant visits and hiring of foreign nationals. Any failures to comply with these laws and regulations could result in fines, adverse publicity and restrictions on our ability to export our products, and repeat failures could carry more significant penalties. As previously reported, in 2008, we self-disclosed to BIS certain inadvertent EAR violations, and have been working with BIS to resolve these. In April 2012, we entered into a settlement agreement with BIS that resolved in full all matters contained in our voluntary self-disclosure. Under the settlement, we agreed to a civil penalty of $850,000 of which we will pay $250,000 in May 2012 and $600,000 is suspended for the next year and will be waived provided that no violations occur during that period. We had accrued $250,000 as of April 1, 2012.

We are a party to several governmental and private-party contracts that provide for liquidated damages in the event that we fail to comply with the covenants or requirements under any of these contracts. These liquidated damage payments could be significant and we could incur significant legal fees if we were to renegotiate these contracts. Any such damage amounts or legal expenses may adversely impact our financial condition or results of operations.

Because of competition for qualified personnel, we may not be able to recruit or retain necessary personnel, which could impede development or sales of our products.

Our growth will depend on our ability to attract and retain qualified, experienced employees. Our ability to attract employees may be harmed by our recent financial losses, which has impacted our available cash and our ability to provide performance-based annual cash incentives. Also, part of our total compensation program includes share-based compensation. Share-based compensation is an important tool in attracting and retaining employees in our industry. If the market price of our common shares declines or remains low, it may adversely affect our ability to attract or retain employees.

During periods of growth in the semiconductor industry, there is substantial competition for experienced engineering, technical, financial, sales and marketing personnel in our industry. In particular, we must attract and retain highly skilled design and process engineers. If we are unable to retain existing key personnel, or attract and retain additional qualified personnel, we may from time to time experience inadequate levels of staffing to develop and market our products and perform services for our customers. As a result, our growth could be limited, we could fail to meet our delivery commitments or we could experience deterioration in service levels or decreases in customer satisfaction.

The price of our common stock has fluctuated in the past and may continue to fluctuate significantly in the future, which may lead to losses by investors, securities litigation or hostile or otherwise unfavorable takeover offers.

The market price of our common stock has been highly volatile in the past, and our stock price may decline in the future. For example, for the three months ended April 1, 2012, the closing price range for our common stock was between $1.42 and $3.19 per share.

The relatively low stock price makes us attractive to hedge funds and other short-term investors. This could result in substantial volatility of the stock price and cause fluctuations in trading volumes for our stock. In addition, in recent years the stock market in general, and the market for shares of high technology stocks in particular, have experienced extreme price fluctuations. These fluctuations have frequently been unrelated to the operating performance of the affected companies. In the past, securities class action litigation has often been instituted against a company following periods of volatility in its stock price. This type of litigation, if filed against us, could result in substantial costs and divert our management’s attention and resources.

Our stock price has been below the five-year peak of $11.76 for several years, and if revenue does not return to the peak 2007 levels or we do not return to profitability in the near term, we could be an attractive target for acquisition or be impacted by mergers or acquisition by another company or consolidation in the industry. An acquisition or merger could be hostile or on terms unfavorable to us, and may result in substantial costs and potential disruption to our business.

We are subject to significant risks related to our operations.

We may outsource select manufacturing activities to third-party service providers, which decrease our control over the performance of these functions and quality of our products.

From time to time, we may outsource product manufacturing to third-party service providers. Outsourcing has a number of risks and reduces our control over the performance of the outsourced functions. Significant performance problems by these third-party service providers could result in cost overruns, delayed deliveries, shortages, quality issues or other problems that could result in significant customer dissatisfaction and could materially and adversely affect our business, financial condition and results of operations. If for any reason one or more of these third-party service providers becomes unable or unwilling to continue to provide services of acceptable quality, at acceptable costs and in a timely manner, our ability to deliver our products to our customers could be severely impaired.

We depend upon a limited number of suppliers for some components and subassemblies, and supply shortages or the loss of these suppliers could result in increased cost or delays in the manufacture and sale of our products.

We rely, to a substantial extent, on outside vendors to provide many of the components and subassemblies of our systems. We obtain some of these components and subassemblies from a sole source or a limited group of suppliers. We generally acquire these components on a purchase order basis and not under long-term supply contracts. Because of this reliance on these vendors and suppliers, we may be unable to obtain an adequate supply of required components. When demand for semiconductor equipment is strong, our suppliers may have difficulty providing components on a timely basis.

In addition, during periods of shortages of components, we may have reduced control over pricing and timely delivery of components. We often quote prices to our customers and accept customer orders for our products prior to purchasing components and subassemblies from our suppliers. If our suppliers increase the cost of components or subassemblies, we may not have alternative sources of supply and may no longer be able to increase the cost of the system being evaluated by our customers to cover all or part of the increased cost of components.

The manufacture of some of these components is an extremely complex process and requires long lead times. If we are unable to obtain adequate and timely deliveries of our required components, we may have to seek alternative sources of supply or manufacture such components internally. This could delay our ability to manufacture or ship our systems in a timely manner, causing us to lose sales, incur additional costs, delay new product introductions and harm our reputation. Historically, we have not experienced any significant delays in manufacturing due to an inability to obtain components, and we are not currently aware of any specific problems regarding the availability of components that might significantly delay the manufacturing of our systems in the future. Any inability to obtain adequate deliveries, or any other circumstance that would require us to seek alternative sources of supply or to manufacture such components internally, could delay our ability to ship our systems and could have a material adverse effect on us.

Our gross margins may be impacted if we do not effectively manage our inventory.

We need to manage our inventory of component parts, work-in-process and finished goods effectively to meet customer delivery demands at an acceptable risk and cost. For both the inventories that support manufacture of our products and our spare parts inventories, if the anticipated customer demand does not materialize in a timely manner, we will incur increased carrying costs and some inventory could become excess or obsolete, resulting in write-offs, which would adversely affect our cash position and results of operations. The sale of this inventory during periods of increasing revenue could temporarily impact our gross margins favorably due to the adjusted carrying value of this inventory, and could result in future unpredictability in our gross margin estimates.

Our gross margins for sales of products that we manufacture in Germany and/or South Korea may fluctuate due to changes in the value of the Euro and South Korean won.

We develop and manufacture products in Germany, where our costs for labor and materials are primarily denominated in Euros, and anticipate increased manufacturing activities in South Korea going forward, where our costs for labor are primarily denominated in won. Future increases in the strength of the Euro or won, if any, could increase our development costs, our costs to manufacture systems, and our costs to purchase spare parts for products from our suppliers, which would make it more difficult for us to compete and could adversely affect our results of operations.

We manufacture many of our products at two primary manufacturing facilities and are thus subject to risk of disruption.

Although, from time to time, we outsource select core product manufacturing to third parties, we continue to produce our latest generation products at our two principal manufacturing plants in Fremont, California and Dornstadt, Germany. We have limited ability to interchangeably produce our products at either facility, and in the event of a disruption of operations at one facility, our other facility would not be able to make up the capacity loss. Our operations could be subject to disruption for a variety of reasons, including, but not limited to, natural disasters, including earthquakes in California, work stoppages, operational facility constraints and terrorism. Such disruption could cause delays in shipments of products to our customers, result in cancellation of orders or loss of customers and seriously harm our business.

We self-insure certain risks including earthquake risk. If one or more of the uninsured events occurs, we could suffer major financial losses.

We purchase insurance to help mitigate the economic impact of certain insurable risks; however, certain other risks are uninsurable or are insurable only at significant cost or cannot be mitigated with insurance. An earthquake could significantly disrupt our principal manufacturing operations in Fremont, California, an area highly susceptible to earthquakes. It could also significantly delay our research and development efforts on new products, a significant portion of which is conducted in California. We self-insure earthquake risks because we believe this is a prudent financial decision based on the high cost and limited coverage available in the earthquake insurance market. If a major earthquake occurs, we could suffer a major financial loss and face significant disruption in our business.

If we are unable to protect our intellectual property, we may lose valuable assets and experience reduced market share. Efforts to protect our intellectual property may be costly to resolve, require additional costly litigation and could divert management attention. We also agree to indemnify customers for certain claims, and such obligations are more likely to increase during downturns.

We rely on a combination of patents, copyrights, trademark and trade secret laws, non-disclosure agreements, and other intellectual property protection methods to protect our proprietary technology. Despite our efforts to protect our intellectual property, we may from time to time be subject to claims of infringement of other parties' patents or other proprietary rights. If this occurs, we may not be able to prevent the use of such technology. Our means of protecting our proprietary rights may not be adequate and our patents may not be sufficiently broad to protect our technology. Any patents owned by us could be challenged, invalidated or circumvented and any rights granted under any patent may not provide adequate protection to us.

Furthermore, we may not have sufficient resources to protect our rights. When we outsource portions of our manufacturing, we are less able to protect our intellectual property ourselves, and rely more on our service providers to do so. Our service providers may not always be able to assure that their employees or former employees do not use our intellectual property for their own account to compete with us. Our competitors may independently develop similar technology, or design around patents that may be issued to us. In addition, the laws of some foreign countries may not protect our proprietary rights to as great an extent as do the laws of the United States and it may be more difficult to monitor the use of our products in such foreign countries. As a result of these threats to our proprietary technology, we may have to resort to costly litigation to enforce our intellectual property rights.

On occasion we receive notification from customers who believe that we are required to indemnify them or we have other financial obligations to them because of claims of intellectual property infringement made against them by third parties. Our involvement in any patent dispute or other intellectual property dispute or action to protect trade secrets, even if the claims are without merit, could be very expensive to defend and could divert the attention of our management. Adverse determinations in any litigation could subject us to significant liabilities to third parties, require us to seek costly licenses from third parties and prevent us from manufacturing and selling our products. Royalty or license agreements, if required, may not be available on terms acceptable to us, or at all. Any of these situations could have a material adverse effect on our business and operating results in one or more countries.

In the normal course of business, we indemnify customers with respect to certain matters, for example if our tool infringes the intellectual property rights of any third party or if we breach any promise in our contract with the customer. During downturns in general or industry specific economic conditions, our customers may require that the extent and scope of our obligation to indemnify them be expanded because customers feel they have greater leverage in negotiating with us. In the future, we may be compelled to enter into or accrue for settlements under such indemnification provisions. Our financial performance could be materially adversely affected if we expend significant amounts in defending or settling any purported claims.

Our failure to comply with environmental or safety regulations could result in substantial liability.

We are subject to a variety of federal, state, local and foreign laws, rules, and regulations relating to environmental protection and workplace safety. These laws, rules and regulations govern the use, storage, discharge and disposal of hazardous chemicals during manufacturing, research and development and sales demonstrations, as well as governmental standards for workplace safety. If we fail to comply with present or future regulations, especially in our manufacturing facilities in the United States, Germany and South Korea, we could be subject to substantial liability for cleanup efforts, personal injury, fines or suspension or cessation of our operations. We may be subject to liability if our acquired companies have past violations. Restrictions on our ability to expand or continue to operate our present locations could be imposed upon us as a result of such laws, rules and regulations, and we could be required to acquire costly remediation equipment or incur other significant expenses.

Any future business divestitures or acquisitions may disrupt our business, diminish stockholder value or distract management attention.

We may seek to divest of certain assets or businesses from time to time, especially if we need additional liquidity or capital resources. When we make a decision to sell assets or a business, we may encounter difficulty completing the transaction as a result of a range of possible factors such as new or changed demands from the buyer. These circumstances may cause us to incur additional time or expense or to accept less favorable terms, which may adversely affect the overall benefits of the transaction.

As part of our ongoing business strategy, we may consider acquisitions of, or significant investments in, businesses that offer products, services and technologies complementary to our own. Such acquisitions could materially adversely affect our operating results and/or the price of our common stock. Acquisitions also entail numerous risks, including:

- difficulty of assimilating the operations, products and personnel of the acquired businesses and possible impairments caused by this;
- potential disruption of our ongoing business;
- unanticipated costs associated with the acquisition;
- inability of management to manage the financial and strategic position of acquired or developed products, services and technologies;
- inability to maintain uniform standards, controls, policies and procedures; and
- impairment of relationships with employees and customers that may occur as a result of integration of the acquired business.

To the extent that shares of our stock or other rights to purchase stock are issued in connection with any future acquisitions, dilution to our existing stockholders will result, and our earnings per share may suffer. We may be required to incur debt to pay for any future acquisitions, which could subject us to restrictive covenants and other leverage concerns. Any future acquisitions may not generate additional revenue or provide any benefit to our business, and we may not achieve a satisfactory return on our investment in any acquired businesses.

Divestitures, acquisitions and other transactions are inherently risky, and we cannot provide any assurance that our previous or future transactions will be successful. The inability to effectively manage the risks associated with these transactions could materially and adversely affect our business, financial condition or results of operations.

Our current transfer of operations and periodic restructuring plans may not produce anticipated benefits and may lead to charges that will adversely affect our results of operations.

We are currently undertaking a transfer of our operations from Canada to our Germany facility. This transfer plan may not be achieved in a timely and efficient manner, and may not fully realize the anticipated cost savings and synergies for a variety of reasons. Some of the risk related to this transfer include failure to obtain expected cost savings due to cost overruns in connection with the move or after operations commence; failure to merge our Canadian operations into our existing German operations; and employment and other law, rules, regulations or other limitations in foreign jurisdictions that could have an impact on timing, amounts or costs of achieving expected synergies.

In addition, we have from time to time enacted restructuring and other cost reduction plans designed to reduce our manufacturing overhead and our operating expenses. These restructuring efforts resulted or may result in significant restructuring charges that have adversely affected, and may continue to adversely affect, our results of operations for the periods in which such charges occur. Additionally, actual costs related to such restructuring plans have in the past, and may in the future, exceed the amounts that we previously estimated, leading to additional charges as actual costs are incurred. We expect to incur significant restructuring charges through the remainder of 2012, both in connection with our transfer of the Canadian operations and otherwise.

Changes in tax rates or tax liabilities could affect results.

We are subject to taxation in the United States and various other countries. Significant judgment is required to determine and estimate worldwide tax liabilities. Our future annual and quarterly tax rates could be affected by numerous factors, including changes in the applicable tax laws, composition of earnings in countries with differing tax rates or our valuation and utilization of deferred tax assets and liabilities. In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different from the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our results of operations.

We may be required to record additional impairment charges that will adversely impact our results of operations.

We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amounts of these assets may not be recoverable.. The resulting assessment indicated a material decline in our market valuation and projected revenues, causing a decrease in the anticipated future cash flows attributable to these assets relative to the cash flow expectations when the assets were acquired. In the event that we determine in a future period that impairment of our intangible assets exists for any reason, we would record additional impairment charges in the period such determination is made, which would adversely impact our financial position and results of operations.

Our restated certificate of incorporation and restated bylaws, our stockholder rights plan and Delaware law contain provisions that could discourage transactions resulting in a change in control, which may negatively affect the market price of our common stock.

Our restated certificate of incorporation, our restated bylaws, our stockholder rights plan and Delaware law contain provisions that might enable our management to discourage, delay or prevent a change in control. In addition, these provisions could limit the price that investors would be willing to pay in the future for shares of our common stock. Pursuant to such provisions:

- our board of directors is authorized, without prior stockholder approval, to create and issue preferred stock, commonly referred to as “blank check” preferred stock, with rights senior to those of common stock;
- our board of directors is staggered into three classes, only one of which is elected at each annual meeting;
- stockholder action by written consent is prohibited;
- nominations for election to our board of directors and the submission of matters to be acted upon by stockholders at a meeting are subject to advance notice requirements;
- certain provisions in our bylaws and certificate of incorporation such as notice to stockholders, the ability to call a stockholder meeting, advance notice requirements and action of stockholders by written consent may only be amended with the approval of stockholders holding 66 2/3 percent of our outstanding voting stock;

- the ability of our stockholders to call special meetings of stockholders is prohibited; and
- subject to certain exceptions requiring stockholder approval, our board of directors is expressly authorized to make, alter or repeal our bylaws.

In addition, the provisions in our stockholder rights plan could make it more difficult for a potential acquiror to consummate an acquisition of our company. We are also subject to Section 203 of the Delaware General Corporation Law, which provides, subject to enumerated exceptions, that if a person acquires 15 percent or more of our outstanding voting stock, the person is an “interested stockholder” and may not engage in any “business combination” with us for a period of three years from the time the person acquired 15 percent or more of our outstanding voting stock.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Description
3.1 (2)	Amended and Restated Certificate of Incorporation of Mattson Technology, Inc..
3.2 (3)	Amended and Restated Bylaws of Mattson Technology, Inc..
31.1 (1)	Certification of Chief Executive Officer Pursuant to Sarbanes-Oxley Act Section 302(a).
31.2 (1)	Certification of Chief Financial Officer Pursuant to Sarbanes-Oxley Act Section 302(a).
32.1 (1)	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350.
32.2 (1)	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350.
101.INS (4)	XBRL Instance Document.
101.SCH (4)	XBRL Taxonomy Extension Schema Document.
101.CAL (4)	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF (4)	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB (4)	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE (4)	XBRL Taxonomy Extension Presentation Linkbase Document.

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(1) Filed herewith.
(2) Incorporated by reference from our Current Report on Form 8-K/A filed on January 30, 2001.
(3) Incorporated by reference from our Current Report on Form 8-K filed on December 22, 2010.
(4) XBRL (Extensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

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 hereunto duly authorized.

MATTSON TECHNOLOGY, INC.
(Registrant)

Date: May 4, 2012

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

Date: May 4, 2012

By: /s/ J. MICHAEL DODSON
J. Michael Dodson
Chief Financial Officer, Executive Vice President and Secretary

Date: May 4, 2012

By: /s/ TYLER PURVIS
Tyler Purvis
Chief Accounting Officer and Corporate Controller
(Principal Accounting Officer)