AXT INC
Form 10-Q
May 10, 2013

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

x Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

for the quarterly period ended March 31, 2013

Or

o 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 000-24085

AXT, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	94-3031310
(State or other jurisdiction of Incorporation or organization)	(I.R.S. Employer Identification No.)

4281 Technology Drive, Fremont, California 94538
(Address of principal executive offices) (Zip code)

(510) 683-5900
(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 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 x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its 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 x No o

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 o	Accelerated filer x
Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at May 3, 2013
Common Stock, $0.001 par value	32,654,288

AXT, INC.
FORM 10-Q
TABLE OF CONTENTS

		Page
PART I. FINANCIAL INFORMATION		3
Item 1. Financial Statements (unaudited)		3
	Condensed Consolidated Balance Sheets as of March 31, 2013 and December 31, 2012	3
	Condensed Consolidated Statements of Operations for the three months ended March 31, 2013 and 2012	4
	Condensed Consolidated Statements of Comprehensive Income (loss) for the three months ended March 31, 2013 and 2012	5
	Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2013 and 2012	6
	Notes To Condensed Consolidated Financial Statements	7
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations		20
Item 3. Quantitative and Qualitative Disclosures About Market Risk		29
Item 4. Controls and Procedures		31
PART II. OTHER INFORMATION		31
Item 1. Legal Proceedings		31
Item 1A. Risk Factors		31
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds		44
Item 3. Defaults Upon Senior Securities		44
Item 4. Mine Safety Disclosures		44
Item 5. Other Information		44
Item 6. Exhibits		45
	Signatures	46

Table of Contents

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

AXT, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited, in thousands, except per share data)

	March 31, 2013	December 31, 2012 (1)
ASSETS		
Current assets:		
Cash and cash equivalents	$25,792	$30,634
Short-term investments	6,540	10,270
Accounts receivable, net of allowances of $270 and $245 as of March 31, 2013 and December 31, 2012, respectively	17,014	17,912
Inventories	38,768	40,352
Related party notes receivable – current	2,047	2,036
Prepaid expenses and other current assets	7,034	5,268
Total current assets	97,195	106,472
Long-term investments	17,038	9,191
Property, plant and equipment, net	37,477	37,235
Related party notes receivable – long-term	418	416
Other assets	14,196	14,275
Total assets	$166,324	$167,589
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$6,581	$5,894
Accrued liabilities	9,434	7,202
Total current liabilities	16,015	13,096
Long-term portion of royalty payments	3,125	3,325
Other long-term liabilities	148	254
Total liabilities	19,288	16,675
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 2,000 shares authorized; 883 shares issued and outstanding as of March 31, 2013 and December 31, 2012 (Liquidation preference of $6.0 million and $5.9 million as of March 31, 2013 and December 31, 2012, respectively)	3,532	3,532
Common stock, $0.001 par value per share; 70,000 shares authorized; 32,654 and 32,471 shares issued and outstanding as of March 31, 2013 and December 31, 2012, respectively	32	32
Additional paid-in capital	193,651	193,063
Accumulated deficit	(61,447)	(59,047)
Accumulated other comprehensive income	6,366	6,033
AXT, Inc. stockholders' equity	142,134	143,613
Noncontrolling interests	4,902	7,301
Total stockholders' equity	147,036	150,914

Total liabilities and stockholders' equity	$166,324	$167,589

See accompanying notes to condensed consolidated financial statements.

(1) The condensed consolidated balance sheet at December 31, 2012 has been derived from the audited consolidated financial statements at that date.

Table of Contents

AXT, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, in thousands, except per share data)

	Three Months Ended March 31,	
	2013	2012
Revenue	$22,380	$23,486
Cost of revenue	18,896	15,292
Gross profit	3,484	8,194
Operating expenses:		
Selling, general and administrative	3,925	3,785
Research and development	822	835
Total operating expenses	4,747	4,620
Income (loss) from operations	(1,263)	3,574
Interest income, net	31	88
Equity in earnings of unconsolidated joint ventures	282	154
Other expense, net	(825)	(489)
Income (loss) before provision for income taxes	(1,775)	3,327
Provision for income taxes	(184)	(375)
Net income (loss)	(1,959)	2,952
Less: Net income attributable to noncontrolling interests	(441)	(1,317)
Net income (loss) attributable to AXT, Inc.	$(2,400)	$1,635
Net income (loss) attributable to AXT, Inc. per common share:		
Basic	$(0.08)	$0.05
Diluted	$(0.08)	$0.05
Weighted average number of common shares outstanding:		
Basic	32,297	32,034
Diluted	32,297	33,018

See accompanying notes to condensed consolidated financial statements.

Table of Contents

AXT, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited, in thousands)

	Three Months Ended March 31,	
	2013	2012
Net income (loss)	$(1,959)	$2,952
Other comprehensive income (loss), net of tax:		
Change in foreign currency translation gain, net of tax	407	338
Change in unrealized gain (loss) on available-for-sale investments, net of tax	(17)	100
Total other comprehensive income, net of tax	390	438
Comprehensive income (loss)	(1,569)	3,390
Less: Comprehensive income attributable to the noncontrolling interests	(498)	(1,384)
Comprehensive income (loss) attributable to AXT, Inc.	$(2,067)	$2,006

See accompanying notes to condensed consolidated financial statements.

Table of Contents

AXT, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Three Months Ended March 31,	
	2013	2012
Cash flows from operating activities:		
Net income (loss)	$(1,959)	$2,952
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	1,291	907
Amortization of marketable securities premium	146	71
Stock-based compensation	332	281
Loss on disposal of property, plant and equipment	—	29
Changes in assets and liabilities:		
Accounts receivable, net	922	1,350
Inventories	1,649	4,030
Prepaid expenses and other current assets	(1,740)	491
Other assets	105	124
Accounts payable	664	883
Accrued liabilities	(164)*	(1,108)*
Other long-term liabilities	(270)	(459)
Net cash provided by operating activities	976	9,551
Cash flows from investing activities:		
Purchases of property, plant and equipment	(1,349)	(1,124)
Purchases of available-for-sale securities	(12,410)	(3,079)
Proceeds from maturities of available-for-sale securities	8,130	2,700
Net cash used in investing activities	(5,629)	(1,503)
Cash flows from financing activities:		
Proceeds from common stock options exercised	256	219
Dividends paid by joint ventures	(532)	(3,384)
Net cash used in financing activities	(276)	(3,165)
Effect of exchange rate changes on cash and cash equivalents	87	117
Net increase (decrease) in cash and cash equivalents	(4,842)	5,000
Cash and cash equivalents at the beginning of the period	30,634	26,156
Cash and cash equivalents at the end of the period	$25,792	$31,156

*Dividends accrued but not paid by joint ventures of $2,365 and $655 was included in accrued liabilities as of March 31, 2013 and March 31, 2012, respectively.

See accompanying notes to condensed consolidated financial statements.

Table of Contents

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

Note 1. Basis of Presentation

The accompanying condensed consolidated financial statements of AXT, Inc. ("AXT," the "Company," "we," "us," and "our" refer to AXT, Inc. and all of its consolidated subsidiaries) are unaudited, and have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, the year-end condensed consolidated balance sheet data was derived from our audited consolidated financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States of America. In the opinion of our management, the unaudited condensed consolidated financial statements reflect all adjustments, consisting only of normal recurring adjustments, considered necessary to present fairly the financial position, results of operations and cash flows of AXT and our consolidated subsidiaries for all periods presented.

Our management has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these condensed consolidated financial statements in conformity with accounting principles generally accepted in the United States of America. Actual results could differ materially from those estimates.

The results of operations are not necessarily indicative of the results to be expected in the future or for the full fiscal year. It is recommended that these condensed consolidated financial statements be read in conjunction with our consolidated financial statements and the notes thereto included in our 2012 Annual Report on Form 10-K filed with the Securities and Exchange Commission (the "SEC") on March 15, 2013.

The consolidated financial statements include the accounts of AXT, our wholly-owned subsidiary, Beijing Tongmei Xtal Technology Co, Ltd., and our majority-owned subsidiaries, Beijing JiYa Semiconductor Material Co., Ltd, Nanjing Jin Mei Gallium Co., Ltd and Beijing BoYu Semiconductor Vessel Craftwork Technology Co., Ltd. All significant inter-company accounts and transactions have been eliminated. Investments in business entities in which we do not have control, but have the ability to exercise significant influence over operating and financial policies (generally 20-50% ownership), are accounted for by the equity method. For majority-owned subsidiaries, we reflect the noncontrolling interest of the portion we do not own on our condensed consolidated balance sheets in stockholders' equity and in our condensed consolidated statements of operations.

Certain prior period amount in our condensed consolidated statements of operations has been reclassified to conform to the current period presentation. We reclassified $154,000 from "other expense, net" to "equity in earnings of unconsolidated joint ventures" for the three months ended March 31, 2012.

Table of Contents

Note 2. Investments and Fair Value Measurements

Our cash, cash equivalents and investments are classified as follows (in thousands):

	March 31, 2013				December 31, 2012			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized (Loss)	Fair Value	Amortized Cost	Gross Unrealized Gain	Gross Unrealized (Loss)	Fair Value
Classified as:								
Cash	$25,789	$ —	$ —	$25,789	$26,250	$ —	$ —	$26,250
Cash equivalents:								
Money market fund	3	—	—	3	4,384	—	—	4,384
Total cash equivalents	3	—	—	3	4,384	—	—	4,384
Total cash and cash equivalents	25,792	—	—	25,792	30,634	—	—	30,634
Investments (available for sale):								
Certificates of deposit	6,998	8	(7)	6,999	6,638	9	(2)	6,645
Corporate bonds	16,646	4	(71)	16,579	12,872	7	(63)	12,816
Total investments	23,644	12	(78)	23,578	19,510	16	(65)	19,461
Total cash, cash equivalents and investments	$49,436	$ 12	$ (78)	$49,370	$50,144	$ 16	$ (65)	$50,095
Contractual maturities on investments:								
Due within 1 year	$6,536			$6,540	$10,288			$10,270
Due after 1 through 5 years	17,108			17,038	9,222			9,191
	$23,644			$23,578	$19,510			$19,461

We manage our investments as a single portfolio of highly marketable securities that is intended to be available to meet our current cash requirements. We have no investments in auction rate securities. There were no sales of available-for-sales securities and no realized gains and losses for the three months ended March 31, 2013 and 2012. The proceeds from maturities of available-for-sale securities were $8.1 million and $2.7 million for the three months ended March 31, 2013 and 2012, respectively.

The gross unrealized losses related to our portfolio of available-for-sale securities were primarily due to changes in interest rates and market and credit conditions of the underlying securities. We have determined that the gross unrealized losses on some of our available-for-sale securities as of March 31, 2013 are temporary in nature. We periodically review our investment portfolio to identify and evaluate investments that have indications of possible impairment. Factors considered in determining whether a loss is temporary include the magnitude of the decline in market value, the length of time the market value has been below cost (or adjusted cost), credit quality, and our ability and intent to hold the securities for a period of time sufficient to allow for any anticipated recovery in market value.

The following table summarizes the fair value and gross unrealized losses related to available-for-sale securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position as of March 31, 2013 (in thousands):

	In Loss Position < 12 Months		In Loss Position > 12 Months		Total In Loss Position	
	Fair Value	Gross Unrealized (Loss)	Fair Value	Gross Unrealized (Loss)	Fair Value	Gross Unrealized (Loss)
Investments:						
Certificates of deposit	$2,953	$(7)	$—	$—	$2,953	$(7)
Corporate bonds	12,788	(71)	—	—	12,788	(71)
Total in loss position	$15,741	$(78)	$—	$—	$15,741	$(78)

Table of Contents

The following table summarizes the fair value and gross unrealized losses related to available-for-sale securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position as of December 31, 2012 (in thousands):

	In Loss Position < 12 Months		In Loss Position > 12 Months		Total In Loss Position	
	Fair Value	Gross Unrealized (Loss)	Fair Value	Gross Unrealized (Loss)	Fair Value	Gross Unrealized (Loss)
Investments:						
Certificates of deposit	$1,877	$(1)	$199	$(1)	$2,076	$(2)
Corporate bonds	6,446	(40)	1,502	(23)	7,948	(63)
Total in loss position	$8,323	$(41)	$1,701	$(24)	$10,024	$(65)

Investments in Privately-held Companies

We have made strategic investments in private companies located in China in order to gain access at a competitive cost to raw materials that are critical to our substrate business (see Note 6). The investment balances for all these companies, including minority investments in privately-held companies made indirectly through our consolidated joint ventures are accounted for under the equity method and are included in “other assets” in the condensed consolidated balance sheets and totaled $9.5 million and $9.4 million as of March 31, 2013 and December 31, 2012, respectively. We also maintain minority investments in other unconsolidated privately-held companies which are accounted for under the cost method as we do not have the ability to exercise significant influence over their operations. Our investments in these privately-held companies are reviewed for other than temporary declines in value on a quarterly basis. We monitor our investments for impairment and record reductions in carrying value when events or changes in circumstances indicate that the carrying value may not be recoverable. As of both March 31, 2013 and December 31, 2012, our investments in these unconsolidated privately-held companies had a carrying value of $392,000 and are also included in “other assets” in the condensed consolidated balance sheets.

Fair Value Measurements

ASC topic 820, Fair value measurement (“ASC 820”) establishes three levels of inputs that may be used to measure fair value. Level 1 instrument valuations are obtained from real-time quotes for transactions in active exchange markets involving identical assets. Level 2 instrument valuations are obtained from readily-available pricing sources for comparable instruments. Level 3 instrument valuations are obtained from unobservable inputs in which there is little or no market data, which require us to develop our own assumptions. As of March 31, 2013, we did not have any Level 3 assets or liabilities. On a recurring basis, we measure certain financial assets and liabilities at fair value, primarily consisting of our short-term and long-term investments.

The type of instrument valued based on quoted market prices in active markets include our money market funds, which are generally classified within Level 1 of the fair value hierarchy. We classify all of our available-for-sale securities including certificates of deposit and corporate bonds as having Level 2 inputs. The valuation techniques used to measure the fair value of these financial instruments having Level 2 inputs were derived from quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency. There were no changes in valuation techniques or related inputs in the three months ended March 31, 2013. There have been no transfers between fair value measurement levels during the three months ended March 31, 2013.

The following table summarizes our financial assets and liabilities measured at fair value on a recurring basis as of March 31, 2013 (in thousands):

	Balance as of March 31, 2013	Quoted Prices in Active Markets of Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets:			
Cash equivalents and investments:			
Money market fund	$ 3	$ 3	$ —
Certificates of deposit	6,999	—	6,999
Corporate bonds	16,579	—	16,579
Total	$ 23,581	$ 3	$ 23,578
Liabilities	$ —	$ —	$ —

Table of Contents

The following table summarizes our financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2012 (in thousands):

	Balance as of December 31, 2012	Quoted Prices in Active Markets of Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets:			
Cash equivalents and investments:			
Money market fund	$ 4,384	$ 4,384	$ —
Certificates of deposit	6,645	—	6,645
Corporate bonds	12,816	—	12,816
Total	$ 23,845	$ 4,384	$ 19,461
Liabilities	$ —	$ —	$ —

Items Measured at Fair Value on a Nonrecurring Basis

Certain assets that are subject to nonrecurring fair value measurements are not included in the table above. These assets include investments in privately-held companies accounted for by equity and cost method (See Note 6). We did not record other-than-temporary impairment charges for either of these investments during the three months ended March 31, 2013 or 2012.

Note 3. Inventories

The components of inventories are summarized below (in thousands):

	March 31, 2013	December 31, 2012
Inventories:		
Raw materials	$ 18,937	$ 20,003
Work in process	15,119	15,608
Finished goods	4,712	4,741
	$ 38,768	$ 40,352

As of March 31, 2013 and December 31, 2012, carrying values of inventories were net of inventory reserve of $9.7 million and $10.1 million, respectively, for excess and obsolete inventory.

Note 4. Accrued Liabilities

The components of accrued liabilities are summarized below (in thousands):

	March 31, 2013	December 31, 2012
Dividends payable by consolidated joint ventures	$ 2,365	$ —
Accrued compensation and related charges	1,424	2,066
Current portion of royalty payments	800	800
Accrued income taxes	521	640

Accrued professional services	312	609
Accrued product warranty	749	588
Other accrued liabilities	3,263	2,499
	$ 9,434	$ 7,202

Table of Contents

Note 5. Related Party Transactions

In August 2011, our consolidated joint venture, Beijing JiYa Semiconductor Material Co., Ltd (JiYa), entered into a non-interest bearing note agreement for $1.7 million (Rmb 10,485,200) with one of its equity investment entities. Under the loan agreement, JiYa loaned $789,000 (Rmb 4,959,000) to its equity investment entity in August 2011 and the remaining amount of $880,000 (Rmb 5,526,200) was loaned during the three months ended March 31, 2012. The original term of the loan was two years and ten months and the loan was payable to JiYa in three installments with the first installment of $417,000 (Rmb 2,620,000) due in December 2012, the second installment of $834,000 (Rmb 5,240,000) due in December 2013, and the last installment of $418,000 (Rmb 2,625,200) due in May 2014. During the three months ended December 31, 2012, the parties signed an addendum to the note agreement to delay the first repayment of $417,000 (Rmb 2,620,000) to June 2013. As of March 31, 2013, we included $1.3 million (Rmb 7,860,000) in “Related party notes receivable – short term” and $418,000 (Rmb 2,625,200) in “related party notes receivable – long term” in our condensed consolidated balance sheets.

In August 2011, our consolidated joint venture, Nanjing Jin Mei Gallium Co., Ltd. (Jin Mei) loaned $796,000 (Rmb 5,000,000) to its equity investment entity for construction purposes. As of March 31, 2013, this balance was included in “related party notes receivable – short term” in our condensed consolidated balance sheets. During the three months ended December 31, 2012, the parties signed a note agreement retroactively to set forth the terms for the loan. The loan bears interest at 6.7% per annum, subject to adjustment to market rate, and the principal is due on December 31, 2013.

Beginning in 2012, JiYa is contractually obligated under an agency sales agreement to sell raw material on behalf of one of its equity investment entities. JiYa bills to the customers and remits the receipts, net of its portions of sales commission, to this equity investment entity. For the three months ended March 31, 2013 and 2012, JiYa has recorded $10,000 and $0 of income from agency sales respectively, which was included in “other expense, net” in our condensed consolidated statements of operations. As of March 31, 2013 and December 31, 2012, amounts payable of $355,000 and $257,000, respectively, to this equity investment entity for delivery in transit was included in “accrued liabilities” in our condensed consolidated balance sheets.

JiYa also purchases raw materials from one of its equity investment entities for production in the ordinary course of business. As of March 31, 2013 and December 31, 2012, amounts payable of $795,000 and $1.1 million, respectively, were included in “accounts payable” in our condensed consolidated balance sheets.

Beginning in 2012, Jin Mei is contractually obligated under an agency sales agreement to sell raw material on behalf of its equity investment entity. Jin Mei bills to the customers and remits the receipts, net of its portions of sales commission, to this equity investment entity. For the three months ended March 31, 2013 and 2012, Jin Mei has recorded $65,000 and $45,000 of income, respectively, from agency sales, which were included in “other expense, net” in our condensed consolidated statements of operations.

During the three months ended September 30, 2012, Tongmei paid $118,000 (Rmb 740,924) on behalf of Donghai County Dongfang High Purity Electronic Materials Co., Ltd., its unconsolidated joint venture, to purchase materials. As of March 31, 2013, this balance was included in "prepaid expenses and other current assets" in our condensed consolidated balance sheets.

Our Related Party Transactions Policy seeks to prohibit all conflicts of interest in transactions between related parties and us, unless they have been approved by our Board of Directors. This policy applies to all of our employees and directors, our subsidiaries and our joint ventures. Our executive officers retain board seats on the Board of Directors of the companies in which we have invested in our China joint ventures. See Note 6 for further details.

11

Table of Contents

Note 6. Investments in Privately-held Companies

We have made strategic investments in private companies located in China in order to gain access to raw materials at a competitive cost that are critical to our substrate business.

Our investments are summarized below (in thousands):

Company	Investment Balance as of March 31, 2013	Investment Balance as of December 31, 2012	Accounting Method	Ownership Percentage
Beijing JiYa Semiconductor Material Co., Ltd	$ 3,331	$ 3,331	Consolidated	46 %
Nanjing Jin Mei Gallium Co., Ltd	592	592	Consolidated	83 %
Beijing BoYu Semiconductor Vessel Craftwork Technology Co., Ltd	410	410	Consolidated	70 %
	$ 4,333	$ 4,333		
Donghai County Dongfang High Purity Electronic Materials Co., Ltd.	$ 2,011	$ 2,038	Equity	46 %
Xilingol Tongli Germanium Co. Ltd	4,279	4,246	Equity	25 %
Emeishan Jia Mei High Purity Metals Co., Ltd	1,054	1,042	Equity	25 %
	$ 7,344	$ 7,326		

Our ownership of Beijing JiYa Semiconductor Material Co., Ltd. (JiYa) is 46%. We continue to consolidate JiYa as we have significant influence in management and have majority control of the board. Our Chief Executive Officer is chairman of the JiYa board, while our president of China operations and our vice president of China administration and our vice president of wafer production are also members of the board.

Our ownership of Nanjing Jin Mei Gallium Co., Ltd. (Jin Mei) is 83%. We continue to consolidate Jin Mei as we have significant influence in management and have majority control of the board. Our Chief Executive Officer is chairman of the Jin Mei board, while our president of China operations and our vice president of China administration are also members of the board.

Our ownership of Beijing BoYu Semiconductor Vessel Craftwork Technology Co., Ltd (BoYu) is 70%. We continue to consolidate BoYu as we have a significant influence in management and have majority control of the board. Our Chief Executive Officer is chairman of the BoYu board, while our president of China operations and our vice president of China administration are also members of the board.

Although we have representation on the boards of directors of each of these companies, the daily operations of each of these companies are managed by local management and not by us. Decisions concerning their respective short term strategy and operations, any capacity expansion and annual capital expenditures, and decisions concerning sales of finished product, are made by local management with some inputs from us.

During the three months ended March 31, 2013 and 2012, the three consolidated joint ventures generated $1.3 million and $2.6 million of income, respectively, of which $441,000 and $1.3 million, respectively, were allocated to minority interests, resulting in $852,000 and $1.3 million of income, respectively, to our net income (loss).

For the three minority investment entities that are not consolidated, the investment balances are included in “other assets” in our condensed consolidated balance sheets and totaled $7.3 million as of both March 31, 2013 and December

31, 2012. We own 46% of the ownership interests in one of these companies and 25% in each of the other two companies. These three companies are not considered variable interest entities because:

- all three companies have sustainable businesses of their own;
- our voting power is proportionate to our ownership interests;
- we only recognize our respective share of the losses and/or residual returns generated by the companies if they occur; and
- we do not have controlling financial interest in, do not maintain operational or management control of, do not control the board of directors of, and are not required to provide additional investment or financial support to any of these companies.

Table of Contents

We also maintain minority investments in privately-held companies made indirectly through our consolidated joint ventures. These minority investments are accounted for under the equity method in the books of our consolidated joint ventures. As of March 31, 2013 and December 31, 2012, our consolidated joint ventures included these minority investments in "other assets" in the condensed consolidated balance sheets with a carrying value of $2.2 million and $2.0 million, respectively.

All of the minority investment entities that are not consolidated and accounted for under the equity method had the following summarized income information (in thousands) for the three months ended March 31, 2013 and 2012.

	Three Months Ended March 31,	
	2013	2012
Net Sales	$ 9,273	$ 6,543
Gross profit	3,124	1,950
Operating income	1,614	862
Net income	1,295	742

Our gross entity earnings from all the minority investment entities that are not consolidated and accounted for under the equity method were $282,000 and $154,000 for the three months ended March 31, 2013 and 2012, respectively.

We also maintain minority investments directly in two privately-held companies accounted for under the cost method and we do not have the ability to exercise significant influence over their operations. As of March 31, 2013 and December 31, 2012, our investments in these two unconsolidated privately-held companies had a carrying value of $392,000 and are included in "other assets" in the condensed consolidated balance sheets.

Note 7. Stockholders' Equity

Consolidated Statements of Changes in Equity

	Preferred Stock	Common Stock	Additional Paid In Capital	Accumulated Deficit	Other Comprehensive Income/(loss)	AXT, Inc. stockholders' equity	Noncontrolling interests	Total stockholders' equity
Balance as of December 31, 2012	$3,532	$32	$ 193,063	$ (59,047)	$ 6,033	$ 143,613	$ 7,301	$ 150,914
Common stock options exercised			256			256		256
Stock-based compensation			332			332		332
Net loss				(2,400)		(2,400)	441	(1,959)
Dividends declared by joint ventures							(2,897)	(2,897)
Change in unrealized (loss) gain on marketable securities					(17)	(17)		(17)

Currency translation adjustment					350	350	57	407
Balance as of March 31, 2013	$3,532	$32	$193,651	$ (61,447)	$ 6,366	$ 142,134	$ 4,902	$ 147,036

There were no reclassification adjustments from accumulated other comprehensive income for the three months ended March 31, 2013 and March 31, 2012.

Table of Contents

Note 8.Stock-Based Compensation

We account for stock-based compensation in accordance with the provisions of FASB Accounting Standards Codification ("ASC") topic 718, Compensation-Stock Compensation ("ASC 718"), which established accounting for stock-based awards exchanged for employee services. Stock-based compensation cost is measured at each grant date, based on the fair value of the award, and is recognized as expense over the employee's requisite service period of the award. All of our stock compensation is accounted for as an equity instrument.

The following table summarizes compensation costs related to our stock-based awards (in thousands, except per share data):

	Three Months Ended March 31,	
	2013	2012
Cost of revenue	$ 6	$ 18
Selling, general and administrative	284	238
Research and development	42	25
Total stock-based compensation	332	281
Tax effect on stock-based compensation	—	—
Net effect on net income (loss)	$ 332	$ 281
Effect on net income (loss) attributable to AXT, Inc. per common share:		
Basic	$ (0.01)	$ (0.01)
Diluted	$ (0.01)	$ (0.01)

As of March 31, 2013, the unamortized compensation costs related to unvested stock options granted to employees under our stock option plans was approximately $1.9 million, net of estimated forfeitures of $31,000. These costs are amortized on a straight-line basis over a weighted-average period of approximately 2.6 years and will be adjusted for subsequent changes in estimated forfeitures. We did not capitalize any stock-based compensation to inventory as of March 31, 2013 due to the immateriality of the amount.

We estimate the fair value of stock options using a Black-Scholes valuation model, consistent with the provisions of ASC 718. There were zero and 80,000 stock options granted with weighted-average grant date fair value of $0 and $3.05 in the three months ended March 31, 2013 and 2012, respectively. The fair value of our stock options granted to employees for the three months ended March 31, 2012 was estimated using the following weighted-average assumptions:

	Three months ended March 31, 2012
Expected term (in years)	4.0
Volatility	73.41 %
Expected dividend	0 %
Risk-free interest rate	0.76 %

Table of Contents

The following table summarizes our stock option activities during the three months ended March 31, 2013 (in thousands, except per share data):

Stock Options	Shares	Weighted-average Exercise Price	Weighted-average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Balance as of January 1, 2013	2,727	$3.28	6.71	$1,353
Granted	—	—		
Exercised	(183)	1.40		
Canceled and expired	(26)	3.80		
Balance as of March 31, 2013	2,518	$3.41	6.84	$1,239
Options vested and expected to vest as of March 31, 2013	2,502	$3.41	6.83	$1,238
Options exercisable as of March 31, 2013	1,523	$3.14	5.58	$1,137

The aggregate intrinsic value in the table above represents the total pretax intrinsic value, based on our closing price of $2.94 on March 28, 2013, which would have been received by the option holder had all option holders exercised their options on that date.

Restricted stock awards

A summary of activity related to restricted stock awards for the three months ended March 31, 2013 is presented below:

Stock Awards	Shares	Weighted-Average Grant Date Fair Value
Non-vested as of January 1, 2013	238,723	$ 4.27
Granted	—	$ —
Vested	—	$ —
Non-vested as of March 31, 2013	238,723	$ 4.27

As of March 31, 2013, the unamortized compensation costs related to unvested restricted stock awards was approximately $768,000, which is to be amortized on a straight-line basis over a weighted average period of approximately 2.2 years.

Table of Contents

Note 9. Net Income (loss) Per Share

Basic net income (loss) per share is computed using the weighted-average number of common shares outstanding during the periods less shares of common stock subject to repurchase and non-vested stock awards. Diluted net income (loss) per share is computed using the weighted-average number of common shares outstanding and potentially dilutive common shares outstanding during the periods. The dilutive effect of outstanding stock options and restricted stock awards is reflected in diluted earnings per share by application of the treasury stock method. Potentially dilutive common shares consist of common shares issuable upon the exercise of stock options. Potentially dilutive common shares are excluded in net loss periods, as their effect would be anti-dilutive.

A reconciliation of the numerators and denominators of the basic and diluted net income (loss) per share calculations is as follows (in thousands, except per share data):

	Three Months Ended March 31,	
	2013	2012
Numerator:		
Net income (loss) attributable to AXT, Inc.	$(2,400)	$1,635
Less: Preferred stock dividends	(44)	(44)
Net income (loss) available to common stockholders	$(2,444)	$1,591
Denominator:		
Denominator for basic net income (loss) per share - weighted average common shares	32,297	32,034
Effect of dilutive securities:		
Common stock options	—	903
Restricted stock awards	—	81
Denominator for dilutive net income (loss) per common share	32,297	33,018
Net income (loss) attributable to AXT, Inc. per common share:		
Basic	$(0.08)	$0.05
Diluted	$(0.08)	$0.05
Weighted-average shares:		
Options excluded from diluted net income (loss) per share as the impact is anti-dilutive	2,656	878
Restricted stock excluded from diluted net income (loss) per share as the impact is anti-dilutive	239	74

The 883,000 shares of $0.001 par value Series A preferred stock issued and outstanding as of March 31, 2013 and December 31, 2012, valued at $3,532,000 are non-voting and non-convertible preferred stock with a 5.0% cumulative annual dividend rate payable when declared by the board of directors and $4 per share liquidation preference over common stock, and must be paid before any distribution is made to common stockholders. These preferred shares were issued to Lyte Optronics, Inc. stockholders in connection with the completion of our acquisition of Lyte Optronics, Inc. on May 28, 1999.

Note 10. Segment Information and Foreign Operations

Segment Information

We operate in one segment for the design, development, manufacture and distribution of high-performance compound semiconductor substrates and sale of materials. In accordance with ASC topic 280, Segment Reporting, our chief operating decision-maker has been identified as our Chief Executive Officer, who reviews operating results to make

decisions about allocating resources and assessing performance for the Company. Since we operate in one segment, all financial segment and product line information can be found in our condensed consolidated financial statements.

Table of Contents

The following table represents revenue amounts (in thousands) by product type:

	Three Months Ended March 31,	
	2013	2012
Product type:		
GaAs substrates	$11,723	$12,231
InP substrates	1,849	1,451
Ge substrates	2,551	2,630
Raw materials and other	6,257	7,174
Total	$22,380	$23,486

The following table represents revenue amounts (in thousands) reported for products shipped to customers in the corresponding geographic region:

	Three Months Ended March 31,	
	2013	2012
Geographical information:		
China	$ 6,029	$ 5,774
Europe (primarily Germany)	4,689	4,565
Taiwan	3,779	2,046
North America (primarily the United States)	3,469	5,167
Japan	2,282	2,189
Asia Pacific (excluding China, Japan and Taiwan)	2,132	3,745
Total	$ 22,380	$ 23,486

Long-lived assets consist primarily of property, plant and equipment, and are attributed to the geographic location in which they are located. Long-lived assets by geographic region were as follows (in thousands):

	As of	
	March 31, 2013	December 31, 2012
Long-lived assets by geographic region:		
North America	$ 337	$ 430
China	37,140	36,805
	$ 37,477	$ 37,235

Significant Customers

No customer represented more than 10% of our revenue for the three months ended March 31, 2013. One customer represented 17% of our revenue for the three months ended March 31, 2012. Our top five customers, although not the same five customers for each period, represented 34% and 46% of our revenue for the three months ended March 31, 2013 and 2012, respectively.

We perform ongoing credit evaluations of our customers' financial condition, and limit the amount of credit extended when deemed necessary, but generally do not require collateral. One customer accounted for 18% and 28% of our trade accounts receivable balance as of March 31, 2013 and December 31, 2012, respectively.

Note 11. Commitments and Contingencies

Indemnification Agreements

We enter into standard indemnification arrangements with our customers in the ordinary course of business. Pursuant to these arrangements, we indemnify, hold harmless, and agree to reimburse the indemnified parties for losses suffered or incurred by the indemnified party, generally their business partners or customers, in connection with any U.S. patent, or any copyright or other intellectual property infringement claim by any third party with respect to our products. The term of these indemnification agreements is generally perpetual anytime after the execution of the agreement. The maximum potential amount of future payments we could be required to make under these agreements is unlimited. We have never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, we believe the estimated fair value of these agreements is minimal.

We have entered into indemnification agreements with our directors and officers that require us to indemnify our directors and officers against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct of a culpable nature; to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified; and to obtain directors' and officers' insurance if available on reasonable terms, which we currently have in place.

Table of Contents

Product Warranty

We provide warranties for our products for a specific period of time, generally twelve months, against material defects. We provide for the estimated future costs of warranty obligations in cost of sales when the related revenue is recognized. The accrued warranty costs represent the best estimate at the time of sale of the total costs that we expect to incur to repair or replace product parts that fail while still under warranty. The amount of accrued estimated warranty costs are primarily based on historical experience as to product failures as well as current information on repair costs. On a quarterly basis, we review the accrued balances and update these based on the historical warranty cost trends. The following table reflects the change in our warranty accrual which is included in “accrued liabilities” on the condensed consolidated balance sheets, during the three months ended March 31, 2013 and 2012 (in thousands):

	Three Months Ended March 31,	
	2013	2012
Beginning accrued warranty and related costs	$ 588	$ 1,003
Accruals for warranties issued	264	102
Adjustments related to pre-existing warranties including expirations and changes in estimates	166	(8)
Cost of warranty repair	(269)	(100)
Ending accrued warranty and related costs	$ 749	$ 997

Contractual Obligations

We lease certain office space, manufacturing facilities and equipment under long-term operating leases expiring at various dates through February 2016. The majority of our lease obligation relates to our lease agreement for the facility at Fremont, California with approximately 27,760 square feet, which commenced on December 1, 2008 for a term of seven years, with an option by us to cancel the lease after five years, upon forfeiture of the security deposit and payment of one-half of the fifth year’s rent.

We entered into a royalty agreement with a vendor effective December 3, 2010 with a term of eight years, terminating December 31, 2018. We and our related companies are granted a worldwide, nonexclusive, royalty bearing, irrevocable license to certain patents for the term on the agreement. We shall pay a total of $7.0 million in royalty payments over eight years that began in 2011 based on future royalty bearing sales.

Outstanding contractual obligations as of March 31, 2013 are summarized as follows (in thousands):

		Payments due by period			
Contractual Obligations	Total	Less than 1 year	1-3 years	4-5 years	More than 5 years
Operating leases	$917	$389	$528	$—	$—
Royalty agreement	3,925	800	1,544	1,150	431
Total	$4,842	$1,189	$2,072	$1,150	$431

Purchase Obligations

In the normal course of business, we purchase or place orders for the necessary materials of our products from various suppliers and we commit to purchase products where we may incur a penalty if the agreement was canceled. As of March 31, 2013, we do not have any outstanding material purchase obligations.

18

Table of Contents

Legal Proceedings

From time to time we may be involved in judicial or administrative proceedings concerning matters arising in the ordinary course of business. We do not expect that any of these matters, individually or in the aggregate, will have a material adverse effect on our business, financial condition, cash flows or results of operation.

Note 12. Foreign Exchange Transaction Losses

We incurred foreign currency transaction exchange losses of $593,000 and $165,000 for the three months ended March 31, 2013 and 2012, respectively. These amounts are included in “Other expense, net” on our condensed consolidated statements of operations.

Note 13. Income Taxes

We account for income taxes in accordance with ASC topic 740, Income Taxes (“ASC 740”) which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. ASC 740 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized. We recognize interest and penalties related to uncertain tax positions in income tax expense. As of March 31, 2013, we do not have any gross unrecognized tax benefits, nor any accrued interest and penalties related to uncertain tax positions. As a result of the implementation of ASC 740 on January 1, 2007, we identified $16.4 million in liability for unrecognized tax benefits. Of this amount, none was accounted for as a reduction to the January 1, 2007 balance of retained earnings. The amount decreased the tax loss carry-forwards in the U.S. which are fully offset by a valuation allowance. We file income tax returns in the U.S. federal, various states and foreign jurisdictions. We have substantially concluded all U.S. federal and state income tax matters through December 31, 2011. Provision for income taxes for three months ended March 31, 2013 and 2012 was mostly related to our China subsidiary and our China joint venture operations. We have made a tax election in China whereby certain minimum foreign withholding taxes are treated as an expense and not a tax credit. Besides the state taxes liabilities, no federal income tax benefit or expense has been provided for the three months ended March 31, 2013 or 2012 due to our net loss, our valuation allowance being utilized and uncertainty of future profits in the U.S.

Note 14. Recent Accounting Pronouncements

In March 2013, the FASB issued ASU No. 2013-05, “Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity.” This standard addresses the accounting for the cumulative translation adjustment when a parent either sells a part or all of its investment in a foreign entity or no longer holds a controlling financial interest in a subsidiary or group of assets that is a nonprofit activity or a business within a foreign entity. The standard is effective as of the beginning of a fiscal year that begins after December 15, 2013 and interim and annual periods thereafter. The standard will become effective for us for the three months ending March 31, 2014. We are currently evaluating the potential impact, if any, of the adoption of the standard on our consolidated results of operations and financial condition.

In February 2013, the FASB issued ASU No. 2013-02, “Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income”. This standard requires entities to present information about reclassification adjustments from accumulated other comprehensive income in the annual financial statements in a single note or on the face of the financial statements. Public companies will also have to provide this information in their interim financial statements. The new requirements are effective as of the beginning of a fiscal year that begins after December 15, 2012 and interim and annual periods thereafter. The standard is effective for us for the three months ended March 31, 2013 and did not have any significant impact on our condensed consolidated results of operations and footnote

disclosures.

Table of Contents

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This quarterly report on Form 10-Q, including the following sections, contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, particularly statements relating to our expectations regarding results of operations, customer demand, our ability to expand our markets and increase sales, industry trends, customer qualifications of our products, gross margins, the impact of the adoption of certain accounting pronouncements, our investments in capital projects, and our belief that we have adequate cash and investments to meet our needs over the next 12 months. These forward-looking statements are based upon management's current views with respect to future events and financial performance, and are subject to certain risks and uncertainties that could cause actual results to differ materially from historical results or those anticipated in such forward-looking statements. Such risks and uncertainties include those set forth under the section entitled "Risk Factors" below, which identify important factors that could cause actual results to differ materially from those predicted in any such forward-looking statements. We caution investors that actual results may differ materially from those projected in the forward-looking statements as a result of certain risk factors identified in this Form 10-Q and other filings we have made with the Securities and Exchange Commission. Forward-looking statements may be identified by the use of terms such as "anticipates," "believes," "estimates," "expects," "intends," and similar expressions. Statements concerning ou future or expected financial results and condition, business strategy and plans or objectives for future operations are forward-looking statements.

These forward-looking statements are not guarantees of future performance. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. This discussion should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2012 and the condensed consolidated financial statements included elsewhere in this report.

Overview

We are a leading worldwide developer and producer of high-performance compound and single element semiconductor substrates including substrates made from gallium arsenide (GaAs), indium phosphide (InP) and germanium (Ge). We currently sell the following substrate products in the sizes and for the applications indicated:

Product Substrates	Diameter	Applications
GaAs (semi-insulating)	2", 3", 4", 5", 6"	Power amplifiers and radio frequency integrated circuits for wireless handsets (cell phones)
		Direct broadcast television
		High-performance transistors
		Satellite communications
GaAs (semi-conducting)	2", 3", 4"	High brightness light emitting diodes
		Lasers
		Optical couplers
InP	2", 3", 4"	Broadband and fiber optic communications
Ge	2", 4", 6"	Satellite and terrestrial solar cells
		Optical applications

We manufacture all of our semiconductor substrates using our proprietary vertical gradient freeze (VGF) technology. Most of our revenue is from sales of GaAs substrates. We manufacture all of our products in the People's Republic of China (PRC or China), which generally has favorable costs for facilities and labor compared to comparable facilities in the United States, Europe or Japan. We also have joint ventures in China which provide us pricing advantages, reliable supply and enhanced sourcing lead-times for key raw materials which are central to our final manufactured products. These joint ventures produce products including 99.99% pure gallium (4N Ga), high purity gallium, arsenic, germanium, germanium dioxide, pyrolytic boron nitride (pBN) crucibles and boron oxide (B2O3). Our ownership interest in these entities ranges from 20% to 83%. We consolidate, for accounting purposes, the joint ventures in which we have majority or controlling financial interest, and employ equity accounting for the joint ventures in which we have a smaller ownership interest and significant influence on management. We purchase portions of the materials produced by these ventures for our own use and the joint ventures sell the remainder of their production to third parties. We use our direct sales force in the United States and China and independent sales representatives in Europe and other parts of Asia to market and sell our substrates.

Table of Contents

Critical Accounting Policies and Estimates

We prepared our condensed consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. As such, we make estimates, assumptions and judgments that affect the amounts reported on our financial statements. These estimates, assumptions and judgments about future events and their effects on our results cannot be determined with certainty, and are made based upon our historical experience and on other assumptions that are believed to be reasonable under the circumstances. These estimates may change as new events occur or additional information is obtained, and we may periodically be faced with uncertainties, the outcomes of which are not within our control and may not be known for a prolonged period of time. The discussion and analysis of our results of operations and financial condition are based upon these condensed consolidated financial statements.

We have identified the policies below as critical to our business operations and understanding of our financial condition and results of operations. A critical accounting policy is one that is both material to the presentation of our financial statements and requires us to make difficult, subjective or complex judgments that could have a material effect on our financial condition and results of operations. They may require us to make assumptions about matters that are highly uncertain at the time of the estimate, and different estimates that we could have used, or changes in the estimate that are reasonably likely to occur, may have a material impact on our financial condition or results of operations.

Revenue Recognition

We manufacture and sell high-performance compound semiconductor substrates and sell certain raw materials including gallium, germanium dioxide, and pBN crucibles. After we ship our products, there are no remaining obligations or customer acceptance requirements that would preclude revenue recognition. Our products are typically sold pursuant to a purchase order placed by our customers, and our terms and conditions of sale do not require customer acceptance. We recognize revenue upon shipment and transfer of title of products to our customers, which is either upon shipment from our dock, receipt at the customer’s dock, or removal from consignment inventory at the customer’s location, provided that we have received a signed purchase order, the price is fixed or determinable, title and risk of ownership have transferred, collection of resulting receivables is probable, and product returns are reasonably estimable. We do not provide training, installation or commissioning services.

We provide allowance for future returns based on historical experience, current economic trends and changes in customer demand at the time revenue is recognized.

Accounts Receivable and Allowance for Doubtful Accounts

We periodically review the likelihood of collection on our accounts receivable balances and provide an allowance for doubtful accounts receivable primarily based upon the age of these accounts. We evaluate receivables from U.S. customers in excess of 90 days and for receivables from customers located outside the U.S. in excess of 120 days and reserve allowance on the receivable balances if needed. We assess the probability of collection based on a number of factors, including the length of time a receivable balance has been outstanding, our past history with the customer and their creditworthiness.

As of March 31, 2013 and December 31, 2012, our accounts receivable, net, balance was $17.0 million and $17.9 million, respectively, with no allowance for doubtful accounts. If actual uncollectible accounts differ substantially from our estimates, revisions to the estimated allowance for doubtful accounts would be required, which could have a material impact on our financial results for the affected period.

The allowance for sales returns is also deducted from gross accounts receivable. As of March 31, 2013 and December 31, 2012, our allowance for sales returns was $270,000 and $245,000, respectively.

Warranty Reserve

We maintain a warranty reserve based upon our claims experience during the prior twelve months. Warranty costs are accrued at the time revenue is recognized. As of March 31, 2013 and December 31, 2012, accrued product warranties totaled $749,000 and $588,000, respectively. If actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability would be required, which could have a material impact on our financial condition and results of operations for future periods.

Table of Contents

Inventory Valuation

Inventories are stated at the lower of cost or market. Cost is determined using the weighted-average cost method. Our inventory consists of raw materials as well as finished goods and work-in-process that include material, labor and manufacturing overhead costs. Given the nature of our substrate products, and the materials used in the manufacturing process, the wafers and ingots comprising work-in-process may be held in inventory for up to two years and three years, respectively, as the risk of obsolescence for these materials is low. We routinely evaluate the levels of our inventory in light of current market conditions in order to identify excess and obsolete inventory, and we provide a valuation allowance for certain inventories based upon the age and quality of the product and the projections for sale of the completed products. As of March 31, 2013 and December 31, 2012, we had an inventory reserve of $9.7 million and $10.1 million, respectively, for excess and obsolete inventory. If actual demand for our products were to be substantially lower than estimated, additional inventory adjustments for excess or obsolete inventory might be required, which could have a material impact on our business, financial condition and results of operations.

Impairment of Investments

We classify our investments in debt and equity securities as available-for-sale securities in accordance with ASC topic 320, Investments - Debt and Equity Securities (“ASC 320”). All available-for-sale securities with a quoted market value below cost (or adjusted cost) are reviewed in order to determine whether the decline is other-than-temporary. Factors considered in determining whether a loss is temporary include the magnitude of the decline in market value, the length of time the market value has been below cost (or adjusted cost), credit quality, and our ability and intent to hold the securities for a period of time sufficient to allow for any anticipated recovery in market value.

We invest in equity instruments of privately-held companies for business and strategic purposes. These investments are classified as other assets and are accounted for under the cost method as we do not have the ability to exercise significant influence over their operations. We monitor our investments for impairment and record reductions in carrying value when events or changes in circumstances indicate that the carrying value may not be recoverable. Determination of impairment is highly subjective and is based on a number of factors, including an assessment of the strength of investee’s management, the length of time and extent to which the fair value has been less than our cost basis, the financial condition and near-term prospects of the investee, fundamental changes to the business prospects of the investee, share prices of subsequent offerings, and our intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in our carrying value. We had no write-downs for the three months ended March 31, 2013 or 2012.

Fair Value of Investments

ASC 820, Fair Value Measurement (“ASC 820”) establishes three levels of inputs that may be used to measure fair value.

Level 1 instruments represent quoted prices in active markets. Therefore, determining fair value for Level 1 instruments does not require significant management judgment, and the estimation is not difficult.

Level 2 instruments include observable inputs other than Level 1 prices, such as quoted prices for identical instruments in markets with insufficient volume or infrequent transactions (less active markets), issuer credit ratings, non-binding market consensus prices that can be corroborated with observable market data, model-derived valuations in which all significant inputs are observable or can be derived principally from or corroborated with observable market data for substantially the full term of the assets or liabilities, or quoted prices for similar assets or liabilities. These Level 2 instruments require more management judgment and subjectivity compared to Level 1 instruments, including:

Determining which instruments are most similar to the instrument being priced requires management to identify a sample of similar securities based on the coupon rates, maturity, issuer, credit rating, and instrument type, and subjectively select an individual security or multiple securities that are deemed most similar to the security being priced.

Determining which model-derived valuations to use in determining fair value requires management judgment. When observable market prices for identical securities or similar securities are not available, we price our marketable debt instruments using non-binding market consensus prices that are corroborated with observable market data or pricing models, such as discounted cash flow models, with all significant inputs derived from or corroborated with observable market data.

Level 3 instruments include unobservable inputs to the valuation methodology that are significant to the measurement of fair value of assets or liabilities. The determination of fair value for Level 3 instruments requires the most management judgment and subjectivity. As of March 31, 2013, we did not have any assets or liabilities without observable market values that would require a high level of judgment to determine fair value (Level 3 assets). There have been no transfers between fair value measurement levels during the three months ended March 31, 2013.

Table of Contents

Impairment of Long-Lived Assets

We evaluate the recoverability of property, equipment and intangible assets in accordance with ASC topic 360, Property, Plant and Equipment ("ASC 360"). When events and circumstances indicate that long-lived assets may be impaired, we compare the carrying value of the long-lived assets to the projection of future undiscounted cash flows attributable to these assets. In the event that the carrying value exceeds the future undiscounted cash flows, we record an impairment charge against income equal to the excess of the carrying value over the assets' fair value. Fair values are determined based on quoted market values, discounted cash flows or internal and external appraisals, as applicable. We had no "Assets held for sale" on the condensed consolidated balance sheet as of March 31, 2013 or December 31, 2012.

Stock-based Compensation

We account for stock-based compensation in accordance with ASC topic 718, Stock-based Compensation ("ASC 718"), using the modified prospective method. Share-based awards granted include stock options and restricted stock awards. We utilize the Black-Scholes option pricing model to estimate the grant date fair value of stock options, which requires the input of highly subjective assumptions, including expected volatility and expected term. Historical volatility was used while the expected term for our options was estimated based on historical option exercise behavior and post-vesting forfeitures of options, and the contractual term, the vesting period and the expected term of the outstanding options. Further, we apply an expected forfeiture rate in determining the amount of share-based compensation. We use historical forfeitures to estimate the forfeitures for stock compensation awards that are not expected to vest. Changes in these inputs and assumptions can materially affect the measure of estimated fair value of our stock compensation. The cost of restricted stock awards is determined using the fair value of our common stock on the date of grant.

We recognize the compensation costs for stock options net of an estimated forfeiture rate over the requisite service period of the options award, which is generally the vesting term of four years. Compensation expense for restricted stock awards is recognized over the vesting period, which is generally three years or four years. Stock-based compensation expense is recorded in cost of revenue, research and development, and selling, general and administrative expenses.

Income Taxes

We account for income taxes in accordance with ASC topic 740, Income Taxes ("ASC 740") which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. ASC 740 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized.

We provide for income taxes based upon the geographic composition of worldwide earnings and tax regulations governing each region, particularly China. The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws, particularly in foreign countries such as China.

See Note 13—"Income Taxes" in the notes to condensed financial statements for additional information.

Table of Contents

Results of Operations

Revenue

	Three Months Ended March 31,		Increase (Decrease)	% Change
	2013	2012		
	($ in thousands)			
GaAs	$11,723	$12,231	$(508)	(4.2)%
InP	1,849	1,451	398	27.4 %
Ge	2,551	2,630	(79)	(3.0)%
Raw materials	6,257	7,174	(917)	(12.8) %
Total revenue	$22,380	$23,486	$(1,106)	(4.7) %

Revenue decreased $1.1 million, or 4.7%, to $22.4 million for the three months ended March 31, 2013 from $23.5 million for the three months ended March 31, 2012. Total GaAs substrate revenue decreased $508,000, or 4.2%, to $11.7 million for the three months ended March 31, 2013 from $12.2 million for the three months ended March 31, 2012. The decrease in GaAs substrate revenue was primarily due to the softer demand environment from our current customer base in both wireless devices market and the light emitting diode (LED) market.

Sales of 2 inch, 3 inch and 4 inch diameter GaAs substrates, which are mainly semi-conducting substrates used in LED applications, decreased $515,000 to $7.5 million for the three months ended March 31, 2013 from $8.0 million for the three months ended March 31, 2012. The decrease in revenue from smaller diameter substrates was primarily due to weaker demand from our current customers in the LED market.

Sales of 5 inch and 6 inch diameter GaAs substrates, which are mainly semi-insulting substrates used in wireless devices, increased slightly by $6,000 to $4.2 million for the three months ended March 31, 2013 from $4.2 million for the three months ended March 31, 2012. The increase in revenue from larger diameter substrates was primarily due to fluctuation in demand for 5 inch semi-insulating GaAs substrate.

InP substrate revenue increased $398,000, or 27.4%, to $1.8 million for the three months ended March 31, 2013 from $1.5 million for the three months ended March 31, 2012 as demand from customers in the optical networking industry increased. We continued to see renewed demand for these substrates as investment in high-speed optical communications increased worldwide.

Ge substrate revenue decreased slightly by $79,000, or 3.0%, to $2.6 million for the three months ended March 31, 2013 from $2.6 million for the three months ended March 31, 2012 due to fluctuation in demand from our customers for satellite applications and for concentrated photovoltaic solar applications.

Raw materials revenue decreased $917,000, or 12.8%, to $6.3 million for the three months ended March 31, 2013 from $7.2 million for the three months ended March 31, 2012 primarily due to decreased selling prices which was partially offset by increased tonnage sold.

Revenue by Geographic Region

	Three Months Ended March 31,		Increase (Decrease)	% Change
	2013	2012		
	($ in thousands)			
China	$6,029	$5,774	$255	4.4 %
% of total revenue	27 %	25 %		

Europe (primarily Germany)	4,689		4,565		124	2.7	%
% of total revenue	21	%	19	%			
Taiwan	3,779		2,046		1,733	84.7	%
% of total revenue	17	%	9	%			
North America (primarily the United States)	3,469		5,167		(1,698)	(32.9)	%
% of total revenue	16	%	22	%			
Japan	2,282		2,189		93	4.2	%
% of total revenue	10	%	9	%			
Asia Pacific (excluding China, Taiwan and Japan)	2,132		3,745		(1,613)	(43.1)	%
% of total revenue	9	%	16	%			
Total revenue	$22,380		$23,486		$(1,106)	(4.7)	%

Table of Contents

Revenue from customers in China increased by $255,000, or 4.4%, to $6.0 million for the three months ended March 31, 2013 from $5.8 million for the three months ended March 31, 2012 primarily due to increased GaAs substrate revenue and Ge substrate revenue partially offset by decreased raw materials revenue.

Revenue from customers in Europe increased by $124,000, or 2.7%, to $4.7 million for the three months ended March 31, 2013 from $4.6 million for the three months ended March 31, 2012 primarily due to increased GaAs substrate revenue and raw materials revenue partially offset by decreased Ge substrate revenue.

Revenue from customers in Taiwan increased by $1.7 million, or 84.7%, to $3.8 million for the three months ended March 31, 2013 from $2.0 million for the three months ended March 31, 2012 primarily due to increased semi-insulating GaAs substrate revenue and InP substrate revenue.

Revenue from customers in North America decreased by $1.7 million, or 32.9%, to $3.5 million for the three months ended March 31, 2013 from $5.2 million for the three months ended March 31, 2012 primarily due to decreased raw materials revenue resulting from decreased selling prices of 4N raw gallium and decreased orders from our customers for semi-insulating GaAs substrates.

Revenue from customers in Japan increased by $93,000, or 4.2%, to $2.3 million for the three months ended March 31, 2013 from $2.2 million for the three months ended March 31, 2012 primarily due to increased raw materials revenue partially offset by decreased GaAs substrate revenue.

Revenue from customers in Asia Pacific (excluding China, Taiwan and Japan) decreased by $1.6 million, or 43.1%, to $2.1 million for the three months ended March 31, 2013 from $3.7 million for the three months ended March 31, 2012 primarily due to decreased semi-insulating GaAs substrate revenue from customers in Singapore.

Gross Margin

	Three Months Ended March 31,		Increase (Decrease)	% Change
	2013	2012		
	($ in thousands)			
Gross profit	$3,484	$8,194	$(4,710)	(57.5)%
Gross Margin %	15.6%	34.9%		

Gross margin decreased to 15.6% of total revenue for the three months ended March 31, 2013 from 34.9% of total revenue for the three months ended March 31, 2012. Higher priced raw material in our inventory and overall lower average selling prices negatively impacted the gross margins for all substrates. Gross margins for raw material sales also decreased due to decreased selling prices of 4N raw gallium.

Selling, General and Administrative Expenses

	Three Months Ended March 31,		Increase (Decrease)	% Change
	2013	2012		
	($ in thousands)			
Selling, general and administrative expenses	$3,925	$3,785	$140	3.7%
% of total revenue	17.5%	16.1%		

Selling, general and administrative expenses increased $140,000, or 3.7% to $3.9 million for the three months ended March 31, 2013 from $3.8 million for the three months ended March 31, 2012. The increase was primarily due to higher personnel related costs, higher health insurance from our joint ventures in China and higher stock-based compensation expenses resulting from the options and stock awards granted in 2012 which were expensed over the vesting schedule, offset by lower freight charges.

Research and Development

	Three Months Ended March 31,		Increase (Decrease)	% Change
	2013	2012		
	($ in thousands)			
Research and development	$822	$835	$(13)	(1.6)%
% of total revenue	3.7%	3.6%		

Research and development expenses decreased $13,000, or 1.6% to $822,000 for the three months ended March 31, 2013 from $835,000 for the three months ended March 31, 2012. The decrease was primarily due to lower utility expense at our facilities in China and product testing related costs from our joint ventures in China offset by higher personnel related costs due to the hiring of our Chief Scientist in March 2012.

Table of Contents

Interest Income, net

	Three Months Ended March 31,		Increase	
	2013	2012	(Decrease)	% Change
	($ in thousands)			
Interest income, net	$31	$88	$(57)	(64.8)%
% of total revenue	0.1%	0.4%		

Interest income, net decreased $57,000 to $31,000 for the three months ended March 31, 2013 from $88,000 for the three months ended March 31, 2012. The decrease was primarily due to lower returns from the mix of investment securities.

Equity in Earnings of Unconsolidated Joint Ventures

	Three Months Ended March 31,		Increase	
	2013	2012	(Decrease)	% Change
	($ in thousands)			
Equity in earnings of unconsolidated joint ventures	$282	$154	$128	83.1%
% of total revenue	1.3%	0.7%		

Equity in earnings of unconsolidated joint ventures increased $128,000 to $282,000 for the three months ended March 31, 2013 from $154,000 for the three months ended March 31, 2012 primarily due to higher net income from our minority-owned joint ventures that are not consolidated.

Other Expense, net

	Three Months Ended March 31,		Increase	
	2013	2012	(Decrease)	% Change
	($ in thousands)			
Other expense, net	$825	$489	$336	68.7%
% of total revenue	3.7%	2.1%		

Other expense, net increased $336,000 to $825,000 for the three months ended March 31, 2013 from $489,000 for the three months ended March 31, 2012 primarily due to higher foreign exchange losses partially offset by lower withholding tax on foreign dividends from our consolidated joint ventures.

Provision for Income Taxes

	Three Months Ended March 31,		Increase	
	2013	2012	(Decrease)	% Change
	($ in thousands)			
Provision for income taxes	$184	$375	$(191)	(50.9)%
% of total revenue	0.8%	1.6%		

Provision for income taxes was mostly related to our China subsidiary and our China joint venture operations and decreased by $191,000 to $184,000 for the three months ended March 31, 2013 from $375,000 for the three months ended March 31, 2012. The decrease in provision for income taxes was primarily due to decreased sales and net income of our foreign subsidiaries as well as lower taxable income for state tax purposes in the U.S. Besides the state tax liabilities, no federal income tax or benefit has been provided for U.S. operations due to our net loss, our available net operating loss carryforwards for the three months ended March 31, 2013 and 2012 and uncertainty of profits in the U.S.

Table of Contents

Noncontrolling interests

	Three Months Ended March 31,		Increase (Decrease)	% Change
	2013	2012		
	($ in thousands)			
Noncontrolling interests	$441	$1,317	$(876)	(66.5)%
% of total revenue	2.0%	5.6%		

Net income attributable to noncontrolling interests decreased $876,000, or 66.5% to $441,000 for the three months ended March 31, 2013 from $1.3 million for the three months ended March 31, 2012 primarily due to significantly lower profitability from one of our China joint venture operations compared to the same period last year.

Liquidity and Capital Resources

We consider cash and cash equivalents, short-term investments and long-term investments as liquid and available for use within two years in our current operations. Short-term investments and long-term investments are comprised of U.S. government securities and investment-grade corporate notes and bonds. As of March 31, 2013, our principal sources of liquidity were $49.4 million consisting of cash and cash equivalents of $25.8 million, short-term investments of $6.5 million and long-term investments of $17.1 million, of which $12.7 million was held by our consolidated joint ventures.

Cash and cash equivalents of $25.8 million decreased by $4.8 million and short-term and long-term investments of $23.6 million increased by $4.1 million during the three months ended March 31, 2013. Cash and cash equivalents of $31.2 million increased by $5.0 million and short-term and long-term investments of $14.9 million increased by $408,000 during the three months ended March 31, 2012.

Net cash provided by operating activities of $976,000 for the three months ended March 31, 2013 was primarily comprised of our net loss of $2.0 million, adjusted for non-cash items of depreciation of $1.3 million, stock-based compensation of $332,000, amortization of marketable securities premium of $146,000 and a net change of $1.2 million in assets and liabilities. The $1.2 million net change in assets and liabilities primarily resulted from a $1.6 million decrease in inventories, a $922,000 decrease in accounts receivable, a $105,000 decrease in other assets, a $664,000 increase in accounts payable, partially offset by a $1.7 million increase in prepaid expenses and other current assets, a $164,000 decrease in accrued liabilities and a $270,000 decrease in other long-term liabilities.

Net cash provided by operating activities of $9.6 million for the three months ended March 31, 2012 was primarily comprised of our net income of $3.0 million, adjusted for non-cash items of depreciation of $907,000, stock-based compensation of $281,000, amortization of marketable securities premium of $71,000, loss on disposal of property, plant and equipment of $29,000 and a net change of $5.3 million in assets and liabilities. The $5.3 million net change in assets and liabilities primarily resulted from a $4.0 million decrease in inventories, a $1.4 million decrease in accounts receivable, a $491,000 decrease in prepaid expenses and other current assets, a $124,000 decrease in other assets, a $883,000 increase in accounts payable, partially offset by a $1.1 million decrease in accrued liabilities and a $459,000 decrease in other long-term liabilities.

Net cash used in investing activities of $5.6 million for the three months ended March 31, 2013 was primarily from the purchase of property, plant and equipment of $1.3 million and the net purchases of marketable investment securities of $4.3 million.

Net cash used in investing activities of $1.5 million for the three months ended March 31, 2012 was primarily from the purchase of property, plant and equipment of $1.1 million and the net purchases of marketable investment securities of $379,000.

In January 2012, we agreed with the Administrative Commission of Tianjin Economy and Technology Development Zone to establish a second manufacturing facility in Tianjin, China. The arrangement, if completed, would provide us with land use rights for approximately 32 acres of industrial land located in Yixian Scientific and Industrial Park to construct a compound semiconductor substrate manufacturing facility that would be completed in phases over a number of years. We agreed to provide $12.5 million in the first phase of the construction of the facility and have an understanding with our BoYu joint venture that it will provide the RMB 32.0 million, or approximately $5.0 million, that is anticipated to be required for the portion of the project devoted to crystal support, in exchange for land use rights, enterprise and individual income tax rebates, employee hiring and development subsidies, and other benefits. We expect to fund the first phase of the construction of the facility with cash flow generated by our normal operations supplemented by our existing line of credit. However, we have delayed our participation in the project at this time due to the volatility in our substrate business. It is possible that the investment of $5.0 million will still be funded by our BoYu joint venture for crystal support.

Table of Contents

Net cash used in financing activities of $276,000 for the three months ended March 31, 2013 consisted of $532,000 net dividends paid by our consolidated joint ventures partially offset by net proceeds of $256,000 on the issuance of common stock pursuant to stock option exercises.

Net cash used in financing activities of $3.2 million for the three months ended March 31, 2012 consisted of $3.4 million net dividends paid by joint ventures partially offset by net proceeds of $219,000 on the issuance of common stock pursuant to stock option exercises.

On September 13, 2011, our registration statement on Form S-3 was declared effective by the Securities and Exchange Commission (SEC). We may from time to time offer up to $60.0 million of common stock, preferred stock, depositary shares, warrants, debt securities and/or units in one or more offerings and in any combination. We intend to use the net proceeds from any sale of securities under the shelf registration statement for general corporate purposes, which may include capital expenditures in connection with our planned expansion of our manufacturing facilities in China. The timing of any offering will be at our discretion and will depend on many factors, including the prevailing market conditions. Specific terms and share prices of any future offering under the registration statement will be established at the time of any such offering, and will be described in a prospectus supplement that we will file with the SEC.

On February 21, 2013, our Board of Directors approved a stock repurchase program that complies with Rule 10b-18 of the Securities Exchange Act of 1934, as amended, authorizing us to purchase up to $6.0 million of our outstanding common stock through February 27, 2014. The timing, actual number and value of the shares that are repurchased under this program will be dependent on market conditions and other corporate considerations, including price, corporate and regulatory requirements and alternative investment opportunities. The program is expected to be funded from existing cash balances and cash generated from operations. We are not obligated to repurchase any particular amount of common stock during any period and may choose to suspend or discontinue the repurchase program at any time. For the three months ended March 31, 2013, we did not repurchase any shares.

We intend to fund our operating expenses primarily through cash flows from operations. We believe that we have adequate cash and investments to meet our needs over the next 12 months. If our sales decrease, however, our ability to generate cash from operations will be adversely affected which could adversely affect our future liquidity, require us to use cash at a more rapid rate than expected, and require us to seek additional capital. There can be no assurance that such additional capital will be available or, if available it will be on terms acceptable to us.

Cash from operations could be affected by various risks and uncertainties, including, but not limited to those set forth below under Item 1A “Risks Factors.”

Line of Credit

We have an unused credit facility with a bank that provides for a line of credit of $10.0 million, which is secured by marketable securities we have with the bank. There were no outstanding borrowings under this line of credit as of March 31, 2013 and December 31, 2012.

Contractual Obligations and Operating Leases

We lease certain office space, manufacturing facilities and equipment under long-term operating leases expiring at various dates through February 2016. The lease agreement of the facility at Fremont, California with approximately 27,760 square feet commenced December 1, 2008 for a term of seven years, with an option by us to cancel the lease after five years, upon forfeiture of the security deposit and payment of one-half of the fifth year’s rent.

We entered into a royalty agreement with a vendor effective December 3, 2010 with a term of eight years, terminating December 31, 2018. We and our related companies are granted a worldwide, nonexclusive, royalty bearing, irrevocable license to certain patents for the term of the agreement. We shall pay a total of $7.0 million royalty payment over eight years that began in 2011 based on future royalty bearing sales.

Table of Contents

Outstanding contractual obligations as of March 31, 2013 are summarized as follows (in thousands):

		Payments due by period			
Contractual Obligations	Total	Less than 1 year	1-3 years	4-5 years	More than 5 years
Operating leases	$917	$389	$528	$—	$—
Royalty agreement	3,925	800	1,544	1,150	431
Total	$4,842	$1,189	$2,072	$1,150	$431

Purchase orders or contracts for the purchase of certain goods and services are not included in the preceding table. We cannot determine the aggregate amount of such purchase orders that represent contractual obligations because purchase orders may represent authorizations to purchase rather than binding agreements. For the purposes of this table, contractual obligations for purchase of goods or services are defined as agreements that are enforceable and legally binding and that specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum, or variable price provisions; and the approximate timing of the transaction. Our purchase orders are based on our current needs and are fulfilled by our vendors within short time horizons. We also enter into contracts for outsourced services; however, the obligations under these contracts were not significant and the contracts generally contain clauses allowing for cancellation without significant penalty. Contractual obligations that are contingent upon the achievement of certain milestones are not included in the table above.

Off-Balance Sheet Arrangements

As of March 31, 2013, we did not have any off-balance sheet financing arrangements and have never established any special purpose entities as defined under SEC Regulation S-K Item 303(a)(4)(ii).

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our condensed consolidated financial statements, please see “Note 14 - Recent Accounting Pronouncements” in the Notes to Condensed Consolidated Financial Statements of this Form 10-Q.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Risk

A significant portion of our business is conducted in currencies other than the U.S. dollar. The functional currency for our foreign operations is the Renminbi, the local currency of China. Since most of our operations are conducted in China, most of our costs are incurred in Chinese Renminbi, which subjects us to fluctuations in the exchange rates between the U.S. dollar and the Chinese Renminbi. We incur transaction gains or losses resulting from consolidation of expenses incurred in local currencies for our Chinese subsidiaries, including our joint ventures, as well as in translation of the assets and liabilities at each balance sheet date. Our financial results could be adversely affected by factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets, including the revaluation by China of the Renminbi, and any future adjustments that China may make to its currency such as any move it might make to a managed float system with opportunistic interventions. We may also experience foreign exchange losses on our non-functional currency denominated receivables and payables to the extent that we have not mitigated our exposure utilizing foreign currency forward exchange contracts. Foreign exchange losses could have a material adverse effect on our operating results and cash flows. If we do not effectively manage the risks associated with this currency risk, our revenue, cash flows and financial condition could be adversely affected.

We manage against these risks by actively monitoring our exchange rate exposure. Our foreign operations, however, in most instances act as a natural hedge since both operating expenses as well as revenues and both assets and liabilities are generally denominated in their respective local currency. In these instances, although an unfavorable change in the exchange rate of foreign currencies against the U.S. dollar will result in lower revenues when translated into U.S. dollars, the operating expenses will be lower as well. We do not use short-term forward exchange contracts for hedging purposes to reduce the effects of adverse foreign exchange rate movements. We cannot be certain that any such hedging activities will be effective, or available to us at commercially reasonable rates. As of March 31, 2013 and December 31, 2012, we had no outstanding commitments with respect to foreign exchange contracts.

During the three months ended March 31, 2013, we recorded net foreign exchange losses of $593,000, included as part of “other expense, net” in our condensed consolidated statements of operations. We incurred foreign currency transaction exchange gains and losses due to operations in general. In the future we may experience foreign exchange losses on our non-functional currency denominated receivables and payables to the extent that we have not mitigated our exposure utilizing foreign currency forward exchange contracts. Foreign exchange losses could have a material adverse effect on our operating results and cash flows. During the three months ended March 31, 2013, we recorded unrealized foreign currency gains of $407,000, included in the balance of “accumulated other comprehensive income” on our condensed consolidated balance sheets.

Table of Contents

Interest Rate Risk

Cash and cash equivalents earning interest and certain variable rate debt instruments are subject to interest rate fluctuations. The following table sets forth the probable impact of a 10% change in interest rates (in thousands):

Instrument	Balance as of March 31, 2013	Current Interest Rate	Projected Annual Interest Income/(Expense)	Proforma 10% Interest Rate Decline Income/(Expense)	Proforma 10% Interest Rate Increase Income/(Expense)
Cash	$25,789	0.74 %	$ 191	$ 172	$ 210
Cash equivalents	3	0.06	—	—	—
Investment in debt and equity instruments	23,578	2.75	648	583	713
			$ 839	$ 755	$ 923

The primary objective of our investment activities is to preserve principal while maximizing income without significantly increasing risk. Financial instruments that potentially subject us to concentration of credit risk consist primarily of cash and cash equivalents, short-term investments, and trade accounts receivable. We invest primarily in money market accounts, certificates of deposits, corporate bonds and notes, and government securities. We are exposed to credit risks in the event of default by the issuers to the extent of the amount recorded on the condensed consolidated balance sheets. These securities are generally classified as available-for-sale and consequently are recorded on the balance sheet at fair value with unrealized gains or losses reported as a separate component of accumulated other comprehensive income, net of estimated tax. Our cash, cash equivalents and short-term investments and long-term investments are in high-quality securities placed with major banks and financial institutions and commercial paper. We have no investments in auction rate securities.

Credit Risk

We perform periodic credit evaluations of our customers' financial condition and generally do not require collateral. One customer accounted for 18% and 28% of our trade accounts receivable balance as of March 31, 2013 and December 31, 2012, respectively.

Equity Risk

We maintain minority investments directly, and indirectly through our consolidated joint ventures in privately-held companies located in China. These minority investments are reviewed for other than temporary declines in value on a quarterly basis. These investments are classified as "other assets" in the condensed consolidated balance sheets and are either accounted for under the cost method or under equity method consolidated through joint ventures depending upon our equity ownership and whether or not we have the ability to exercise significant influence over their operations. We monitor our investments for impairment and record reductions in carrying value when events or changes in circumstances indicate that the carrying value may not be recoverable. Reasons for other than temporary declines in value include whether the related company would have insufficient cash flow to operate for the next twelve months, significant changes in the operating performance and changes in market conditions. As of both March 31, 2013 and December 31, 2012, the direct minority investments totaled $392,000, and the indirect minority investments by our consolidated joint ventures totaled $2.2 million and $2.0 million, respectively.

Table of Contents

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, our Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of the design and operation of our disclosure controls and procedures, as such terms are defined under Rule 13a-15(e) and 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended. Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this quarterly report in ensuring that information required to be disclosed on SEC reports is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures.

Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting was made in the three months ended March 31, 2013 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time we may be involved in judicial or administrative proceedings concerning matters arising in the ordinary course of business. We do not expect that any of these matters, individually or in the aggregate, will have a material adverse effect on our business, financial condition, cash flows or results of operation.

Item 1A. Risk Factors

For ease of reference, we have divided these risks and uncertainties into the following general categories:

Risks related to our general business;

Risks related to international aspects of our business;

Risks related to our financial results and capital structure;

Risks related to our intellectual property; and

Risks related to compliance and other legal matters.

Risks Related to Our General Business

Underutilizing our manufacturing facilities may result in declines in our gross margins.

An important factor in our success is the extent to which we are able to utilize the available capacity in our manufacturing facilities. Because many portions of our manufacturing costs are relatively fixed, high utilization rates are critical to our gross margins and operating results. If we fail to achieve acceptable manufacturing volumes or experience product shipment delays, our results of operations could be negatively affected. During periods of

decreased demand, we have underutilized our manufacturing lines. If we are unable to improve utilization levels at our facilities during periods of decreased demand and correctly manage capacity, the increased expense levels will have an adverse effect on our business, financial condition and results of operations. Our gross profit margins have fluctuated from period to period, and these fluctuations are expected to continue in the future. Within the last two years, our gross profit margin has fluctuated from 46.7% in the quarter ended June 30, 2011 to 15.6% for the quarter ended March 31, 2013.

If we receive fewer customer orders than forecasted or if our customers delay or cancel orders, we may not be able to reduce our manufacturing costs in the short-term and our gross margins would be negatively affected. In addition, lead times required by our customers are shrinking which reduces our ability to forecast revenue and adjust our costs in the short-term.

Table of Contents

Shifts in our product mix may result in declines in gross margins.

Our gross profit margins vary among our product families, and are generally higher on our larger diameter wafers. In addition, historically our gross margins have been higher on our raw materials sales. Accordingly, our overall gross margins have fluctuated from period to period as a result of shifts in product mix, the introduction of new products, decreases in average selling prices for products and our ability to reduce product costs, and these fluctuations are expected to continue in the future.

We do not control the prices at which our joint venture companies sell their raw materials products to third parties. However, as we consolidate the results of three of these companies with our own, any reduction in their gross margins could have a significant, adverse impact on our overall gross margins. One or more of our joint venture companies has in the past and may in the future sell raw materials at significantly reduced prices in order to gain volume sales or new customers. In such an event, our gross margin may be adversely impacted. In addition, one of our joint ventures has in the past been subject to capacity constraints requiring it to source product from other third party suppliers in order to meet customer demand, resulting in decreased gross margin and adversely impacting our gross margin. This joint venture may in the future continue to experience such capacity restraints, causing our gross margin, and consequently our operating results, to be adversely impacted.

Ongoing financial market volatility and adverse changes in the domestic and global economic environment could have a significant adverse impact on our business, financial condition and operating results.

We are subject to the risks arising from adverse changes and uncertainty in domestic and global economies. Uncertain global economic conditions and low or negative growth in China, Europe and the United States, along with difficulties in the financial markets, national debt and fiscal concerns in various regions are posing challenges to our industry. The possible duration and severity of this adverse economic cycle is unknown. Although we remain well-capitalized and have not suffered any liquidity issues as a result of those events, the cost and availability of funds may be adversely affected by illiquid credit markets. Continued turbulence in U.S. and international markets and economies may adversely affect our liquidity, financial condition and profitability. Another severe or prolonged economic downturn could result in a variety of risks to our business, including:

increased volatility in our stock price;

increased volatility in foreign currency exchange rates;

delays in, or curtailment of, purchasing decisions by our customers or potential customers either as a result of overall economic uncertainty or as a result of their inability to access the liquidity necessary to engage in purchasing initiatives;

increased credit risk associated with our customers or potential customers, particularly those that may operate in industries most affected by the economic downturn, such as financial services; and

impairment of our intangible or other assets.

We have experienced and expect to continue to experience delays in customer purchasing decisions or disruptions in normal volume of customer orders that we believe are in part due to the uncertainties in the global economy and an adverse impact on consumer spending. During challenging and uncertain economic times and in tight credit markets, many customers delay or reduce technology purchases. To the extent that the current economic downturn worsens or persists, or any of the above risks occur, our business and operating results could be significantly and adversely affected.

Current global economic conditions may have an impact on our business and financial condition in ways that we currently cannot predict.

Our operations and financial results depend on worldwide economic conditions and their impact on levels of business spending, which had deteriorated significantly in many countries and regions in previous years and may be depressed for the foreseeable future. Uncertainties in the financial and credit markets have caused our customers to postpone deliveries of ordered systems and placement of new orders. Continued uncertainties may reduce future sales of our products and services. The revenue growth and profitability of our business depends on the overall demand for our substrates, and we are particularly dependent on the market conditions for the wireless, solid-state illumination, fiber optics and telecommunications industries. Because our sales are primarily to major corporate customers whose businesses fluctuate with general economic and business conditions, a softening of demand for products that use our substrates, caused by a weakening economy, may result in decreased revenue. Customers may find themselves facing excess inventory from earlier purchases, and may defer or reconsider purchasing products due to the downturn in their business and in the general economy. If market conditions deteriorate, we may experience increased collection times and greater write-offs, either of which could have a material adverse effect on our profitability and our cash flow.

Table of Contents

In addition, the tightening of credit markets and concerns regarding the availability of credit may make it more difficult for our customers to raise capital, whether debt or equity, to finance their purchases of capital equipment, including the products we sell. Delays in our customers' ability to obtain such financing, or the unavailability of such financing, would adversely affect our product sales and revenues and therefore harm our business and operating results. We cannot predict the timing, duration of or effect on our business of the economic slowdown or the timing or strength of any subsequent recovery.

The average selling prices of our products may decline over relatively short periods, which may reduce our gross margins.

The market for our products is characterized by declining average selling prices resulting from factors such as increased competition, overcapacity, the introduction of new products and decreased sales of products incorporating our products and as a result average selling prices for our products may decline over relatively short time periods. We have in the past experienced, and in the future may experience, substantial period-to-period fluctuations in operating results due to declining average selling prices. On average, we have experienced average selling price declines over the course of the last twelve months of anywhere from approximately 5% to 20% per year depending on the product. It is also possible for the pace of average selling price declines to accelerate beyond these levels for certain products in a commoditizing market. We anticipate that average selling prices will decrease in the future in response to the unstable demand environment, product introductions by competitors or us, or by other factors, including pricing pressures from significant customers. When our average selling prices decline, our gross profits decline unless we are able to sell more products or reduce the cost to manufacture our products. We generally attempt to combat average selling price declines by improving yields, manufacturing efficiency and working to reduce the costs of our raw materials and of manufacturing our products. We have in the past and may in the future experience declining sales prices, which could negatively impact our revenues, gross profits and financial results. We therefore need to sell our current products in increasing volumes to offset any decline in their average selling prices, and introduce new products, which we may not be able to do, or do on a timely basis.

We may be unable to reduce the cost of our products sufficiently to enable us to compete with others. Our cost reduction efforts may not allow us to keep pace with competitive pricing pressures and could adversely affect our margins. In order to remain competitive, we must continually reduce the cost of manufacturing our products through design and engineering changes. We cannot assure you that any changes effected by us will result in sufficient cost reductions to allow us to reduce the price of our products to remain competitive or improve our gross margins.

The loss of one or more of our key substrate customers would significantly hurt our operating results.

A small number of substrate customers have historically accounted for a substantial portion of our total revenue. For the three months ended March 31, 2013 and 2012, IQE Group represented 8% and 17% of our revenue, respectively. Our top five customers, although not the same customers for each period, represented 34% and 46% of our revenue for the three months ended March 31, 2013 and 2012, respectively. We expect that a significant portion of our future revenue will continue to be derived from a limited number of substrate customers. Most of our customers are not obligated to purchase a specified quantity of our products or to provide us with binding forecasts of product purchases. In addition, our customers may reduce, delay or cancel orders at any time without any significant penalty. In the past, we have experienced slower bookings, significant push-outs and cancellation of orders from customers. If we lose a major customer or if a customer cancels, reduces or delays orders, or reduces the prices paid for our products, our revenue would decline. In addition, customers that have accounted for significant revenue in the past may not continue to generate revenue for us in any future period. Any delay in scheduled shipments of our products could cause revenue to fall below our expectations and the expectations of market analysts or investors, causing our stock price to decline.

Defects in our products could diminish demand for our products.

Our products are complex and may contain defects. We have experienced quality control problems with some of our products, which caused customers to return products to us, reduce orders for our products, or both. We believe that we continue to experience some reduction in orders as a result of our product quality problems. If we continue to experience quality control problems, or experience these or other problems in new products, customers may cancel or reduce orders or purchase products from our competitors, we may be unable to maintain or increase sales to our customers and sales of our products could decline. Defects in our products could cause us to incur higher manufacturing costs and suffer product returns and additional service expenses, all of which could adversely impact our operating results.

If new products developed by us contain defects when released, our customers may be dissatisfied and we may suffer negative publicity or customer claims against us, lose sales or experience delays in market acceptance of our new products.

Table of Contents

If we do not successfully develop new products to respond to rapidly changing customer requirements, our ability to generate revenue, obtain new customers, and retain existing customers may suffer.

Our success depends on our ability to offer new products and product features that incorporate leading technology and respond to technological advances. In addition, our new products must meet customer needs and compete effectively on quality, price and performance. The life cycles of our products are difficult to predict because the markets for our products are characterized by rapid technological change, changing customer needs and evolving industry standards. If our competitors introduce products employing new technologies or performance characteristics, our existing products could become obsolete and unmarketable. During the past few years, we have seen our competitors selling more substrates manufactured using a crystal growth technology similar to ours, which has eroded our technological differentiation. Other companies, including TriQuint Semiconductors, are actively developing substrate materials that could be used to manufacture devices that could provide the same high-performance, low-power capabilities as GaAs- and InP-based devices at competitive prices. For examples, silicon on insulator (SOI) technology uses layered silicon-insulator-silicon substrate in place of conventional silicon substrates in semiconductor manufacturing; complementary metal-oxide-semiconductor (CMOS) technology is used for constructing integrated circuits. If these substrate materials or VGF-derived products are successfully developed and semiconductor device manufacturers adopt them, demand for our GaAs substrates could decline and our revenue could suffer.

The development of new products can be a highly complex process, and we may experience delays in developing and introducing new products. Any significant delay could cause us to fail to timely introduce and gain market acceptance of new products. Further, the costs involved in researching, developing and engineering new products could be greater than anticipated. If we fail to offer new products or product enhancements or fail to achieve higher quality products, we may not generate sufficient revenue to offset our development costs and other expenses or meet our customers' requirements.

The cyclical nature of the semiconductor industry may limit our ability to maintain or increase net sales and operating results during industry downturns.

The semiconductor industry is highly cyclical and periodically experiences significant economic downturns characterized by diminished product demand, resulting in production overcapacity and excess inventory in the markets we serve. A downturn can result in lower unit volumes and rapid erosion of average selling prices. The semiconductor industry has experienced significant downturns, often in connection with, or in anticipation of, maturing product cycles of both semiconductor companies' and their customers' products or a decline in general economic conditions. This may adversely affect our results of operations and the value of our business.

Our continuing business depends in significant part upon manufacturers of electronic and opto-electronic compound semiconductor devices, as well as the current and anticipated market demand for these devices and products using these devices. As a supplier to the compound semiconductor industry, we are subject to the business cycles that characterize the industry. The timing, length and volatility of these cycles are difficult to predict. The compound semiconductor industry has historically been cyclical due to sudden changes in demand, the amount of manufacturing capacity and changes in the technology employed in compound semiconductors. The rate of changes in demand, including end demand, is high, and the effect of these changes upon us occurs quickly, exacerbating the volatility of these cycles. These changes have affected the timing and amounts of customers' purchases and investments in new technology. These industry cycles create pressure on our revenue, gross margin and net income.

Our industry has in the past experienced periods of oversupply and is currently experiencing a period of oversupply that has resulted in significantly reduced demand and prices for compound semiconductor devices and components, including our products, both as a result of general economic changes and overcapacity. When these periods occur and our operating results and financial condition are adversely affected, oversupply causes greater price competition and

can cause our revenue, gross margins and net income to decline. Inventory buildups in telecommunications products and slower than expected sales of computer equipment resulted in overcapacity and led to reduced sales by our customers, and therefore reduced purchases of our products in 2012 and the three months ended March 31, 2013. During periods of weak demand such as those experienced historically, customers typically reduce purchases, delay delivery of products and/or cancel orders of component parts such as our products. In 2012, we experienced cancellations, price reductions, delays and push-outs of orders, which have resulted in reduced revenue. If the economic downturn continues, further order cancellations, reductions in order size or delays in orders could occur and would materially adversely affect our business and results of operations. Actions to reduce our costs may be insufficient to align our structure with prevailing business conditions. We may be required to undertake additional cost-cutting measures, and may be unable to invest in marketing, research and development and engineering at the levels we believe are necessary to maintain our competitive position. Our failure to make these investments could seriously harm our business.

We base our planned operating expenses in part on our expectations of future revenue, and a significant portion of our expenses is relatively fixed in the short term. If revenue for a particular quarter is lower than we expect, we likely will be unable to proportionately reduce our operating expenses for that quarter, which would harm our operating results for that quarter. In 2012 and the three months ended March 31, 2013, we experienced significantly declining gross margins due to the allocation of fixed costs across a lower volume of sales than anticipated.

Table of Contents

Our results of operations may suffer if we do not effectively manage our inventory.

We must manage our inventory of component parts, work-in-process and finished goods effectively to meet changing customer requirements, while keeping inventory costs down and improving gross margins. Some of our products and supplies have in the past and may in the future become obsolete while in inventory due to changing customer specifications, or become excess inventory due to decreased demand for our products and an inability to sell the inventory within a foreseeable period. Furthermore, if current costs of production increase or sales prices drop below the standard prices at which we value inventory, we may need to take a charge for a reduction in inventory values. We have in the past had to take inventory valuation and impairment charges. Any future unexpected changes in demand or increases in costs of production that cause us to take additional charges for un-saleable, obsolete or excess inventory, or to reduce inventory values, could adversely affect our results of operations.

If we have low product yields, the shipment of our products may be delayed and our operating results may be adversely impacted.

Our products are manufactured using complex technologies, and the number of usable substrates we produce can fluctuate as a result of many factors, including:

impurities in the materials used;

contamination of the manufacturing environment;

substrate breakage;

equipment failure, power outages or variations in the manufacturing process; and

performance of personnel involved in the manufacturing process.

If our yields decrease, our revenue could decline if we are unable to produce needed product on time. At the same time, our manufacturing costs could remain fixed, or could increase. We have experienced product shipment delays and difficulties in achieving acceptable yields on both new and older products, and delays and poor yields have adversely affected our operating results. We may experience similar problems in the future and we cannot predict when they may occur or their duration or severity. In particular, many of our manufacturing processes are new and are still being refined, which can result in lower yields.

If our manufacturing processes result in defects in our products making them unfit for use by our customers, our products would be rejected, resulting in compensation costs paid to our customers, and possible disqualification. This could lead to revenue loss and market share loss.

Intense competition in the markets for our products could prevent us from increasing revenue and sustaining profitability.

The markets for our products are intensely competitive. We face competition for our substrate products from other manufacturers of substrates, such as Freiberger Compound Materials, Hitachi Cable and Sumitomo Electric Industries, from semiconductor device manufacturers that produce substrates for their own use, and from companies, such as TriQuint Semiconductors, that are actively developing alternative materials to GaAs and marketing semiconductor devices using these alternative materials. We believe that at least two of our major competitors are shipping high volumes of GaAs substrates manufactured using a technique similar to our VGF technique. Other competitors may develop and begin using similar technology. If we are unable to compete effectively, our revenue may not increase

and we may be unable to remain profitable. We face many competitors that have a number of significant advantages over us, including:

- greater experience in the business;
- more manufacturing experience;
- extensive intellectual property;
- broader name recognition; and
- significantly greater financial, technical and marketing resources.

Table of Contents

Our competitors could develop new or enhanced products that are more effective than our products.

The level and intensity of competition has increased over the past year and we expect competition to continue to increase in the future. Competitive pressures caused by the current economic conditions have resulted in reductions in the prices of our products, and continued or increased competition could reduce our market share, require us to further reduce the prices of our products, affect our ability to recover costs and result in reduced gross margins.

In addition, new competitors have and may continue to emerge, such as a small crystal growing company established by a former employee in China that is supplying ingots to the market. While new competitors such as this company currently do not appear to be fully competitive, competition from sources such as this could increase, particularly if these competitors are able to obtain large capital investments.

The Chinese government has previously imposed manufacturing restrictions that, if imposed again in the future on our facilities, could materially and adversely impact our results of operations and our financial condition.

The Chinese government has in the past imposed restrictions on manufacturing facilities, such as the restrictions imposed on polluting factories for the 2008 Olympics and Paralympics, including a shut-down of transportation of materials and power plants to reduce air pollution. If, in the future, restrictions are imposed on our operations, our ability to meet customer demand or supply current or new orders would be significantly impacted. Customers could then be required to purchase product from our competitors, causing our competitors to take market share from us, and could result in our customers supplying future needs from our competitors. Restrictions on transportation of materials could limit our ability to transport our product, and could result in bottlenecks at shipping ports, limiting our ability to deliver products to our customers. During periods of such restrictions, we may increase our stock of critical materials (such as arsenic, gallium, and other chemicals) for use during the period that these restrictions are likely to last, which will increase our use of cash and increase our inventory level. Any of these restrictions could materially and adversely impact our results of operations and our financial condition.

Demand for our products may decrease if our customers experience difficulty manufacturing, marketing or selling their products.

Our products are used as components in our customers' products. Accordingly, demand for our products is subject to factors affecting the ability of our customers to introduce and market their products successfully, including:

the competition our customers face in their particular industries;

the technical, manufacturing, sales and marketing and management capabilities of our customers;

the financial and other resources of our customers; and

the inability of our customers to sell their products if they infringe third-party intellectual property rights.

If demand for the end-user applications for which our products are used decreases, or our customers are unable to develop, market and sell their products, demand for our products will decrease.

The financial condition of our customers may affect their ability to pay amounts owed to us.

Many of our customers are facing business downturns that have reduced their cash balances and their prospects. We frequently allow our customers extended payment terms after shipping products to them. Subsequent to our shipping a product, some customers have been unable to make payments when due, reducing our cash balances and causing us to

incur charges to allow for a possibility that some accounts might not be paid. Customers may also be forced to file for bankruptcy. If our customers do not pay their accounts when due, we will be required to incur charges that would reduce our earnings.

Table of Contents

We purchase critical raw materials and parts for our equipment from single or limited sources, and could lose sales if these sources fail to fill our needs.

We depend on a limited number of suppliers for certain raw materials, components and equipment used in manufacturing our products, including key materials such as quartz tubing and polishing solutions. Although several of these raw materials are purchased from suppliers in which we hold an ownership interest, we generally purchase these materials through standard purchase orders and not pursuant to long-term supply contracts, and no supplier guarantees supply of raw materials or equipment to us. If we lose any of our key suppliers, our manufacturing efforts could be significantly hampered and we could be prevented from timely producing and delivering products to our customers. Prior to investing in our raw material joint ventures, we sometimes experienced delays obtaining critical raw materials and spare parts, including gallium, due to shortages of these materials and we could experience such delays again in the future due to shortages of materials and may be unable to obtain an adequate supply of materials. These shortages and delays could result in higher materials costs and cause us to delay or reduce production of our products. If we have to delay or reduce production, we could fail to meet customer delivery schedules and our revenue and operating results could suffer.

We have made and may continue to make strategic investments in raw materials suppliers, which may not be successful and may result in the loss of all or part of our investment.

We have made investments through our joint ventures in raw material suppliers in China, which provide us with opportunities to gain supplies of key raw materials that are important to our substrate business. These affiliates each have a market beyond that provided by us. We do not have influence over all of these companies and in some we have made only a strategic, minority investment. We may not be successful in achieving the financial, technological or commercial advantage upon which any given investment is premised, and we could end up losing all or part of our investment.

Our substrate products have a long qualification cycle that makes it difficult to plan our expenses and forecast our results.

New customers typically place orders with us for our substrate products three months to a year or more after our initial contact with them. The sale of our products may be subject to delays due to our customers' lengthy internal budgeting, approval and evaluation processes. During this time, we may incur substantial expenses and expend sales, marketing and management efforts while the customers evaluate our products. These expenditures may not result in sales of our products. If we do not achieve anticipated sales in a period as expected, we may experience an unplanned shortfall in our revenue. As a result, we may not be able to cover expenses, causing our operating results to vary. In addition, if a customer decides not to incorporate our products into its initial design, we may not have another opportunity to sell products to this customer for many months or even years. In the current competitive and economic climate, the average sales cycle for our products has lengthened even further and is expected to continue to make it difficult for us to forecast our future sales accurately. We anticipate that sales of any future substrate products will also have lengthy sales cycles and will, therefore, be subject to risks substantially similar to those inherent in the lengthy sales cycles of our current substrate products.

Problems incurred by our joint ventures or venture partners could result in a material adverse impact on our financial condition or results of operations.

We have invested in joint venture operations in China that produce products including 99.99% pure gallium (4N Ga), high purity gallium, arsenic, germanium, germanium dioxide, pyrolytic boron nitride (pBN) crucibles and boron oxide (B_2O_3). We purchase a portion of the materials produced by these ventures for our use and sell the remainder of their production to third parties. Our ownership interest in these entities ranges from 20% to 83%. We consolidate the joint

ventures in which we have a majority or controlling financial interest and employ equity accounting for the joint ventures in which we have a smaller ownership interest. Several of these joint ventures occupy space within larger facilities owned and/or operated by one of the other venture partners. Several of these venture partners are engaged in other manufacturing activities at or near the same facility. In some facilities, we share access to certain functions, including water, hazardous waste treatment or air quality treatment. If any of our joint venture partners in any of these ventures experiences problems with its operations, disruptions of our joint venture operations could result, having a material adverse effect on the financial condition and results of operation of our joint ventures, and correspondingly on our financial condition or results of operations. For example, since gallium is a by-product of aluminum, our gallium joint venture in China, which is housed in and receives services from an affiliated aluminum plant, could generate lower production of gallium as a result of reduced by-product services provided by the aluminum plant. Accordingly, in order to meet customer supply obligations, our joint venture may have to source finished products from another independent third party supplier, resulting in reduced gross margin.

In addition, if any of our joint ventures or venture partners with which our joint ventures share facilities is deemed to have violated applicable laws, rules or regulations governing the use, storage, discharge or disposal of hazardous chemicals during manufacturing, research and development, or sales demonstrations, the operations of our joint ventures could be adversely affected and we could be subject to substantial liability for clean-up efforts, personal injury and fines or suspension or cessation of our joint venture operations as a result of the actions of the joint ventures or other venture partners. Employees working for our joint ventures or any of the other venture partners could bring litigation against us as a result of actions taken at the joint venture or venture partner facilities, even though we are not directly controlling the operations, including actions for exposure to chemicals or other hazardous materials at the facilities of our joint ventures or the facilities of any venture partner that are shared by our joint ventures. While we would expect to defend ourselves vigorously in any litigation that is brought against us, litigation is inherently uncertain and it is possible that our business, financial condition, results of operations or cash flows could be affected. Even if we are not deemed responsible for the actions of the joint ventures or venture partners, litigation could be costly, time consuming to defend and divert management attention; in addition, if we are deemed to be the most financially viable of the partners, plaintiffs may decide to pursue us for damages.

Table of Contents

We believe that continuing to invest in additional joint ventures will be important to remaining competitive in our marketplace and ensuring a supply of critical raw materials. However, we may not be able to identify complementary joint venture opportunities or, even once opportunities are identified, we may not be able to reach agreement on the terms of the venture with the other venture partners. Additional joint ventures could cause us to incur contingent liabilities or other expenses, any of which could adversely affect our financial condition and operating results.

Since all of our joint venture activity is expected to occur in China, these activities could subject us to a number of risks associated with conducting operations internationally, including:

difficulties in managing geographically disparate operations;

difficulties in enforcing agreements through non-U.S. legal systems;

unexpected changes in regulatory requirements that may limit our ability to export the venture products or sell into particular jurisdictions or impose multiple conflicting tax laws and regulations;

political and economic instability, civil unrest or war;

terrorist activities that impact international commerce;

difficulties in protecting our intellectual property rights, particularly in countries where the laws and practices do not protect proprietary rights to as great an extent as do the laws and practices of the United States;

changing laws and policies affecting economic liberalization, foreign investment, currency convertibility or exchange rates, taxation or employment; and

nationalization of foreign-owned assets, including intellectual property.

The effect of terrorist threats and actions on the general economy could decrease our revenue.

The United States continues to be on alert for terrorist activity. The potential near- and long-term impact terrorist activities may have in regards to our suppliers, customers and markets for our products and the U.S. economy is uncertain. There may be embargos of ports or products, or destruction of shipments or our facilities, or attacks that affect our personnel. There may be other potentially adverse effects on our operating results due to significant events that we cannot foresee. Since we perform all of our manufacturing operations in China, and a significant portion of our customers are located outside of the United States, terrorist activity or threats against U.S.-owned enterprise are a particular concern to us.

If any of our facilities is damaged by occurrences such as fire, explosion, or natural disaster, we might not be able to manufacture our products.

The ongoing operation of our manufacturing and production facilities in China is critical to our ability to meet demand for our products. If we are not able to use all or a significant portion of our facilities for prolonged periods for any reason, we would not be able to manufacture products for our customers. For example, a fire or explosion caused by our use of combustible chemicals and high temperatures during our manufacturing processes or power interruption caused by severe weather situation could render some or all of our facilities inoperable for an indefinite period of time. Actions outside of our control, such as earthquakes or other natural disasters, could also damage our facilities, rendering them inoperable. If we are unable to operate our facilities and manufacture our products, we would lose customers and revenue and our business would be harmed.

We depend on the continuing efforts of our senior management team and other key personnel. If we lose members of our senior management team or other key personnel, or are unable to successfully retain, recruit and train qualified personnel, our ability to manufacture and sell our products could be harmed.

Our future success depends on the continuing services of members of our senior management team and other key personnel. Our industry is characterized by high demand and intense competition for talent, and the turnover rate can be high. We compete for qualified management and other personnel with other semiconductor companies. Our employees could leave our company with little or no prior notice and would be free to work for a competitor. If one or more of our senior executives or other key personnel were unable or unwilling to continue in their present positions, we may not be able to replace them easily or at all, and other senior management may be required to divert attention from other aspects of the business. The loss of any of these individuals or our ability to attract or retain qualified personnel could adversely affect our business.

Table of Contents

Risks Related to International Aspects of Our Business

Changes in tariffs, import restrictions, export restrictions Chinese regulations or other trade barriers may reduce gross margins.

We may incur increases in costs due to changes in tariffs, import or export restrictions, or other trade barriers, or unexpected changes in regulatory requirements, any of which could reduce our gross margins. For example, in July 2012, we received notice of retroactive value-added taxes (VATs) levied by the tax authorities in the PRC which applied for the period from July 1, 2011 to June 30, 2012. We expensed the retroactive VATs of approximately $1.3 million in the quarter ended June 30, 2012, which resulted in a 505 basis point decrease in our gross margins. Tax authorities in the PRC revised tax regulations and levied VAT on materials imported not forming part of the final product as foreign-owned enterprises. These VATs will continue to negatively impact our gross margins for the future quarters. Given the relatively fluid regulatory environment in the PRC, there could be additional tax or other regulatory changes in the future. Any such changes could directly and materially adversely impact our financial results and general business condition.

Our operating results depend in large part on continued customer acceptance of our substrate products manufactured in China and continued improvements in product quality.

We manufacture all of our products in China, and source most of our raw materials in China. Accordingly, we continue to seek customer qualification of our China-manufactured products. In addition, we have in the past experienced quality problems with our China-manufactured products. Our previous quality problems caused us to lose market share to our competitors, as some customers reduced their orders from us until our surface quality was as good and consistent as that offered by competitors and customers allocated their requirements for compound semiconductor substrates across more of our competitors. If we are unable to continue to achieve customer qualifications for our products, or if continue to experience quality problems, customers may not increase purchases of our products, our China facility will become underutilized, and we will be unable to achieve expected revenue growth. In addition, in early 2012, we entered into an arrangement to establish a second manufacturing facility in China, which if completed will further our reliance on Chinese manufacturing facilities. We may again lose sales of our products to competitors and experience loss of market share. If we are unable to recover and retain our market share, we may be unable to grow our business.

We derive a significant portion of our revenue from international sales, and our ability to sustain and increase our international sales involves significant risks.

Our revenue growth depends in part on the expansion of our international sales and operations. International sales represented 85% and 78% of our total revenue for the three months ended March 31, 2013 and 2012, respectively. We expect that sales to customers outside the United States, particularly sales to customers in Asia, will continue to represent a significant portion of our revenue.

Currently, a significant percentage of our sales is to customers headquartered in Asia. All of our manufacturing facilities and some of our suppliers are also located outside the U.S. Managing our overseas operations presents challenges, including periodic regional economic downturns, trade balance issues, varying business conditions and demands, political instability, variations in enforcement of intellectual property and contract rights in different jurisdictions, differences in the ability to develop relationships with suppliers and other local businesses, changes in U.S. and international laws and regulations including U.S. export restrictions, fluctuations in interest and currency exchange rates, the ability to provide sufficient levels of technical support in different locations, cultural differences, shipping delays and terrorist acts or acts of war, among other risks. Many of these challenges are present in China, which represents a large potential market for semiconductor devices and where we anticipate significant opportunity

for growth. Global uncertainties with respect to: (i) economic growth rates in various countries; (ii) sustainability of demand for electronics products; (iii) capital spending by semiconductor manufacturers; (iv) price weakness for certain semiconductor devices; and (v) political instability in regions where we have operations may also affect our business, financial condition and results of operations.

Our dependence on international sales involves a number of risks, including:

changes in tariffs, import restrictions, export restrictions, or other trade barriers;

unexpected changes in regulatory requirements;

longer periods to collect accounts receivable;

changes in export license requirements;

political and economic instability;

unexpected changes in diplomatic and trade relationships; and

foreign exchange rate fluctuations.

Table of Contents

Our sales are denominated in U.S. dollars, except for sales to our Chinese customers which are denominated in Renminbi and our Japanese customers which are denominated in Japanese yen. Thus, increases in the value of the U.S. dollar could increase the price of our products in non-U.S. markets and make our products more expensive than competitors' products in these markets.

Also, denominating some sales in Japanese yen subjects us to fluctuations in the exchange rates between the U.S. dollar and the Japanese yen. The functional currency of our Chinese subsidiary and joint ventures is the local currency. We incur transaction gains or losses resulting from consolidation of expenses incurred in local currencies for these entities, as well as in translation of the assets and liabilities of their assets at each balance sheet date. If we do not effectively manage the risks associated with international sales, our revenue, cash flows and financial condition could be adversely affected.

Changes in China's political, social and economic environment may affect our financial performance.

Our financial performance may be affected by changes in China's political, social and economic environment. The role of the Chinese central and local governments in the Chinese economy is significant. Chinese policies toward economic liberalization, and laws and policies affecting technology companies, foreign investment, currency exchange rates and other matters could change, resulting in greater restrictions on our ability to do business and operate our manufacturing facilities in China. Any imposition of surcharges or any increase in Chinese tax rates or reduction or elimination of Chinese tax benefits could hurt our operating results. The Chinese government could revoke, terminate or suspend our license for national security and similar reasons without compensation to us. If the Chinese government were to take any of these actions, we would be prevented from conducting all or part of our business. Any failure on our part to comply with governmental regulations could result in the loss of our ability to manufacture our products in China.

If there are power shortages in the PRC, we may have to temporarily close our China operations, which would adversely impact our ability to manufacture our products and meet customer orders, and would result in reduced revenue.

In the past, the Chinese government has faced a power shortage resulting in power demand outstripping supply in peak periods. Instability in electrical supply in past years has caused sporadic outages among residential and commercial consumers causing the Chinese government to implement tough measures to ease the energy shortage. If further problems with power shortages occur in the future, we are required to make temporary closures of our subsidiary and joint venture operations, we may be unable to manufacture our products, and would then be unable to meet customer orders except from inventory on hand. As a result, our revenue could be adversely impacted, and our relationships with our customers could suffer, impacting our ability to generate future revenue. In addition, if power is shut off at our Beijing subsidiary at any time, either voluntarily or as a result of unplanned brownouts, during certain phases of our manufacturing process including our crystal growth phase, the work in process may be ruined and rendered unusable, causing us to incur expense that will not be covered by revenue, and negatively impacting our cost of revenue and gross margins.

An outbreak of contagious disease such as Severe Acute Respiratory Syndrome (SARS) or the Avian Flu may adversely impact our manufacturing operations and some of our key suppliers and customers.

Any reoccurrence of SARS or an outbreak of a contagious disease, such as Avian Flu, may cause us to temporarily close our manufacturing operations. Similarly, if one or more of our key suppliers is required to close for an extended period, we might not have enough raw material inventories to continue manufacturing operations. In addition, while we possess management skills among our China staff that enable us to maintain our manufacturing operations with minimal on-site supervision from our U.S.-based staff, our business could also be harmed if travel to or from Asia and

the United States is restricted or inadvisable. If our manufacturing operations were closed for a significant period, we could lose revenue and market share, which would depress our financial performance and could be difficult to recapture. Finally, if one of our key customers is required to close for an extended period, we might not be able to ship product to them, our revenue would decline and our financial performance would suffer.

Table of Contents

Risks Related to Our Financial Results and Capital Structure

If we fail to manage periodic contractions, we may utilize our cash balances, resulting in the decline of our existing cash, cash equivalents and investment balances.

We anticipate that our existing cash resources will fund our operations and purchases of capital equipment, as well as provide adequate working capital for the next twelve months. However, our liquidity is affected by many factors including, among others, the extent to which we pursue additional capital expenditures, the level of our production, and other factors related to the uncertainties of the industry and global economies. If we fail to manage our contractions successfully we may draw down our cash reserves, which would adversely affect our operating results and financial condition, reduce our value and possibly impinge our ability to raise debt and equity funding in the future, at a time when we might be required to raise additional cash. Accordingly, there can be no assurance that events in the future will not require us to seek additional capital or, if required, that such capital would be available on terms acceptable to us, if at all. As part of our effort to reduce costs, we may lose key staff, production resources and technology that we will need to replenish when end markets recover. These events could reduce our ability to grow profitably as markets recover.

If we decide to expand our facilities in China and if we are not able to fund our capital commitments for the expansion, our business and operating results may be adversely affected.

If we decide to expand our manufacturing facilities in China, we and one of our joint ventures expect to invest up to approximately $17.5 million in capital projects. If at the time we undertake the expansion and we are unable to fund these projects due to an unexpected decrease in our cash reserves or an inability to raise additional funds, our business and operating results may be materially adversely impacted.

Unpredictable fluctuations in our operating results could disappoint analysts or our investors, which could cause our stock price to decline.

We have experienced and may continue to experience significant fluctuations in our revenue and earnings. Our quarterly and annual revenue and operating results have varied significantly in the past and may vary significantly in the future due to a number of factors, including:

our ability to develop, manufacture and deliver high quality products in a timely and cost-effective manner;

decline in general economic conditions or downturns in the industry in which we compete;

fluctuations in demand for our products;

expansion of our manufacturing capacity;

expansion of our operations in China;

limited availability and increased cost of raw materials;

the volume and timing of orders from our customers, and cancellations, push-outs and delays of customer orders once made;

fluctuation of our manufacturing yields;

decreases in the prices of our or our competitors' products;

costs incurred in connection with any future acquisitions of businesses or technologies; and

increases in our expenses, including expenses for research and development.

Due to these factors, we believe that period-to-period comparisons of our operating results may not be meaningful indicators of our future performance.

Table of Contents

A substantial percentage of our operating expenses are fixed in the short term, and we may be unable to adjust spending to compensate for an unexpected shortfall in revenue. As a result, any delay in generating revenue could cause our operating results to be below the expectations of market analysts or investors, which could also cause our stock price to fall.

If our operating results and financial performance do not meet the guidance that we have provided to the public, our stock price may decline.

We provide public guidance on our expected operating and financial results for future periods. Although we believe that this guidance provides our stockholders, investors and analysts with a better understanding of our expectations for the future, such guidance is comprised of forward-looking statements subject to the risks and uncertainties described in this report and in our other public filings and public statements. Our actual results may not meet the guidance we have provided. If our operating or financial results do not meet our guidance or the expectations of investment analysts, our stock price may decline.

We have adopted certain anti-takeover measures that may make it more difficult for a third party to acquire us.

Our board of directors has the authority to issue up to 2,000,000 shares of preferred stock and to determine the price, rights, preferences and privileges of those shares without any further vote or action by the stockholders. The rights of the holders of common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. The issuance of shares of preferred stock could have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock. We have no present intention to issue additional shares of preferred stock.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a merger, acquisition or change of control, or changes in our management, which could adversely affect the market price of our common stock. The following are some examples of these provisions:

the division of our board of directors into three separate classes, each with three-year terms;

the right of our board to elect a director to fill a space created by a board vacancy or the expansion of the board;

the ability of our board to alter our amended and restated bylaws; and

the requirement that only our board or the holders of at least 10% of our outstanding shares may call a special meeting of our stockholders.

Furthermore, because we are incorporated in Delaware, we are subject to the provisions of Section 203 of the Delaware General Corporation Law. These provisions prohibit us from engaging in any business combination with any interested stockholder (a stockholder who owns 15% or more of our outstanding voting stock) for a period of three years following the time that such stockholder became an interested stockholder, unless:

662/3% of the shares of voting stock not owned by the interested stockholder approve the merger or combination, or

the board of directors approves the merger or combination or the transaction which resulted in the stockholder becoming an interested stockholder.

Our common stock may be delisted from The Nasdaq Global Select Market, which could negatively impact the price of our common stock and our ability to access the capital markets.

Our common stock is listed on The Nasdaq Global Select Market. The bid price of our common stock has in the past closed below the $1.00 minimum per share bid price required for continued inclusion on The Nasdaq Global Select Market under Marketplace Rule 5450(a). If the bid price of our common stock remains below $1.00 per share for thirty consecutive business days, we could be subject to delisting from the Nasdaq Global Select Market.

Any delisting from The Nasdaq Global Select Market could have an adverse effect on our business and on the trading of our common stock. If a delisting of our common stock were to occur, our common stock would trade on the OTC Bulletin Board or on the “pink sheets” maintained by the National Quotation Bureau, Inc. Such alternatives are generally considered to be less efficient markets, and our stock price, as well as the liquidity of our common stock, may be adversely impacted as a result. Delisting from The Nasdaq Global Select Market could also have other negative results, including the potential loss of confidence by suppliers and employees, the loss of institutional investor interest and fewer business development opportunities, as well as the loss of liquidity for our stockholders.

Table of Contents

Risks Related to Our Intellectual Property

Intellectual property infringement claims may be costly to resolve and could divert management attention.

Other companies may hold or obtain patents on inventions or may otherwise claim proprietary rights to technology necessary to our business. The markets in which we compete are comprised of competitors that in some cases hold substantial patent portfolios covering aspects of products that could be similar to ours. We could become subject to claims that we are infringing patent, trademark, copyright or other proprietary rights of others. For example, we have in the past been involved in lawsuits alleging patent infringement, and could in the future be involved in similar litigation.

If we are unable to protect our intellectual property, we may lose valuable assets or incur costly litigation.

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. However, we believe that, due to the rapid pace of technological innovation in the markets for our products, our ability to establish and maintain a position of technology leadership also depends on the skills of our development personnel. Despite our efforts to protect our intellectual property, third parties can develop products or processes similar to ours. Our means of protecting our proprietary rights may not be adequate, and our competitors may independently develop similar technology, duplicate our products or design around our patents. We believe that at least two of our competitors have begun to ship GaAs substrates produced using a process similar to our VGF technique. Our competitors may also develop and patent improvements to the VGF technology upon which we rely, and thus may limit any exclusivity we enjoy by virtue of our patents or trade secrets.

It is possible that pending or future United States or foreign patent applications made by us will not be approved, that our issued patents will not protect our intellectual property, or that third parties will challenge our ownership rights or the validity of our patents. 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 intellectual property. Our competitors may be able to legitimately ascertain non-patented proprietary technology embedded in our systems. If this occurs, we may not be able to prevent the development of technology substantially similar to ours.

We may have to resort to costly litigation to enforce our intellectual property rights, to protect our trade secrets or know-how or to determine their scope, validity or enforceability. Enforcing or defending our proprietary technology is expensive, could cause us to divert resources and may not prove successful. Our protective measures may prove inadequate to protect our proprietary rights, and if we fail to enforce or protect our rights, we could lose valuable assets.

Risks Related to Compliance and Other Legal Matters

We need to continue to improve or implement our systems, procedures and controls.

The shift of our manufacturing operations to China and growth of our business has placed and continues to place a significant strain on our operations and management resources. We have upgraded our inventory control systems, but continue to rely on certain manual processes in our operations and in connection with consolidation of our financial results. If we fail to manage a transition from manual processes to automated processes effectively, our operations may be disrupted.

To manage our business effectively, we may need to implement additional and improved management information systems, further develop our operating, administrative, financial and accounting systems and controls, add

experienced senior level managers, and maintain close coordination among our executive, engineering, accounting, marketing, sales and operations organizations.

We are subject to internal control evaluations and attestation requirements of Section 404 of the Sarbanes-Oxley Act.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we must include in our Annual Report on Form 10-K a report of management on the effectiveness of our internal control over financial reporting. Ongoing compliance with this requirement is complex, costly and time-consuming. If: (1) we fail to maintain effective internal control over financial reporting; or (2) our management does not timely assess the adequacy of such internal control, we could be subject to regulatory sanctions and the public's perception of us may be adversely impacted.

Table of Contents

If we fail to comply with environmental and safety regulations, we may be subject to significant fines or forced to cease our operations; in addition, we could be subject to suits for personal injuries caused by hazardous materials.

We are subject to federal, state and local environmental and safety laws and regulations in all of our operating locations, including laws and regulations of China, such as laws and regulations related to the development, manufacture and use of our products, the operation of our facilities, and the use of our real property. These laws and regulations govern the use, storage, discharge and disposal of hazardous chemicals during manufacturing, research and development, and sales demonstrations. If we fail to comply with applicable regulations, we could be subject to substantial liability for clean-up efforts, personal injury and fines or suspension or be forced to cease our operations, and/or suspend or terminate the development, manufacture or use of certain of our products, the use of our facilities, or the use of our real property, each of which could have a material adverse effect on our business, financial condition and results of operations.

A complaint was previously filed against us and two current officers, alleging personal injury, general negligence, intentional tort, wage loss and other damages, including punitive damages, as a result of exposure of plaintiffs to high levels of gallium arsenide in gallium arsenide wafers, and methanol. Other current and/or former employees could bring litigation against us in the future. Although we have put in place engineering, administrative and personnel protective equipment programs to address these issues, our ability to expand or continue to operate our present locations could be restricted or we could be required to acquire costly remediation equipment or incur other significant expenses if we were found liable for failure to comply with environmental and safety regulations. Existing or future changes in laws or regulations in the United States and China may require us to incur significant expenditures or liabilities, or may restrict our operations. In addition, our employees could be exposed to chemicals or other hazardous materials at our facilities and we may be subject to lawsuits seeking damages for wrongful death or personal injuries allegedly caused by exposure to chemicals or hazardous materials at our facilities.

Litigation is inherently uncertain and while we would expect to defend ourselves vigorously, it is possible that our business, financial condition, results of operations or cash flows could be affected in any particular period by litigation pending and any additional litigation brought against us. In addition, future litigation could divert management’s attention from our business and operations, causing our business and financial results to suffer. We could incur defense or settlement costs in excess of the insurance covering these litigation matters, or that could result in significant judgments against us or cause us to incur costly settlements, in excess of our insurance limits.

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

44

Table of Contents

Item 6.Exhibits

a. Exhibits

Exhibit Number	Description
31.1	Certification by Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance.
101.SCH*	XBRL Taxonomy Extension Schema.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase.
101.LAB*	XBRL Taxonomy Extension Label Linkbase.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase.

*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, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and is otherwise not subject to liability under these sections.

Table of Contents

SIGNATURES

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

AXT, INC.

Dated: May 10, 2013	By:	/s/ MORRIS S. YOUNG Morris S. Young Chief Executive Officer (Principal Executive Officer)
		/s/ RAYMOND A. LOW Raymond A. Low Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

Table of Contents

EXHIBIT INDEX

Exhibit Number	Description
31.1	Certification by Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance.
101.SCH*	XBRL Taxonomy Extension Schema.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase.
101.LAB*	XBRL Taxonomy Extension Label Linkbase.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase.

*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, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and is otherwise not subject to liability under these sections.