

AXT INC  
Form 10-Q  
August 09, 2011

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

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FORM 10-Q

(Mark One)

Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
for the quarterly period ended June 30, 2011

Or

Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
for the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission File Number 000-24085

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AXT, INC.

(Exact name of registrant as specified in its charter)

DELAWARE  
(State or other jurisdiction of  
Incorporation or organization)

94-3031310  
(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)

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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  No

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

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chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

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

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 July 29, 2011
Common Stock, \$0.001 par value	32,088,670

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## PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements

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

	June 30, 2011 (unaudited)	December 31, 2010 (1)
Assets:		
Current assets:		
Cash and cash equivalents	\$21,078	\$ 23,724
Short-term investments	3,476	10,079
Accounts receivable, net of allowances of \$332 and \$561 as of June 30, 2011 and December 31, 2010, respectively	22,958	23,076
Inventories	39,653	35,986
Prepaid expenses and other current assets	8,699	4,090
Total current assets	95,864	96,955
Long-term investments	11,721	7,172
Property, plant and equipment, net	28,814	24,240
Other assets	14,263	11,884
Total assets	\$150,662	\$ 140,251
Liabilities and stockholders' equity:		
Current liabilities:		
Accounts payable	\$3,745	\$ 7,094
Accrued liabilities	7,681	7,745
Total current liabilities	11,426	14,839
Long-term portion of royalty payments	4,750	5,500
Other long-term liabilities	118	108
Total liabilities	16,294	20,447
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 2,000 shares authorized; 883 shares issued and outstanding as of June 30, 2011 and December 31, 2010, respectively (Liquidation preference of \$5.7 million and \$5.6 million as of June 30, 2011 and December 31, 2010, respectively)	3,532	3,532
Common stock, \$0.001 par value per share; 70,000 shares authorized; 32,088 and 31,877 shares issued and outstanding as of June 30, 2011 and December 31, 2010, respectively	32	32
Additional paid-in capital	190,976	190,021
Accumulated deficit	(71,207 )	(82,477 )
Accumulated other comprehensive income	5,366	4,652
Total AXT, Inc. stockholders' equity	128,699	115,760
Noncontrolling interests	5,669	4,044
Total stockholders' equity	134,368	119,804

Total liabilities and stockholders' equity	\$ 150,662	\$ 140,251
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See accompanying notes to condensed consolidated financial statements.

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(1) The Condensed Consolidated Balance Sheet at December 31, 2010 has been derived from the audited consolidated financial statements at that date.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
Revenue	\$30,031	\$23,177	\$54,597	\$41,818
Cost of revenue	16,005	14,642	29,911	26,551
Gross profit	14,026	8,535	24,686	15,267
Operating expenses:				
Selling, general and administrative	3,714	3,039	7,404	6,458
Research and development	699	515	1,204	966
Total operating expenses	4,413	3,554	8,608	7,424
Income from operations	9,613	4,981	16,078	7,843
Interest income (expense), net	69	(25 )	156	(10 )
Other income, net	450	1,556	87	1,635
Income before provision for income taxes	10,132	6,512	16,321	9,468
Provision for income taxes	(1,064 )	(560 )	(1,966 )	(806 )
Net income	9,068	5,952	14,355	8,662
Less: Net income attributable to noncontrolling interest	(2,006 )	(417 )	(3,085 )	(547 )
Net income attributable to AXT, Inc.	\$7,062	\$5,535	\$11,270	\$8,115
Net income attributable to AXT, Inc. per common share:				
Basic	\$0.22	\$0.18	\$0.35	\$0.26
Diluted	\$0.21	\$0.17	\$0.34	\$0.25
Weighted average number of common shares outstanding:				
Basic	31,831	30,834	31,775	30,789
Diluted	33,093	32,172	33,146	31,982

See accompanying notes to condensed consolidated financial statements.

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

	Six Months Ended June 30,	
	2011	2010
Cash flows from operating activities:		
Net income	\$14,355	\$8,662
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	1,663	1,411
Amortization of marketable securities premium	187	47
Loss on disposal of property, plant and equipment	5	1
Stock-based compensation	422	233
Realized loss (gain) on sale of investments	8	(196 )
Changes in assets and liabilities:		
Accounts receivable, net	156	(3,306 )
Inventories	(3,567 )	350
Prepaid expenses and other current assets	(4,547 )	(1,657 )
Other assets	309	(22 )
Accounts payable	(3,369 )	(1,523 )
Accrued liabilities	(99 )	869
Other long-term liabilities	(613 )	(12 )
Net cash provided by operating activities	4,910	4,857
Cash flows from investing activities:		
Purchases of property, plant and equipment	(5,977 )	(1,187 )
Proceeds from disposal of property, plant and equipment	—	4
Purchases of available for sale securities	(11,831 )	(11,202 )
Proceeds from available for sale securities	13,663	10,996
Investments in joint ventures	(2,649 )	—
Net cash used in investing activities	(6,794 )	(1,389 )
Cash flows from financing activities:		
Proceeds from common stock options exercised	533	166
Dividends paid by joint ventures	(1,636 )	(192 )
Long-term debt payments	—	(38 )
Net cash used in financing activities	(1,103 )	(64 )
Effect of exchange rate changes on cash and cash equivalents	341	52
Net increase (decrease) in cash and cash equivalents	(2,646 )	3,460
Cash and cash equivalents at the beginning of the period	23,724	16,934
Cash and cash equivalents at the end of the period	\$21,078	\$20,394

See accompanying notes to condensed consolidated financial statements.

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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 2010 Annual Report on Form 10-K filed with the Securities and Exchange Commission (the “SEC”) on March 16, 2011 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2011 filed with the SEC on May 10, 2011.

The condensed consolidated financial statements include the accounts of AXT and our majority-owned subsidiaries. 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 Equity and in our Condensed Consolidated Statements of Operations.

Note 2. Accounting for 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. Accordingly, 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 the Company’s stock compensation is accounted for as an equity instrument. The provisions of ASC 718 apply to all awards granted or modified after the date of adoption which was January 1, 2006. The unrecognized expense of awards not yet vested at the date of adoption will be recognized in net income (loss) in the periods after the date of adoption using the same Black-Scholes valuation method and assumptions determined under the original provisions of ASC 718.



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We utilized the Black-Scholes valuation model for estimating the fair value of the stock compensation granted both before and after the adoption of ASC 718. The following table summarizes compensation costs related to our stock-based compensation awards (in thousands, except per share data):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
Stock-based compensation in the form of employee stock options, included in:				
Cost of revenue	\$20	\$5	\$40	\$15
Selling, general and administrative	183	103	359	200
Research and development	12	11	23	18
<b>Total stock-based compensation</b>	<b>215</b>	<b>119</b>	<b>422</b>	<b>233</b>
Tax effect on stock-based compensation	—	—	—	—
<b>Net effect on net income</b>	<b>\$215</b>	<b>\$119</b>	<b>\$422</b>	<b>\$233</b>
Effect on net income attributable to AXT, Inc. per common share:				
Basic	\$0.01	\$0.00	\$0.01	\$0.01
Diluted	\$0.01	\$0.00	\$0.01	\$0.01

The amortization of stock compensation under ASC 718 for the period after our January 1, 2006 adoption is based on the single-option approach.

As of June 30, 2011, the compensation costs related to unvested stock options granted to employees under our stock option plan but not yet recognized was approximately \$1.3 million, net of estimated forfeitures of \$133,000. These costs will be amortized on a straight-line basis over a weighted-average period of approximately 2.5 years and will be adjusted for subsequent changes in estimated forfeitures. We elected not to capitalize any stock-based compensation to inventory as of June 30, 2011 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 no stock option grants made in the three and six months ended June 30, 2011 and 2010.

The following table summarizes the stock option transactions during the six months ended June 30, 2011 (in thousands, except per share data):

	Shares	Weighted- average Exercise Price	Weighted- average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Options outstanding as of January 1, 2011	2,280	\$3.10		
Granted	—	—		

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Exercised	(199 )	2.68		
Canceled and expired	(10 )	39.80		
Options outstanding as of June 30, 2011	2,071	\$2.97	6.08	\$11,471
Options vested and expected to vest as of June 30, 2011	2,004	\$2.94	6.00	\$11,155
Options exercisable as of June 30, 2011	1,213	\$2.43	4.34	\$7,397

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The aggregate intrinsic value in the table above represents the total pretax intrinsic value, based on our closing price of \$8.48 on June 30, 2011, which would have been received by the option holder had all option holders exercised their options on that date. The total number of in-the-money options exercisable as of June 30, 2011 was 1,179,362.

The options outstanding and exercisable as of June 30, 2011 were in the following exercise price ranges:

Range of Exercise Price	Options Outstanding as of June 30, 2011			Options Exercisable as of June 30, 2011	
	Shares	Weighted-average Exercise Price	Weighted-average Remaining Contractual Life	Shares	Weighted-Average Exercise Price
\$1.18 - \$1.33	231,174	\$ 1.26	3.66	231,174	\$ 1.26
\$1.34 - \$1.40	191,494	\$ 1.38	2.16	191,494	\$ 1.38
\$1.59 - \$1.59	334,404	\$ 1.59	7.79	146,472	\$ 1.59
\$1.88 - \$1.98	15,000	\$ 1.93	3.85	15,000	\$ 1.93
\$2.04 - \$2.04	459,900	\$ 2.04	8.32	183,574	\$ 2.04
\$2.19 - \$2.19	212,500	\$ 2.19	1.40	212,500	\$ 2.19
\$3.11 - \$5.09	133,428	\$ 3.98	4.15	133,147	\$ 3.98
\$5.83 - \$5.83	365,750	\$ 5.83	9.09	0	\$ 0.00
\$6.31 - \$9.69	123,599	\$ 7.38	5.50	96,001	\$ 7.37
\$12.12 - \$12.12	4,000	\$ 12.12	0.36	4,000	\$ 12.12
	2,071,249	\$ 2.97	6.08	1,213,362	\$ 2.43

There were 99,000 and 199,000 options exercised in the three months and six months ended June 30, 2011, respectively. The total intrinsic value of options exercised for the three and six months ended June 30, 2011 was \$612,000 and \$1.2 million, respectively. Cash received from options exercised for the three and six months ended June 30, 2011 was \$176,000 and \$533,000, respectively.

## Restricted stock awards

A summary of activity related to restricted stock awards for the six months ended June 30, 2011 is presented below:

Stock Awards	Shares	Weighted-Average Grant Date Fair Value
Non-vested as of January 1, 2011	218,405	\$ 3.30
Granted	16,548	\$ 7.25
Vested	(49,313 )	\$ 1.33
Non-vested as of June 30, 2011	185,640	\$ 4.17

As of June 30, 2011, we had \$613,000 of unrecognized compensation expense, net of forfeitures, related to restricted stock awards, which will be recognized over the weighted average period of 2.1 years. During both the three and six months ended June 30, 2011, 49,313 shares of restricted stock were vested.

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## Note 3. Investments and Fair Value Measurements

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

	June 30, 2011				December 31, 2010			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized (Loss)	Fair Value	Amortized Cost	Gross Unrealized Gain	Gross Unrealized (Loss)	Fair Value
Classified as:								
Cash	\$19,494	\$ —	\$ —	\$19,494	\$22,736	\$ —	\$ —	\$22,736
Cash equivalents:								
Money market fund	1,584	—	—	1,584	988	—	—	988
<b>Total cash and cash equivalents</b>	<b>21,078</b>	<b>—</b>	<b>—</b>	<b>21,078</b>	<b>23,724</b>	<b>—</b>	<b>—</b>	<b>23,724</b>
Investments:								
Certificates of Deposit	2,880	10	(1 )	2,889	3,360	11	—	3,371
US Treasury and agency securities	2,275	—	—	2,275	4,903	8	(2 )	4,909
Corporate bonds	10,042	16	(25 )	10,033	8,961	10	—	8,971
<b>Total investments</b>	<b>15,197</b>	<b>26</b>	<b>(26 )</b>	<b>15,197</b>	<b>17,224</b>	<b>29</b>	<b>(2 )</b>	<b>17,251</b>
<b>Total cash, cash equivalents and investments</b>	<b>\$36,275</b>	<b>\$ 26</b>	<b>\$ (26 )</b>	<b>\$36,275</b>	<b>\$40,948</b>	<b>\$ 29</b>	<b>\$ (2 )</b>	<b>\$40,975</b>
Contractual maturities on investments:								
Due within 1 year	\$3,459			\$3,476	\$10,074			\$10,079
Due after 1 through 5 years	11,738			11,721	7,150			7,172
	\$15,197			\$15,197	\$17,224			\$17,251

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. For the three and six months ended June 30, 2011, we had \$3,000 and \$8,000 gross realized losses on sales of our available-for-sale securities, respectively. For the three and six months ended June 30, 2010, we had \$76,000 and \$196,000 gross realized gains on sales of our available-for-sale securities, 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 our available-for-sale securities as of June 30, 2011 are temporary in nature. We periodically reviewed 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, the financial condition and near-term prospects of the issuer 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

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individual securities have been in a continuous unrealized loss position as of June 30, 2011 (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	\$959	\$(1 )	\$—	\$—	\$959	\$(1 )
Corporate bonds	7,104	(25 )	—	—	7,104	(25 )
Total in loss position	\$8,063	\$(26 )	\$—	\$—	\$8,063	\$(26 )

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## 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 9). The investment balances for the companies accounted for under the equity method are included in “other assets” in the condensed consolidated balance sheets and totaled \$8.0 million and \$4.8 million as of June 30, 2011 and December 31, 2010, respectively. We also maintain minority investments in other unconsolidated privately-held companies which are accounted for under the cost method as of June 30, 2011 and December 31, 2010. As of both June 30, 2011 and December 31, 2010, 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

On January 1, 2008, we adopted ASC topic 820, Fair Value Measurements and Disclosures (“ASC 820”) which defines fair value, establishes a framework for using fair value to measure assets and liabilities, and expands disclosures about fair value measurements. ASC 820 applies whenever other statements require or permit assets or liabilities to be measured at fair value. ASC 820 applies to all financial assets and financial liabilities that are being measured and reported on a fair value basis and requires disclosure that establishes a framework for measuring fair value and expands disclosure about fair value measurements.

Our financial assets and liabilities are valued using market prices on both active markets (Level 1) and less active markets (Level 2). 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 June 30, 2011, we did not have any Level 3 assets or liabilities. This hierarchy requires us to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. On a recurring basis, we measure certain financial assets and liabilities at fair value, primarily consisting of our short-term and long-term investments.

Our cash equivalents and investment instruments are classified within Level 1 or Level 2 of the fair value hierarchy because they are valued using quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency. The type of instrument valued based on quoted market prices in active markets include money market funds, which are generally classified within Level 1 of the fair value hierarchy.

The types of instruments valued based on other observable inputs include investment-grade corporate bonds and US Treasury and agency securities. Such instruments are generally classified within Level 2 of the fair value hierarchy.

The following table summarizes our financial assets and liabilities measured at fair value on a recurring basis in accordance with ASC 820 as of June 30, 2011 (in thousands):

	Balance as of June 30, 2011	Quoted Prices in Active Markets of Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets:			
Cash equivalents and investments:			
Money market fund	\$ 1,584	\$ 1,584	\$ —
Certificates of deposit	2,889	—	2,889
US Treasury and agency securities	2,275	—	2,275

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Corporate bonds	10,033	—	10,033
Total	\$ 16,781	\$ 1,584	\$ 15,197
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 9). We did not record other-than-temporary impairment charges for either of these investments during the six months ended June 30, 2011 and 2010.

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## Note 4. Inventories

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

	June 30, 2011	December 31, 2010
Inventories, net:		
Raw materials	\$20,253	\$ 16,477
Work in process	14,336	15,839
Finished goods	5,064	3,670
	\$39,653	\$ 35,986

## Note 5. Accrued Liabilities

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

	June 30, 2011	December 31, 2010
Accrued compensation and related charges	\$1,238	\$ 1,694
Current portion of royalty payments	1,375	1,622
Accrued product warranty	876	740
Accrued income taxes	1,032	516
Other accrued liabilities	3,160	3,173
	\$7,681	\$ 7,745



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## Note 6. Net Income Per Share

Basic net income 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 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 per share calculations is as follows (in thousands, except per share data):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
<b>Numerator:</b>				
Net income attributable to AXT, Inc.	\$7,062	\$5,535	\$11,270	\$8,115
Less: Preferred stock dividends	(44 )	(44 )	(88 )	(88 )
Net income available to common stockholders	\$7,018	\$5,491	\$11,182	\$8,027
<b>Denominator:</b>				
Denominator for basic net income per share - weighted average common shares	31,831	30,834	31,775	30,789
<b>Effect of dilutive securities:</b>				
Common stock options	1,159	1,338	1,241	1,193
Restricted stock awards	103	—	130	—
Denominator for dilutive net income per common share	33,093	32,172	33,146	31,982
<b>Net income attributable to AXT, Inc. per common share:</b>				
Basic	\$0.22	\$0.18	\$0.35	\$0.26
Diluted	\$0.21	\$0.17	\$0.34	\$0.25
Options excluded from diluted net income per share as the impact is anti-dilutive	418	351	406	355
Restricted stock excluded from diluted net income per share as the impact is anti-dilutive	186	154	186	154

The 883,000 shares of \$0.001 par value Series A preferred stock issued and outstanding as of both June 30, 2011 and December 31, 2010, 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.

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## Note 7. Stockholders' Equity and Other Comprehensive Income (Loss)

Consolidated Statements of Changes in Equity  
(in thousands)

	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, 2010	\$3,532	\$32	\$ 190,021	\$ (82,477 )	\$ 4,652	\$ 115,760	\$ 4,044	\$ 119,804
Common stock options exercised			533			533		533
Stock-based compensation			422			422		422
Comprehensive income:								
Net income				11,270		11,270	3,085	14,355
Dividend paid							(1,636 )	(1,636 )
Change in unrealized (loss) gain on marketable securities					(27 )	(27 )		(27 )
Currency translation adjustment					741	741	176	917
Balance as of June 30, 2011	\$3,532	\$32	\$ 190,976	\$ (71,207 )	\$ 5,366	\$ 128,699	\$ 5,669	\$ 134,368

The components of comprehensive income (loss) are as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
Net income attributable to AXT, Inc.	\$7,062	\$5,535	\$11,270	\$8,115
Other comprehensive income (loss), net of tax:				
Change in foreign currency translation gain (loss), net of tax	759	(158 )	917	(363 )
Change in unrealized gain (loss) on available-for-sale investments, net of tax	20	(274 )	(27 )	(293 )
Total other comprehensive income (loss), net of tax	779	(432 )	890	(656 )
Comprehensive income	7,841	5,103	12,160	7,459
Less: Comprehensive income attributable to the noncontrolling interest	(133 )	—	(176 )	—
Comprehensive income attributable to AXT, Inc.	\$7,708	\$5,103	\$11,984	\$7,459

## Note 8. 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 the principal 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 the consolidated financial statements.

#### Product Information

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2011	2010	2011	2010
Revenue by product type:				
GaAs substrates	\$17,966	\$16,235	\$33,858	\$29,669
InP substrates	1,604	1,077	2,936	1,952
Ge substrates	2,701	1,602	5,691	3,242
Raw materials and other	7,760	4,263	12,112	6,955
Total	\$30,031	\$23,177	\$54,597	\$41,818

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## Geographical Information

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

	Three Months Ended		Six Months Ended	
	June 30,		June 30	
	2011	2010	2011	2010
Revenue by geographic region:				
North America*	\$6,412	\$4,717	\$10,204	\$9,248
Europe	6,048	4,201	11,232	7,969
Japan	4,379	3,504	7,407	6,282
Taiwan	2,745	4,019	5,609	6,601
Asia Pacific	10,447	6,736	20,145	11,718
Total	\$30,031	\$23,177	\$54,597	\$41,818

\*Primarily the United States

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	
	June 30, 2011	December 31, 2010
Long-lived assets by geographic region:		
North America	\$504	\$ 543
China	28,310	23,697
	\$28,814	\$ 24,240

## Significant Customers

One customer represented more than 10% of revenue at 19.0% for the three months ended June 30, 2011 while one customer represented more than 10% of revenue at 18.7% for the three months ended June 30, 2010. One customer represented more than 10% of revenue at 17.6% for the six months ended June 30, 2011 and 2010. Our top five customers represented 36.9% and 42.5% of revenue for the three months ended June 30, 2011 and 2010, respectively. Our top five customers represented 36.5% and 40.5% of revenue for the six months ended June 30, 2011 and 2010, 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 10% or more of our trade accounts receivable balance as of June 30, 2011 at 39.5%. One customer accounted for 10% or more of our trade accounts receivable balance as of December 31, 2010 at 30.4%.

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## Note 9. 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		Accounting Method	Ownership Percentage
	June 30, 2011	December 31, 2010		
Beijing JiYa Semiconductor Material Co., Ltd	\$ 996	\$ 996	Consolidated	46%
Nanjing Jin Mei Gallium Co., Ltd	592	592	Consolidated	83%
Beijing BoYu Semiconductor Vessel Craftwork Technology Co., Ltd	410	410	Consolidated	70%
	\$ 1,998	\$ 1,998		
Jiangsu Dongfang Electric, Inc.	\$ 2,200	\$ —	Equity	46%
Xilingol Tongli Germanium Co. Ltd	3,765	3,437	Equity	25%
Emeishan Jia Mei High Purity Metals Co., Ltd	1,112	1,055	Equity	25%
	\$ 7,077	\$ 4,492		

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 a 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 JiYa 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 a 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 Jin Mei 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 over management and have a majority control of the board. Our chief executive officer is chairman of the BoYu board and our president of China operations and our vice president of China administration are members of the BoYu 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 input from us.

We have added a new joint venture accounted for under the equity method during the three months ended June 30, 2011. The investment balances for the joint ventures accounted for under the equity method are included in other assets in our consolidated balance sheets and totaled \$7.1 million and \$4.5 million as of June 30, 2011 and December 31, 2010, respectively. 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:

these 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.

During the three and six months ended June 30, 2011, the three consolidated joint ventures had income of \$4.5 million and \$7.1 million, respectively, of which \$2.0 million and \$3.1 million, respectively, was allocated to minority interests, resulting in income of \$2.5 million and \$4.0 million, respectively, included in our net income. During the three and six months ended June 30, 2010, the three consolidated joint ventures had income of \$1.3 million and \$1.8 million, respectively, of which \$417,000 and \$547,000, respectively, was allocated to minority interests, resulting in income of \$930,000 and \$1.3 million, respectively, included in our net income.

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We also maintain minority investments indirectly in privately-held companies 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 June 30, 2011 and December 31, 2010, our consolidated joint ventures included these minority investments in “other assets” in the condensed consolidated balance sheets with a carrying value of \$892,000 and \$341,000, respectively.

Our equity earnings from the three minority-owned joint ventures that are not consolidated are recorded as other income, net and totaled \$309,000 and \$382,000 for the three and six months ended June 30, 2011, respectively. Our equity earnings from the two-minority owned joint ventures that are not consolidated are recorded as other income, net and totaled \$61,000 and \$82,000 for the three and six months ended June 30 2010, respectively.

Undistributed retained earnings relating to all our investments in these companies were \$20.7 million and \$16.3 million as of June 30, 2011 and December 31, 2010, respectively.

Our three minority-owned joint ventures that are not consolidated and accounted for under the equity method had the following summarized income information (in thousands) for the three and six months ended June 30, 2011 and 2010.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
Net Sales	\$4,519	\$3,504	\$7,823	\$6,842
Gross profit	2,294	895	3,653	1,790
Operating income	1,587	277	1,950	400
Net income	1,242	244	1,534	326

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 June 30, 2011 and December 31, 2010, 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 10. Commitments and Contingencies

##### Indemnification Agreements

We enter into standard indemnification arrangements 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 may 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.

## Product Warranty

We warrant 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 and six months ended June 30, 2011 and 2010 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
Beginning accrued warranty and related costs	\$798	\$1,086	\$740	\$1,082
Charges/(benefit) to cost of revenue	79	(206 )	137	(146 )
Actual warranty expenditures	—	—	—	(56 )
Ending accrued warranty and related costs	\$877	\$880	\$877	\$880



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## Contractual Obligations

We lease certain office space, manufacturing facilities and equipment under long-term operating leases expiring at various dates through February 2014. The lease agreement for the facility at Fremont, California with approximately 27,760 square feet 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 have 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.

Outstanding contractual obligations as of June 30, 2011 are summarized as follows (in thousands):

Contractual Obligations	Total	Payments due by period			
		Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating leases	\$1,529	\$ 379	\$713	\$437	\$—
Royalty agreement	6,125	1,375	1,825	1,487	1,438
Total	\$7,654	\$ 1,754	\$2,538	\$1,924	\$1,438

## Purchase Obligations

Through the normal course of business, we purchase or place orders for the necessary materials for our products from various suppliers and we commit to purchase products where we may incur a penalty if the agreement was canceled. As of June 30, 2011, we did not have any outstanding material purchase obligations.

## 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 11. Foreign Exchange Transaction Gains/Losses

We incurred foreign exchange transaction exchange gains of \$65,000 and \$230,000 for the three months ended June 30, 2011 and 2010, respectively. We incurred foreign currency transaction exchange losses of \$131,000 and foreign exchange gains of \$162,000 for the six months ended June 30, 2011 and 2010, respectively. These amounts are included in "Other income, net" on the condensed consolidated statements of operations.

## Note 12. Income Taxes

In July 2006, the Financial Accounting Standards Board ("FASB") issued ASC topic 740, Income Taxes ("ASC 740"). ASC 740 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with ASC 740. This interpretation prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. ASC 740 also provides guidance on de-recognition of tax benefits, classification on the balance sheet, interest and penalties, accounting in interim periods, disclosure, and transition. We adopted ASC 740 effective January 1, 2007. We recognize interest and penalties related to uncertain tax positions in income tax expense. As of June 30, 2011, 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, we identified \$16.4 million in the 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, 2009. There was no Federal U.S. tax expense during three and six months ended June 30, 2011 due to the valuation allowance being utilized.

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Note 13. Recent Accounting Pronouncements

With the exception of those stated below, there have been no recent accounting pronouncements or changes in accounting pronouncements during the six months ended June 30, 2011, as compared to the recent accounting pronouncements described in our Annual Report on Form 10-K that are of material significance, or have potential material significance, to the Company.

In June 2011, the FASB issued ASU No. 2011-05, "Presentation of Comprehensive Income (Topic 220)". This standard eliminates the current option to report other comprehensive income and its components in the statement of changes in stockholders' equity. The company will have option to present the total of comprehensive income, the component of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The new requirements are effective as of the beginning of a fiscal year that begins after December 15, 2011 and interim and annual periods thereafter. We are currently evaluating the impact the application of these amendments will have on our consolidated financial statements.

In May 2011, the FASB issued ASU No. 2011-04, "Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U. S. GAAP and IFRS," which amends the current fair value measurement and disclosure guidance to include increased transparency around valuation inputs and investment categorization. This guidance will be effective for interim and annual periods beginning after December 15, 2011. We are currently evaluating the impact the application of these amendments will have on our consolidated financial statements.

Note 14. Subsequent Event

In July 2011, we filed a Form S-3 shelf registration statement with the Securities and Exchange Commission. If it is declared effective by the SEC, we may 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.

**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 our positioning with respect to our leverage of our PRC-based manufacturing capabilities and access to favorably priced raw materials, industry trends, results of operations, customer demand, our ability to expand our markets and increase sales, customer qualifications of our products, gross margins, the impact of the adoption of certain accounting pronouncements, our investments in capital projects, our belief that our stock option program helps us attract, motivate and retain high quality employees, 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 our 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, 2010 and the condensed consolidated financial statements included elsewhere in this report.

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## Overview

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

Substrates	Product	Diameter	Applications
GaAs (semi-insulating)		2", 3", 4", 5"; 6"	Power amplifiers and radio frequency integrated circuits for wireless handsets (cell phones) <ul style="list-style-type: none"> <li>· Direct broadcast television</li> <li>· High-performance transistors</li> <li>· Satellite communications</li> </ul>
GaAs (semi-conducting)		2", 3", 4"	High brightness light emitting diodes <ul style="list-style-type: none"> <li>· Lasers</li> <li>· Optical couplers</li> </ul>
InP		2", 3", 4"	Broadband and fiber optic communications
Ge		2", 4", 6"	Satellite and terrestrial solar cells <ul style="list-style-type: none"> <li>· Optical applications</li> </ul>

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, paralytic boron nitride (pBN) crucibles and boron oxide. Our ownership interest in these entities ranges from 25% to 83%. We consolidate, for accounting purposes, the joint ventures in which we own a majority or controlling financial interest and employ equity accounting for the joint ventures in which we have a 25% to 46% interest in each. 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 independent sales representatives in Europe and Asia to market our substrates. We believe that, as the demand for compound semiconductor substrates is expected to increase, we are positioned to leverage our PRC-based manufacturing capabilities and access to favorably priced raw materials to increase our market share.

## 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.

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We provide 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 June 30, 2011 and December 31, 2010, our accounts receivable, net, balance was \$23.0 million and \$23.1 million, respectively, which was net of an allowance for doubtful accounts of \$1,000 and \$99,000, respectively. During three and six months ended June 30, 2011, we decreased this allowance for doubtful accounts by \$54,000 and \$98,000, respectively, primarily due to receipt of some long past due 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 June 30, 2011 and December 31, 2010, our allowance for sales returns was \$331,000 and \$462,000, 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 June 30, 2011 and December 31, 2010, accrued product warranties totaled \$877,000 and \$740,000, 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.

### 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 June 30, 2011 and December 31, 2010, we had an inventory reserve of \$10.6 million and \$11.5 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.



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### Fair Value of Investments

In the current market environment, the assessment of the fair value of debt instruments can be difficult and subjective. Although volume of trading activity of certain debt instruments has increased since 2010, and the rapid changes occurring in today's financial markets can lead to changes in the fair value of financial instruments in relatively short periods of time. 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 whether a market is considered active requires management judgment. Our assessment of an active market for our marketable debt instruments generally takes into consideration activity during each week of the one-month period prior to the valuation date of each individual instrument, including the number of days each individual instrument trades and the average weekly trading volume in relation to the total outstanding amount of the issued instrument.

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 June 30, 2011, 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).

### Impairment of Long-Lived Assets

We evaluate the recoverability of property, equipment and intangible assets in accordance with ASC topic 360, Impairment of Disposal of Long-Lived Assets ("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.

## Stock-based Compensation

We grant options to substantially all management employees and believe that this program helps us to attract, motivate and retain high quality employees, to the ultimate benefit of our stockholders. We account for stock-based compensation in accordance with ASC topic 718, Stock-based Compensation (“ASC 718”), using the modified prospective method. We utilize the Black-Scholes option pricing model to estimate the grant date fair value of employee stock compensation awards, which requires the input of highly subjective assumptions, including expected volatility and expected term. Historical volatility was used in estimating the fair value of our stock options awards, while the expected term for our options was estimated based on historical option exercise behavior and post-vesting forfeitures of options by our employees. Further, we estimate 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.

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We recognize the compensation costs net of an estimated forfeiture rate over the requisite service period of the options award, which is generally the vesting term of four years. The cost of restricted stock awards is determined using the fair value of our common stock on the date of grant. 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 12—“Income Taxes” in the notes to condensed financial statements for additional information.

## Results of Operations

## Revenue

	Three Months Ended June 30,		Increase (Decrease)	% Change	
	2011	2010	(\$)		
	in thousands)				
GaAs	\$17,966	\$ 16,235	\$1,731	10.7	%
InP	1,604	1,077	527	48.9	%
Ge	2,701	1,602	1,099	68.6	%
Raw materials and other	7,760	4,263	3,497	82.0	%
Total revenue	\$30,031	\$ 23,177	\$6,854	29.6	%

Revenue increased \$6.9 million, or 29.6%, to \$30.0 million for the three months ended June 30, 2011 from \$23.2 million for the three months ended June 30, 2010. Total GaAs substrate revenue increased \$1.7 million, or 10.7%, to \$18.0 million for the three months ended June 30, 2011 from \$16.2 million for the three months ended June 30, 2010. The increase in revenue was primarily due to the growing demand in the light emitting diode (LED) market that uses semi-conducting (SC) substrates, partially offset by reduced orders from some semi-insulating (SI) customers in the wireless devices market who reduced orders while utilizing excess inventory.

Sales of 5 inch and 6 inch diameter GaAs substrates were \$6.3 million for the three months ended June 30, 2011 compared to \$6.8 million for the three months ended June 30, 2010. The decrease in revenue from larger diameter substrates was primarily due to reduced orders from customers in the wireless devices market utilizing excess inventory compared to the same period in the prior year.

Sales of 2 inch, 3 inch and 4 inch diameter GaAs substrates were \$11.7 million for the three months ended June 30, 2011 compared with \$9.4 million for the three months ended June 30, 2010. The increase in revenue from smaller diameter substrates was due to increasing worldwide adoption and investment in LED technology in many

applications.

InP substrate revenue increased \$527,000, or 48.9%, to \$1.6 million for the three months ended June 30, 2011 from \$1.1 million for the three months ended June 30, 2010 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 increased \$1.1 million, or 68.6%, to \$2.7 million for the three months ended June 30, 2011 from \$1.6 million for the three months ended June 30, 2010. Our Ge substrate revenue increased as demand from our customers increases for concentrated photovoltaic solar applications. We continued to make progress in our penetration of the solar cell market, particularly in satellite applications.

Raw materials revenue increased \$3.5 million, or 82.0%, to \$7.8 million for the three months ended June 30, 2011 from \$4.3 million for the three months ended June 30, 2010. The increase in raw materials revenue was primarily due to an increase in demand from new customers and from existing customers for 4N raw gallium, as well as from increased selling prices based on the prevailing market demand.



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North America *	\$6,412		\$4,717		\$1,695	35.9	%
% of total revenue	21.4	%	20.4	%			
Europe	6,048		4,201		1,847	44.0	%
% of total revenue	20.1	%	18.1	%			
Japan	4,379		3,504		875	25.0	%
% of total revenue	14.6	%	15.1	%			
Taiwan	2,745		4,019		(1,274 )	(31.7 )	%
% of total revenue	9.1	%	17.3	%			
Asia Pacific (excluding Japan and Taiwan)	10,447		6,736		3,711	55.1	%
% of total revenue	34.8	%	29.1	%			
Total revenue	\$30,031		\$23,177		\$6,854	29.6	%

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\*Primarily the United States

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Revenue from customers in North America increased by \$1.7 million, or 35.9%, to \$6.4 million for the three months ended June 30, 2011 from \$4.7 million for the three months ended June 30, 2010 primarily due to increased demand for both semi-insulating substrates and InP substrates.

Revenue from customers in Europe increased by \$1.8 million, or 44.0%, to \$6.0 million for the three months ended June 30, 2011 from \$4.2 million for the three months ended June 30, 2010. This increase was primarily due to increased semi-conducting substrate sales and germanium substrates sales to customers in Germany.

Revenue from customers in Japan increased by \$875,000, or 25.0%, to \$4.4 million for the three months ended June 30, 2011 from \$3.5 million for the three months ended June 30, 2010. The increase was primarily due to increased raw material sales of 4N gallium and semi-conducting substrate sales.

Revenue from customers in Taiwan decreased by \$1.3 million, or 31.7%, to \$2.7 million for the three months ended June 30, 2011 from \$4.0 million for the three months ended June 30, 2010. The decrease in revenue was primarily due to reduced orders from customers in the wireless devices market utilizing excess inventory.

Revenue from customers in Asia Pacific (excluding Japan and Taiwan) increased by \$3.7 million, or 55.1%, to \$10.4 million for the three months ended June 30, 2011 from \$6.7 million for the three months ended June 30, 2010. The increase was primarily due to increased raw material sales of 4N gallium and increased sales of semi-conducting substrate used in the LED market in China.

	Six Months Ended		Increase (Decrease)	% Change	
	2011	2010			
	(\$ in thousands)				
North America *	\$10,204	\$9,248	\$956	10.3	%
% of total revenue	18.7	% 22.1	%		
Europe	11,232	7,969	3,263	40.9	%
% of total revenue	20.6	% 19.1	%		
Japan	7,407	6,282	1,125	17.9	%
% of total revenue	13.6	% 15.0	%		
Taiwan	5,609	6,601	(992)	(15.0)	) %
% of total revenue	10.3	% 15.8	%		
Asia Pacific (excluding Japan and Taiwan)	20,145	11,718	8,427	72.0	%
% of total revenue	36.9	% 28.0	%		
Total revenue	\$54,597	\$41,818	\$12,779	30.6	%

\*Primarily the United States

Revenue from customers in North America increased by \$956,000, or 10.3%, to \$10.2 million for the six months ended June 30, 2011 from \$9.2 million for the six months ended June 30, 2010 primarily due to increased demand for InP substrate.

Revenue from customers in Europe increased by \$3.3 million, or 40.9%, to \$11.2 million for the six months ended June 30, 2011 from \$8.0 million for the six months ended June 30, 2010. This increase was primarily due to increased semi-conducting substrate sales and germanium substrates sales to customers in Germany and United Kingdom.

Revenue from customers in Japan increased by \$1.1 million, or 17.9%, to \$7.4 million for the six months ended June 30, 2011 from \$6.3 million for the six months ended June 30, 2010. The increase was primarily due to increased

raw material sales of 4N gallium and semi-conducting substrate sales.

Revenue from customers in Taiwan decreased by \$992,000, or 15.0%, to \$5.6 million for the three months ended June 30, 2011 from \$6.6 million for the six months ended June 30, 2010. The decrease in revenue was primarily due to reduced orders from customers in the wireless devices market utilizing excess inventory.

Revenue from customers in Asia Pacific (excluding Japan and Taiwan) increased by \$8.4 million, or 72.0%, to \$20.1 million for the six months ended June 30, 2011 from \$11.7 million for the six months ended June 30, 2010. The increase was primarily due to increased raw material sales of 4N gallium and increased semi-conducting substrates used in the LED market in China, and GaAs substrate sales in Singapore and Korea.



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## Gross Margin

	Three Months Ended		Increase (Decrease)	% Change
	June 30, 2011	2010		
	(\$ in thousands)			
Gross profit	\$14,026	\$8,535	\$5,491	64.3 %
Gross Margin %	46.7 %	36.8 %		

Gross margin increased to 46.7% of total revenue for the three months ended June 30, 2011 from 36.8% of total revenue for the three months ended June 30, 2010. Sales product mix, and process improvements in production such as longer ingots and first pass yield improvements in ingots continued to contribute to higher gross margins, as well as raw material sales with higher gross margins due to higher gallium selling prices compared to the same period last year.

	Six Months Ended		Increase (Decrease)	% Change
	June 30, 2011	2010		
	(\$ in thousands)			
Gross profit	\$24,686	\$15,267	\$9,419	61.7 %
Gross Margin %	45.2 %	36.5 %		

Gross margin increased to 45.2% of total revenue for the six months ended June 30, 2011 from 36.5% of total revenue for the six months ended June 30, 2010. Sales product mix, and process improvements in production such as longer ingots and first pass yield improvements in ingots continued to contribute to higher gross margins, as well as raw material sales with higher gross margins due to higher gallium selling prices compared to the same period last year.

## Selling, General and Administrative Expenses

	Three Months Ended		Increase (Decrease)	% Change
	June 30, 2011	2010		
	(\$ in thousands)			
Selling, general and administrative expenses	\$3,714	\$3,039	\$675	22.2 %
% of total revenue	12.4 %	13.1 %		

Selling, general and administrative expenses increased \$675,000 or 22.2%, to \$3.7 million for the three months ended June 30, 2011 from \$3.0 million for the three months ended June 30, 2010. The increase was primarily due to increased health insurance costs in China compared to a one-time health insurance refund received in the same period last year, increased labor costs from annual salary increases, and new taxes levied on all foreign-owned companies in China.

	Six Months Ended		Increase (Decrease)	% Change
	June 30, 2011	2010		
	(\$ in thousands)			
Selling, general and administrative expenses	\$7,404	\$6,458	\$946	14.6 %
% of total revenue	13.6 %	15.4 %		

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Selling, general and administrative expenses increased \$946,000, or 14.6%, to \$7.4 million for the six months ended June 30, 2011 from \$6.5 million for the six months ended June 30, 2010. The increase was primarily due to increased health insurance cost in China compared to a one-time health insurance refund received in the same period last year, increased labor costs from annual salary increases, new taxes levied on all foreign-owned companies in China, and increased legal fees incurred in connection with the royalty negotiation with Sumitomo.

Research and Development

	Three Months Ended		Increase (Decrease)	% Change
	2011	2010		
	June 30,			
	(\$ in thousands)			
Research and development	\$699	\$515	\$184	35.7 %
% of total revenue	2.3	% 2.2	%	

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Research and development expenses increased \$184,000, or 35.7%, to \$699,000 for the three months ended June 30, 2011 from \$515,000 for the three months ended June 30, 2010. The increase was primarily due to new product testing costs and related personnel costs to develop and improve our products and to qualify for Chinese government tax-incentive program.

	Six Months Ended		Increase (Decrease)	% Change
	2011	2010		
	June 30,			
	(\$ in thousands)			
Research and development	\$ 1,204	\$ 966	\$ 238	24.6 %
% of total revenue	2.2	% 2.3	%	

Research and development expenses increased \$238,000, or 24.6%, to \$1.2 million for the six months ended June 30, 2011 from \$966,000 for the six months ended June 30, 2010. The increase was primarily due to new product testing costs and related personnel costs to develop and improve our products and to qualify for Chinese government tax-incentive program.

Interest Income (expense), net

	Three Months Ended		Increase (Decrease)	% Change
	2011	2010		
	June 30,			
	(\$ in thousands)			
Interest income (expense) , net	\$ 69	\$ (25 )	\$ 94	NM
% of total revenue	0.2	% 0.1	%	

NM = % not meaningful

Interest income (expense), net was \$69,000 income for the three months ended June 30, 2011 and \$25,000 interest expense for the three months ended June 30, 2010. Interest income, net for the three months ended June 30, 2011 was higher compared to the three months ended June 30, 2010 was due to higher interest income from securities that matured and the absence of interest expense for the tenant improvement loan at our Fremont, U.S. offices, which was paid in full in September 2010.

	Six Months Ended		Increase (Decrease)	% Change
	2011	2010		
	June 30,			
	(\$ in thousands)			
Interest income (expense), net	\$ 156	\$ (10 )	\$ 166	NM
% of total revenue	0.3	% 0.0	%	

NM = % not meaningful

Interest income (expense), net was \$156,000 income for the six months ended June 30, 2011 and \$10,000 interest expense for the six months ended June 30, 2010. Interest income, net for the six months ended June 30, 2011 was higher compared to the six months ended June 30, 2010 was due to higher interest income from securities that matured and the absence of interest expense for the tenant improvement loan at our Fremont, U.S. offices, which was paid in full in September 2010.

## Other Income, net

	Three Months Ended		Increase (Decrease)	% Change
	2011	2010		
	June 30,			
	(\$ in thousands)			
Other income, net	\$450	\$1,556	\$(1,106 )	(71.1 )%
% of total revenue	1.5	% 6.7	%	

Other income, net was \$450,000 for the three months ended June 30, 2011 primarily due to investment income from minority-owned joint ventures that are not consolidated and unrealized foreign exchange gains on our Yen denominated accounts receivable. Other income, net was \$1.6 million for the three months ended June 30, 2010 primarily due to \$1.2 million sales tax refund and unrealized foreign exchange gains and investment income from minority-owned joint ventures that are not consolidated.

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	Six Months Ended		Increase (Decrease)	% Change
	2011	June 30, 2010		
	(\$ in thousands)			
Other income, net	\$ 87	\$ 1,635	\$ (1,548)	(94.7)%
% of total revenue	0.2%	3.9%		

Other income, net was \$87,000 for the six months ended June 30, 2011 primarily due to investment income from minority-owned joint ventures that are not consolidated, offset by withholding tax on foreign dividends from joint ventures and unrealized foreign exchange losses on our Yen denominated accounts receivable. Other income, net was \$1.6 million for the six months ended June 30, 2010 primarily due to a \$1.2 million sales tax refund and realized and unrealized foreign exchange gains and investment income from minority-owned joint ventures that are not consolidated.

## Provision for Income Taxes

	Three Months Ended		Increase (Decrease)	% Change
	2011	June 30, 2010		
	(\$ in thousands)			
Provision for income taxes	\$ 1,064	\$ 560	\$ 504	90.0 %
% of total revenue	3.5 %	2.4 %		

Provision for income taxes for three months ended June 30, 2011 and 2010 was mostly related to our China subsidiary and our China joint venture operations, with the increase primarily due to increased sales and increased net income in the second quarter of 2011 compared to the same period last year.

	Six Months Ended		Increase (Decrease)	% Change
	2011	June 30, 2010		
	(\$ in thousands)			
Provision for income taxes	\$ 1,966	\$ 806	\$ 1,160	143.9 %
% of total revenue	3.6 %	1.9 %		

Provision for income taxes for six months ended June 30, 2011 and 2010 was mostly related to our China subsidiary and our China joint venture operations, with the increase primarily due to increased sales and increased net income in the first six months of 2011 compared to the same period last year.

	Noncontrolling interest		Increase (Decrease)	% Change
	Three Months Ended			
	2011	June 30, 2010		
	(\$ in thousands)			
Noncontrolling interest	\$ 2,006	\$ 417	\$ 1,589	381.1 %
% of total revenue	6.7 %	1.8 %		

Noncontrolling interest increased \$1.6 million to \$2.0 million for the three months ended June 30, 2011 from \$417,000 for the three months ended June 30, 2010 as a result of higher profitability from our China joint venture operations as raw materials sales have increased due to increased demand compared to the same period last year.

	Six Months Ended June 30,				
	2011	2010	Increase (Decrease)	% Change	
	(\$ in thousands)				
Noncontrolling interest	\$3,085	\$547	\$2,538	464.0	%
% of total revenue	5.7	% 1.3	%		

Noncontrolling interest increased \$2.5 million to \$3.1 million for the six months ended June 30, 2011 from \$547,000 for the six months ended June 30, 2010 as a result of higher profitability from our China joint venture operations as raw materials sales have increased due to increased demand compared to the same period last year.

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Liquidity and Capital Resources

As of June 30, 2011, our principal sources of liquidity were \$36.3 million, consisting of cash and cash equivalents of \$21.1 million, short-term investments of \$3.5 million and long-term investments of \$11.7 million. 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 government bonds and high-grade commercial debt instruments.

Cash and cash equivalents of \$21.1 million decreased by \$2.6 million in the six months ended June 30, 2011 compared to December 31, 2010 primarily due to investments in new joint ventures in China and purchases of property, plant and equipment.

Net cash provided by operating activities of \$4.9 million for the six months ended June 30, 2011 was primarily comprised of our net income of \$14.4 million, adjusted for non-cash items of depreciation of \$1.7 million, stock-based compensation of \$422,000, amortization of marketable securities premium of \$187,000, realized loss on sale of investments of \$8,000 and a net increase of \$11.7 million in assets and liabilities. The \$11.7 million net increase in assets and liabilities primarily resulted from a \$3.6 million increase in inventories, a \$4.5 million increase in prepaid expenses and other current assets, a \$3.4 million decrease in accounts payable, a \$99,000 decrease in accrued liabilities, and a \$613,000 decrease in other long-term liabilities, partially offset by a \$156,000 decrease in accounts receivable and a \$309,000 decrease in other assets.

Net cash provided by operating activities of \$4.9 million for the six months ended June 30, 2010 was primarily comprised of our net income of \$8.7 million, adjusted for non-cash items of depreciation of \$1.4 million, stock-based compensation of \$233,000, partially offset by a realized gain on sale of investments of \$196,000, and a net increase of \$5.3 million in assets and liabilities. The \$5.3 million net increase in assets and liabilities primarily resulted from a \$3.3 million increase in accounts receivable, a \$1.7 million increase in prepaid expenses, a \$1.5 million decrease in accounts payable, partially offset by a \$869,000 increase in accrued liabilities, and a \$350,000 decrease in inventories.

Net cash used in investing activities of \$6.8 million for the six months ended June 30, 2011 was primarily from the purchase of property, plant and equipment of \$6.0 million, investments in new joint ventures of \$2.6 million and by the purchase of investments totaling \$11.8 million offset by the sale of investments totaling \$13.7 million.

Net cash used in investing activities of \$1.4 million for the six months ended June 30, 2010 was primarily from the purchase of property, plant and equipment of \$1.2 million and by the purchase of investments totaling \$11.2 million offset by the sale of investments totaling \$11.0 million.

We expect to invest up to approximately \$6.0 million in capital projects at our China facilities for the remainder of 2011 to expand the manufacturing capabilities to optimize the utilization of our resources.

Net cash used in financing activities of \$1.1 million for the six months ended June 30, 2011 consisted of \$1.6 million in dividends paid by our joint ventures partially offset by net proceeds of \$533,000 on the issuance of common stock pursuant to stock option exercises.

Net cash used in financing activities of \$64,000 for the six months ended June 30, 2010 consisted of dividends paid by our joint ventures and long term debt payments of \$230,000, partially offset by net proceeds of \$166,000 on the issuance of common stock pursuant to stock option exercises.

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 at terms acceptable to us. On July 27, 2011, we filed a registration statement on Form S-3 with the Securities and Exchange Commission (SEC). If it is declared effective by the 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.

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."



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We lease certain office space, manufacturing facilities and equipment under long-term operating leases expiring at various dates through February 2014. The lease agreement for the facility at Fremont, California with approximately 27,760 square feet 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. Total rent expenses under these operating leases were approximately \$180,000 and \$154,000 for the six months ended June 30, 2011 and 2010, respectively.

We have 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.

Outstanding contractual obligations as of June 30, 2011 are summarized as follows (in thousands):

Contractual Obligations	Total	Payments due by period			
		Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating leases	\$1,529	\$ 379	\$713	\$437	\$—
Royalty agreement	6,125	1,375	1,825	1,487	1,438
Total	\$7,654	\$ 1,754	\$2,538	\$1,924	\$1,438

## Recent Accounting Pronouncements

With the exception of those stated below, there have been no recent accounting pronouncements or changes in accounting pronouncements during the six months ended June 30, 2011, as compared to the recent accounting pronouncements described in our Annual Report on Form 10-K for the year ended December 31, 2010, that are of material significance, or potential significance, to the Company.

In June 2011, the FASB issued ASU No. 2011-05, "Presentation of Comprehensive Income (Topic 220)". This standard eliminates the current option to report other comprehensive income and its components in the statement of changes in stockholders' equity. The company will have option to present the total of comprehensive income, the component of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The new requirements are effective as of the beginning of a fiscal year that begins after December 15, 2011 and interim and annual periods thereafter. We are currently evaluating the impact the application of these amendments will have on our consolidated financial statements.

In May 2011, the FASB issued ASU No. 2011-04, "Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U. S. GAAP and IFRS," which amends the current fair value measurement and disclosure guidance to include increased transparency around valuation inputs and investment categorization. This guidance will be effective for interim and annual periods beginning after December 15, 2011. We are currently evaluating the impact the application of these amendments will have on our consolidated financial statements.

In various areas, including revenue recognition, stock option accounting, accounting standards and practices continue to evolve. Additionally, the SEC and the FASB's Emerging Issues Task Force continue to address revenues, stock option accounting related accounting issues. We believe that we are in compliance with all of the rules and related guidance as they currently exist. However, any changes to accounting principles generally accepted in the United States of America in these areas could impact the future accounting of our operations.

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, where our operating expenses are predominantly in the local currency. Since most of our operations are conducted in China, most of our costs are incurred in Chinese currency, 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 these subsidiaries, as well as in translation of the assets and liabilities of these assets 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 systems with opportunistic interventions. 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. The U.S. is currently pressuring China to reevaluate the renminbi, which could adversely affect our operation costs and results of operations. If we do not effectively manage against these risks, our cash flows and financial condition may be adversely affected.

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In July 2005, China agreed to a shift in Chinese currency policy. It established a 2% revaluation of the renminbi and referenced the renminbi to a basket of currencies, with a daily trading band of +/-0.3%. Depending on market conditions and the state of the Chinese economy, it is possible that China will make more adjustments in the future. Over the next five to ten years, China may move to a managed float system, with opportunistic interventions. This may negatively impact the United States dollar and U.S. interest rates, which, in turn, could negatively impact our operating results and financial condition. The functional currency of our Chinese subsidiary, including our joint ventures, is the local currency; since most of our operations are conducted in China, most of our costs are incurred in Chinese currency, 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 these subsidiaries, as well as in translation of the assets and liabilities of these assets at each balance sheet date. These risks may be increased by the fluctuation and revaluation of the Chinese renminbi. 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 the 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 had previously purchased foreign exchange contracts to hedge against certain trade accounts receivable denominated in Japanese yen. The change in the fair value of the forward contracts was recognized as part of the related foreign currency transactions as they occur. As of June 30, 2011 and December 31, 2010, we had no outstanding commitments with respect to foreign exchange contracts.

During the three and six months ended June 30, 2011, we recorded net a foreign exchange gain of \$65,000 and a net foreign exchange loss of \$131,000 respectively, included as part of other income in our consolidated statements of operations. We incurred foreign currency transaction exchange gains and losses due to operations in general. It is uncertain whether these currency trends will continue. 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 materially adverse effect on our operating results and cash flows. During the three and six months ended June 30, 2011, we recorded unrealized foreign currency gains of \$626,000 and \$741,000 respectively, included in the balance of accumulated other comprehensive income on our consolidated balance sheet.

**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):

	Balance as of June 30, 2011	Current Interest Rate	Projected Annual Interest Income/(Expense)	Proforma 10% Interest Rate Decline	Proforma 10% Interest Rate Increase
Instrument			Income/(Expense)	Income/(Expense)	Income/(Expense)
Cash	\$ 19,494	0.20	% \$ 39	\$ 35	\$ 43
Cash equivalents	1,584	0.20	3	3	3
Investment in debt and equity instruments	15,197	3.49	530	477	583
			\$ 572	\$ 515	\$ 629

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, commercial paper instruments, and investment grade 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 are in high-quality securities placed with major banks and financial institutions and commercial paper. We have no investments in auction rate securities.

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### Accounts Receivable Risk

We perform periodic credit evaluations of our customers' financial condition and generally do not require collateral. One customer accounted for 10% or more of our trade accounts receivable balance as of June 30, 2011 at 39.5%. One customer accounted for 10% or more of our trade accounts receivable balance at 30.4% as of December 31, 2010.

### Equity Risk

We maintain minority investments directly, and indirectly through our 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 consolidated through joint ventures 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. 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 June 30, 2011 and December 31, 2010, the direct minority investments totaled \$392,000, and the indirect minority investments totaled \$892,000 and \$341,000, respectively.

## 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 June 30, 2011 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.

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Risks Related to Our General Business

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.

Our business and operating results were significantly impacted by general economic conditions in 2009. Although we saw improvement in the demand environment for our products worldwide in 2010 and in the first six months of 2011, we could experience significant adverse effects if there is repeat decline in worldwide markets and overall economic difficulties. The U.S. and global economy had experienced a significant downturn due to the effects of the credit market crisis, slower economic activity and a generally negative economic outlook, a decrease in consumer and business confidence and liquidity concerns, as well as concerns over the U.S. government debt. Global market and economic conditions continue to be volatile. 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. 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.

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 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 current difficult economic 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.



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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 sales to new customers. In such an event, our gross margin may be adversely impacted. In addition, one of our joint venture companies 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.

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. We have experienced these conditions in our business in the past, including most recently in 2009, and may experience renewed, and possibly more severe and prolonged, downturns in the future as a result of such cyclical changes. 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 because of 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 (loss).

Our industry has in the past experienced periods of oversupply that result 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 creates pressure on our revenue, gross margins and net income (loss). 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. 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. Increased price competition has resulted, causing pressure on our net

sales, gross margin and net income (loss). 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.

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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 six months ended June 30, 2011 and the year ended December 31, 2010, IQE Group represented 18% and 19%, respectively, of our revenue. Our top five customers represented 37% and 40% of revenue for the six months ended June 30, 2011 and the year ended December 31, 2010, 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, 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.

We depend on high utilization of our manufacturing capacity.

An important factor in our success is the extent to which we are able to utilize the available capacity in our Beijing facility. As many of our costs are fixed, a reduction in capacity utilization, as well as changes in other factors such as reduced yield or unfavorable product mix, could reduce our profit margins and adversely affect our operating results. A number of factors and circumstances may reduce utilization rates, including periods of industry overcapacity, low levels of customer orders, operating inefficiencies, mechanical failures and disruption of operations due to expansion, power interruptions, fire, flood or other natural disasters or calamities.

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 material transportation and power plants to clean the air. 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 material transport 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, such as occurred during 2008. Any of these restrictions could materially and adversely impact our results of operations and our financial condition.

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 many of our products, which caused customers to return products to us, reduce orders for our products, or both. Although our quality has improved, resulting in some increases in product sales, we believe that we continue to experience some reduction in orders as a result of our prior 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.

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.

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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.

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 three 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. 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 delays 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.

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, 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:

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greater experience in the business;

more manufacturing experience;

extensive intellectual property;

broader name recognition; and

significantly greater financial, technical and marketing resources.

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

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 of ours 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.

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.

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 the current market conditions continue to deteriorate, we may experience increased collection times and greater write-offs, either of which could have a material adverse effect on our cash flow.

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.



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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.

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, 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 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, each of which is located in China, 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.

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 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, paralytic boron nitride (pBN) crucibles and boron oxide. 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 25% to 83%. We consolidate the joint ventures in which we own a majority or controlling financial interest and employ equity accounting for the joint ventures in which we have a 25% to 46% 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.

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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, pursuit of us could occur if we are deemed to be the most financially viable of the partners.

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 a significant event

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 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.

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Risks Related to International Aspects of Our Business

Changes in tariffs, import restrictions, export restrictions 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 2006, tax authorities in the PRC changed the treatment of refunds of value-added taxes that companies pay when they purchase certain raw materials, including gallium and arsenic. The cumulative effect is that our PRC joint venture companies no longer receive a refund of value-added tax for exports of gallium or arsenic, including certain shipments to our wholly-owned PRC subsidiary that are treated as exports under PRC tax regulations. 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. We have continued to experience some issues relating to haze reduction. 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. 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 77% and 78% our total revenue for the six months ended June 30, 2011 and the year ended December 31, 2010 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, an increasing 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;

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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.

Our sales are denominated in U.S. dollars, except for sales to 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.

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, and as a result, we closed most of our operations for a week in late July 2004 in conformance with this policy.

In 2006 we were able to switch the electrical supply for our manufacturing facility onto the same power grid as that used by vital PRC government services such as hospitals and police. However, if even despite this switch, further problems with power shortages occur in the future, and 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.

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.

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. None of our substrate competitors is as dependent on manufacturing facilities in China as we are. 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.



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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 are not able to fund our capital commitments to expand our facilities in China, our business and operating results may be adversely affected.

We expect to invest up to approximately \$6.0 million in capital projects at our China facilities for the remainder of 2011 to expand the manufacturing capabilities to optimize the utilization of our resources. If 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. While we have filed a registration statement on Form S-3 with the SEC to allow us to offer up to \$60 million of securities in one or more offerings, there is no assurance that the registration statement will be declared effective by the SEC or that we will be able to successfully complete any offerings pursuant to the registration statement.

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.

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

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.

We have adopted a preferred stock purchase rights plan intended to guard against certain takeover tactics. The adoption of this plan was not in response to any proposal to acquire us, and the board is not aware of any such effort. The existence of this plan could also have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock.

In addition, 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:

66 2/3% 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 GlobalSelect 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.

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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.

### 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 two separate 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 the 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 these changes 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.

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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.

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.

We have in the past been the subject of claims made by the California Occupational Safety and Health Administration in an investigation primarily regarding impermissible levels of potentially hazardous materials in certain areas of our manufacturing facility in Fremont, California. We were also previously the target of press allegations and correspondence purportedly on behalf of current and/or former employees concerning our environmental compliance programs and exposure of our employees to hazardous materials. In addition, 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. Reserved

Item 5. Other Information

None

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## 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.

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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: August 9, 2011

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)

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