

AXT INC  
Form 10-Q  
November 09, 2012

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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 September 30, 2012

Or

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

for the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 000-24085

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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 November 2, 2012
Common Stock, \$0.001 par value	32,378,455

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## PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements (Unaudited)

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

	September 30, 2012 (unaudited)	December 31, 2011 (1)
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 35,503	\$ 26,156
Short-term investments	10,577	5,505
Accounts receivable, net of allowances of \$167 and \$124 as of September 30, 2012 and December 31, 2011, respectively	16,888	17,966
Inventories	39,932	46,012
Related party notes receivable – current	414	412
Prepaid expenses and other current assets	5,125	7,052
Total current assets	108,439	103,103
Long-term investments	5,367	8,981
Property, plant and equipment, net	36,201	34,282
Related party notes receivable – long-term	2,031	2,021
Other assets	14,183	14,101
Total assets	\$ 166,221	\$ 162,488
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 4,570	\$ 3,286
Accrued liabilities	6,800	7,597
Total current liabilities	11,370	10,883
Long-term portion of royalty payments	3,525	4,125
Other long-term liabilities	157	431
Total liabilities	15,052	15,439
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 2,000 shares authorized; 883 shares issued and outstanding as of September 30, 2012 and December 31, 2011, respectively (Liquidation preference of \$5.9 million and \$5.8 million as of September 30, 2012 and December 31, 2011, respectively)	3,532	3,532
Common stock, \$0.001 par value per share; 70,000 shares authorized; 32,378 and 32,222 shares issued and outstanding as of September 30, 2012 and December 31, 2011, respectively	32	32
Additional paid-in capital	192,703	191,554
Accumulated deficit	(58,291 )	(62,157 )
Accumulated other comprehensive income	6,006	5,818
Total AXT, Inc. stockholders' equity	143,982	138,779

Noncontrolling interests	7,187	8,270
Total stockholders' equity	151,169	147,049
Total liabilities and stockholders' equity	\$ 166,221	\$ 162,488

See accompanying notes to condensed consolidated financial statements.

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(1) The Condensed Consolidated Balance Sheet at December 31, 2011 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 September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
Revenue	\$20,808	\$28,305	\$69,447	\$82,902
Cost of revenue	15,342	16,068	48,279	45,979
Gross profit	5,466	12,237	21,168	36,923
Operating expenses:				
Selling, general and administrative	3,950	3,555	11,709	10,959
Research and development	844	612	2,593	1,816
Total operating expenses	4,794	4,167	14,302	12,775
Income from operations	672	8,070	6,866	24,148
Interest income, net	52	103	202	259
Other income, net	492	356	314	443
Income before provision for (benefit from) income taxes	1,216	8,529	7,382	24,850
Provision for (benefit from) income taxes	(228)	) 667	559	2,633
Net income	1,444	7,862	6,823	22,217
Less: Net income attributable to noncontrolling interest	(512)	) (1,378)	) (2,957)	) (4,463)
Net income attributable to AXT, Inc.	\$932	\$6,484	\$3,866	\$17,754
Net income attributable to AXT, Inc. per common share:				
Basic	\$0.03	\$0.20	\$0.12	\$0.55
Diluted	\$0.03	\$0.19	\$0.11	\$0.53
Weighted average number of common shares outstanding:				
Basic	32,183	31,944	32,118	31,832
Diluted	32,769	33,126	32,911	33,140

See accompanying notes to condensed consolidated financial statements.

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AXT, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
(Unaudited, in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
Net income	\$1,444	\$7,862	\$6,823	\$22,217
Other comprehensive income (loss), net of tax:				
Change in cumulative foreign currency translation adjustment, net of tax	(192 )	460	119	1,377
Change in unrealized gain (loss) on available-for-sale investments, net of tax	9	(191 )	115	(218 )
Total other comprehensive income (loss), net of tax	(183 )	269	234	1,159
Comprehensive income	1,261	8,131	7,057	23,376
Less: Comprehensive income attributable to noncontrolling interest	(486 )	(1,483 )	(3,003 )	(4,744 )
Comprehensive income attributable to AXT, Inc.	\$775	\$6,648	\$4,054	\$18,632

See accompanying notes to condensed consolidated financial statements.

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

	Nine Months Ended September 30,	
	2012	2011
Cash flows from operating activities:		
Net income	\$6,823	\$22,217
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	2,832	2,512
Amortization of marketable securities premium	220	279
Loss (gain) on disposal of property, plant and equipment, net	176	(30 )
Stock-based compensation	873	638
Realized loss on sale of investments	—	8
Changes in assets and liabilities:		
Accounts receivable, net	1,076	1,123
Inventories	6,071	(8,209 )
Prepaid expenses and other current assets	1,923	(3,016 )
Other assets	(97 )	(1,406 )
Accounts payable	1,287	(538 )
Accrued liabilities	(795 )	(702 )
Other long-term liabilities	(824 )	(848 )
Net cash provided by operating activities	19,565	12,028
Cash flows from investing activities:		
Purchases of property, plant and equipment	(4,951 )	(9,573 )
Proceeds from sale of property, plant and equipment	—	23
Purchases of available for sale securities	(8,225 )	(13,951 )
Proceeds from sale of available for sale securities	6,660	15,938
Investments in joint ventures	—	(2,646 )
Loan to related party	—	(775 )
Net cash used in investing activities	(6,516 )	(10,984 )
Cash flows from financing activities:		
Proceeds from common stock options exercised	276	637
Dividends paid by joint ventures	(4,086 )	(1,636 )
Net cash used in financing activities	(3,810 )	(999 )
Effect of exchange rate changes on cash and cash equivalents	108	632
Net increase in cash and cash equivalents	9,347	677
Cash and cash equivalents at the beginning of the period	26,156	23,724
Cash and cash equivalents at the end of the period	\$35,503	\$24,401

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 generally accepted accounting principles (“GAAP”) 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 GAAP. 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 certain estimates, judgments and assumptions to prepare these condensed consolidated financial statements in conformity with GAAP. We believe that the estimates, judgments, and assumptions upon which it relies are reasonable based on information available at the time that these estimates, judgments, and assumptions are made. These estimates, judgments, and assumptions can affect the reported amounts of assets and liabilities as of the date of the financial statements as well as the reported amounts of revenues and expenses during the periods presented. To the extent there are material differences between these estimates and actual results, our condensed consolidated financial statements would be affected.

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 2011 Annual Report on Form 10-K filed with the Securities and Exchange Commission (the “SEC”) on March 15, 2012 and our Quarterly Report on Form 10-Q for the quarterly periods ended March 31, 2012 and June 30, 2012 filed with the SEC on May 10, 2012 and August 9, 2012, respectively.

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 interests 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 Financial Accounting Standards Board (“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. We utilized the Black-Scholes valuation model for estimating the fair value of the stock options granted. The amortization of stock compensation under ASC 718 is based on the single-option approach. All of our stock compensation is accounted for as an equity instrument.



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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
Stock-based compensation in the form of employee stock options and restricted stock awards, included in:				
Cost of revenue	\$ 19	\$ 20	\$ 56	\$ 60
Selling, general and administrative	245	184	721	543
Research and development	36	12	96	35
Total stock-based compensation	300	216	873	638
Tax effect on stock-based compensation	—	—	—	—
Net effect on net income	\$ 300	\$ 216	\$ 873	\$ 638
Effect on net income attributable to AXT, Inc. per common share:				
Basic	\$ (0.01 )	\$ (0.01 )	\$ (0.03 )	\$ (0.02 )
Diluted	\$ (0.01 )	\$ (0.01 )	\$ (0.03 )	\$ (0.02 )

As of September 30, 2012, the compensation costs related to unvested stock options granted to employees under our stock option plan but not yet recognized was approximately \$1.6 million, net of estimated forfeitures of \$91,000. These costs will be amortized on a straight-line basis over a weighted-average period of approximately 2.3 years and will be adjusted for subsequent changes in estimated forfeitures. We elected not to capitalize any stock-based compensation to inventory as of September 30, 2012 due to the immateriality of the amount.

There were no stock options granted in the three months ended September 30, 2012 and 2011. There were 104,000 and zero stock options granted with weighted average grant date fair value of \$2.84 and none in the nine months ended September 30, 2012 and 2011, respectively. The fair value of our stock options granted to employees for the nine months ended September 30, 2012 was estimated using the following weighted-average assumptions:

	Nine Months Ended September 30, 2012
Expected term (in years)	4.0
Volatility	73.74 %
Expected dividend	0.0 %
Risk-free interest rate	0.71 %

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The following table summarizes the stock option transactions during the nine months ended September 30, 2012 (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, 2012	2,380	\$ 3.25	6.25	\$3,456
Granted	104	5.22		
Exercised	(126 )	2.19		
Canceled and expired	(30 )	9.69		
Options outstanding as of September 30, 2012	2,328	\$ 3.31	6.05	\$2,151
Options vested and expected to vest as of September 30, 2012	2,292	\$ 3.29	6.00	\$2,146
Options exercisable as of September 30, 2012	1,501	\$ 2.69	4.75	\$1,882

The aggregate intrinsic value in the table above represents the total pretax intrinsic value, based on our closing price of \$3.38 on September 30, 2012, 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 September 30, 2012 was 1,152,553.

The options outstanding and exercisable as of September 30, 2012 were in the following exercise price ranges:

Options Outstanding as of September 30, 2012				Options Exercisable as of September 30, 2012	
Range of Exercise Price	Shares	Weighted-average Exercise Price	Weighted-average Remaining Contractual Life	Shares	Weighted-Average Exercise Price
\$1.18 - \$1.38	407,001	\$ 1.31	1.73	407,001	\$ 1.31
\$1.40 - \$1.40	1,094	\$ 1.40	2.45	1,094	\$ 1.40
\$1.59 - \$1.59	328,460	\$ 1.59	6.54	273,967	\$ 1.59
\$1.88 - \$1.91	8,000	\$ 1.90	2.00	8,000	\$ 1.90
\$2.04 - \$2.04	441,775	\$ 2.04	7.07	313,481	\$ 2.04
\$2.19 - \$4.09	175,510	\$ 2.80	2.00	151,510	\$ 2.62
\$4.79 - \$4.79	366,500	\$ 4.79	9.08	—	\$ —
\$4.81 - \$5.61	144,610	\$ 5.26	7.10	64,610	\$ 4.84
\$5.83 - \$5.83	362,450	\$ 5.83	7.84	200,431	\$ 5.83
\$6.31 - \$7.82	92,295	\$ 6.65	5.73	81,191	\$ 6.48

2,327,695	\$	3.31	6.05	1,501,285	\$	2.69
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There were 26,000 and 51,579 options exercised in the three months ended September 30, 2012 and 2011, respectively. The total intrinsic value of options exercised for the three months ended September 30, 2012 and 2011 was \$18,000 and \$334,000, respectively. There were 126,000 and 250,591 options exercised in the nine months ended September 30, 2012 and 2011, respectively. The total intrinsic value of options exercised for the nine months ended September 30, 2012 and 2011 was \$383,000 and \$1.5 million, respectively. Cash received from options exercised for the nine months ended September 30, 2012 and 2011 was \$276,000 and \$637,000, respectively.

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## Restricted stock awards

A summary of activity related to restricted stock awards for the nine months ended September 30, 2012 is presented below:

Stock Awards	Shares	Weighted-Average Grant Date Fair Value
Non-vested as of January 1, 2012	223,127	\$ 4.47
Granted	30,768	\$ 3.90
Vested	(77,812 )	\$ 3.09
Non-vested as of September 30, 2012	176,083	\$ 4.98

There were 30,768 and 16,548 restricted stock awards granted with weighted average grant date fair value of \$3.90 and \$7.25 in the nine months ended September 30, 2012 and 2011, respectively. There were 77,812 and 72,300 shares of restricted stock awards vested with weighted average grant date fair value of \$3.09 and \$2.77 in the nine months ended September 30, 2012 and 2011, respectively. As of September 30, 2012, we had \$721,000 of unrecognized compensation expense related to restricted stock awards, which will be recognized over the weighted average period of 2.5 years.

## Note 3. Investments and Fair Value Measurements

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

	September 30, 2012				December 31, 2011			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized (Loss)	Fair Value	Amortized Cost	Gross Unrealized Gain	Gross Unrealized (Loss)	Fair Value
Classified as:								
Cash	\$27,490	\$ —	\$ —	\$27,490	\$25,299	\$ —	\$ —	\$25,299
Cash equivalents:								
Money market funds	8,013	—	—	8,013	857	—	—	857
Total cash equivalents	8,013	—	—	8,013	857	—	—	857
Total cash and cash equivalents	35,503	—	—	35,503	26,156	—	—	26,156
Investments (Available for sale):								
Certificates of deposit	6,878	7	(4 )	6,881	3,561	5	(3 )	3,563
US Treasury and agency securities	—	—	—	—	1,200	—	(1 )	1,199
Corporate bonds	9,085	12	(34 )	9,063	9,859	2	(137 )	9,724
Total investments	15,963	19	(38 )	15,944	14,620	7	(141 )	14,486
Total cash, cash equivalents and	\$51,466	\$ 19	\$ (38 )	\$51,447	\$40,776	\$ 7	\$ (141 )	\$40,642

investments

Contractual  
maturities on  
investments:

Due within 1 year	\$ 10,581	\$ 10,577	\$ 5,521	\$ 5,505
Due after 1 through 5 years	5,382	5,367	9,099	8,981
	\$ 15,963	\$ 15,944	\$ 14,620	\$ 14,486

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 both the three months ended September 30, 2012 and 2011, we did not have any realized gain or loss on sales of our available-for-sale securities. For the nine months ended September 30, 2012 and 2011, we had none and \$8,000 of gross realized loss 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 September 30, 2012 are temporary in nature. We periodically review our investment portfolio to identify and evaluate investments that have indications of possible impairment. Factors considered in determining whether a loss is temporary include the magnitude of the decline in market value, the length of time the market value has been below cost (or adjusted cost), credit quality and our ability and intent to hold the securities for a period of time sufficient to allow for any anticipated recovery in market value.

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The following table summarizes the fair value and gross unrealized losses related to available-for-sale securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position as of September 30, 2012 (in thousands):

	In Loss Position < 12 months		In Loss Position > 12 months		Total In Loss Position	
	Fair Value	Gross Unrealized (Loss)	Fair Value	Gross Unrealized (Loss)	Fair Value	Gross Unrealized (Loss)
Investments:						
Certificates of deposit	\$3,314	\$(3 )	\$200	\$(1 )	\$3,514	\$(4 )
Corporate bonds	2,725	(17 )	1,517	(17 )	4,242	(34 )
Total in loss position	\$6,039	\$(20 )	\$1,717	\$(18 )	\$7,756	\$(38 )

The following table summarizes the fair value and gross unrealized losses related to available-for-sale securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position as of December 31, 2011 (in thousands):

	In Loss Position < 12 months		Total In Loss Position	
	Fair Value	Gross Unrealized (Loss)	Fair Value	Gross Unrealized (Loss)
Investments:				
Certificates of Deposit	678	(3 )	678	(3 )
US Treasury and agency securities	1,199	(1 )	1,199	(1 )
Corporate bonds	\$ 8,221	\$ (137 )	\$ 8,221	\$ (137 )
Total in loss position	\$ 10,098	\$ (141 )	\$ 10,098	\$ (141 )

## 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 10). The investment balances for the companies, including indirect minority investments in privately-held companies by our consolidated joint ventures, are accounted for under the equity method and are included in “other assets” in the condensed consolidated balance sheets and totaled \$9.1 million and \$8.3 million as of September 30, 2012 and December 31, 2011, respectively. We also maintain minority investments in other unconsolidated privately-held companies which are accounted for under the cost method. Our investments in these privately-held companies are reviewed for other than temporary declines in value on a quarterly basis. These 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. Reasons for other than temporary declines in value include whether the related company would have insufficient cash flow to operate for the next twelve months, significant changes in the operating performance and changes in market conditions. As of both September 30, 2012 and December 31, 2011, 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



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 September 30, 2012, 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.

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The type of instrument valued based on quoted market prices in active markets include our money market funds, which are generally classified within Level 1 of the fair value hierarchy. We classify all of our available-for-sale securities including certificates of deposit and corporate bonds as having Level 2 inputs. The valuation techniques used to measure the fair value of these financial instruments having Level 2 inputs were derived from quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency. There were no changes in valuation techniques or related inputs in the three months ended September 30, 2012. There have been no transfers between fair value measurement levels during the three months ended September 30, 2012.

The following table summarizes our financial assets and liabilities measured at fair value on a recurring basis as of September 30, 2012 (in thousands):

	Balance as of September 30, 2012	Quoted Prices in Active Markets of Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets:			
Cash equivalents and investments:			
Money market fund	\$ 8,013	\$ 8,013	\$ —
Certificates of deposit	6,881	—	6,881
Corporate bonds	9,063	—	9,063
Total	\$ 23,957	\$ 8,013	\$ 15,944
Liabilities	\$ —	\$ —	\$ —

The following table summarizes our financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2011 (in thousands):

	Balance as of December 31, 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 – cash	\$ 857	\$ 857	\$ —
Certificates of deposit	3,563	—	3,563
US Treasury and agency securities	1,199	—	1,199
Corporate bonds	9,724	—	9,724
Total	\$ 15,343	\$ 857	\$ 14,486
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. We have investments in privately-held companies accounted for by equity and cost method (See Note 10), which are periodically assessed for other-than-temporary impairment. If we determine that an other-than-temporary impairment has occurred, we write-down the investment to its fair value. For the three and nine months ended September 30, 2012 and 2011, we did not record other-than-temporary impairment charges for these investments.



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## Note 4. Inventories

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

	September 30, 2012	December 31, 2011
Inventories:		
Raw materials	\$ 16,980	\$ 25,460
Work in process	16,432	15,753
Finished goods	6,520	4,799
	\$ 39,932	\$ 46,012

## Note 5. Related Party Transactions

In August 2011, our consolidated joint venture, Beijing JiYa Semiconductor Material Co., Ltd (JiYa), entered into a non-interest bearing note agreement in the amount of \$1.7 million (Rmb 10,485,200) with one of its equity investment entities. Under the loan agreement, JiYa loaned \$783,000 (Rmb 4,959,000) to its equity investment entity in August 2011 and the remaining amount of \$872,000 (Rmb 5,526,200) was loaned during the three months ended March 31, 2012. The term of the loan is two years and ten months and the equity investment entity will repay JiYa in three installments with the first installment of \$414,000 (Rmb 2,620,000) due in December 2012, the second installment of \$828,000 (Rmb 5,240,000) due in December 2013, and last installment of \$414,000 (Rmb 2,625,200) due in May 2014. As of September 30, 2012, we included \$414,000 (Rmb 2,620,000) in "Related party notes receivable – short term" and \$1.2 million (Rmb 7,865,200) in "Related party notes receivable – long term" in the condensed consolidated balance sheets.

In August 2011, our consolidated joint venture, Nanjing Jin Mei Gallium Co., Ltd. loaned \$789,000 (Rmb 5,000,000) to its equity investment entity for construction purposes. As of September 30, 2012, this balance was included in "Related party notes receivable – long term" in the condensed consolidated balance sheets.

In March 2012, our wholly-owned subsidiary, Beijing Tongmei Xtal Technology, entered into an operating lease for the land it owns with our consolidated joint venture Beijing BoYu Semiconductor Vessel Craftwork Technology Co., Ltd. The lease agreement for the land with approximately 22,081 square feet commenced on January 1, 2012 for a term of 10 years with annual lease payment of \$23,682 (Rmb 150,000) subject to 5% increase at each third year anniversary. The annual lease payment is due by January 31 of each year.

During the three months ended September 30, 2012, our wholly-owned subsidiary, Beijing Tongmei Xtal Technology has paid \$168,000 (Rmb 740,924) on behalf of its equity investment entity, Donghai County Dongfang High Purity Electronic Materials Co., Ltd, to purchase materials. As of September 30, 2012, this balance was included in "Prepaid expenses and current assets" in the condensed consolidated balance sheets.

## Note 6. Accrued Liabilities

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

	September 30, 2012	December 31, 2011
Accrued compensation and related charges	1,099	1,807
Current portion of royalty payments	913	1,375
Accrued product warranty	697	1,003

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Accrued professional services	689	650
Accrued income taxes	526	306
Advances from customers	242	74
Loan commitment for related party notes receivable	—	868
Other accrued liabilities	2,634	1,514
	\$ 6,800	\$ 7,597

Note 7. 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 and vesting of restricted stock awards.

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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 September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
Numerator:				
Net income attributable to AXT, Inc.	\$932	\$6,484	\$3,866	\$17,754
Less: Preferred stock dividends	(44 )	(44 )	(132 )	(132 )
Net income available to common stockholders	\$888	\$6,440	\$3,734	\$17,622
Denominator:				
Denominator for basic net income per share - weighted average common shares	32,183	31,944	32,118	31,832
Effect of dilutive securities:				
Common stock options	582	1,094	754	1,192
Restricted stock awards	4	88	39	116
Denominator for dilutive net income per common share	32,769	33,126	32,911	33,140
Net income attributable to AXT, Inc. per common share:				
Basic	\$0.03	\$0.20	\$0.12	\$0.55
Diluted	\$0.03	\$0.19	\$0.11	\$0.53
Options excluded from diluted net income per share as the impact is anti-dilutive				
	992	407	977	403
Restricted stock excluded from diluted net income per share as the impact is anti-dilutive				
	172	163	14	163

The 883,000 shares of \$0.001 par value Series A preferred stock issued and outstanding as of both September 30, 2012 and December 31, 2011, valued at \$3,532,000 are non-voting 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, which must be paid before any distribution is made to common stockholders. These preferred shares were issued to Lyte Optronics, Inc. stockholders in connection with the completion of our acquisition of Lyte Optronics, Inc. on May 28, 1999.

## Note 8. Stockholders' Equity

## Consolidated Statement of Changes in Equity

(in thousands)

	Preferred Stock	Common Stock	Additional Paid In Capital	Accumulated Deficit	Other Comprehensive Income	AXT, Inc. Stockholders' Equity	Noncontrolling Interests	Total Stockholders' Equity
Balance as of December 31, 2011	\$3,532	\$32	\$ 191,554	\$ (62,157 )	\$ 5,818	\$ 138,779	\$ 8,270	\$ 147,049
Common stock options exercised			276			276		276
Stock-based compensation			873			873		873

Comprehensive  
income:

Net income				3,866		3,866	2,957	6,823
Net dividends declared by joint ventures							(4,086 )	(4,086 )
Change in unrealized (loss) gain on marketable securities					115	115		115
Currency translation adjustment					73	73	46	119
Balance as of September 30, 2012	\$3,532	\$32	\$ 192,703	\$ (58,291 )	\$ 6,006	\$ 143,982	\$ 7,187	\$ 151,169

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## Note 9. 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 chief executive officer, who reviews operating results to make decisions about allocating resources and assessing our performance. Since we operate in one segment, all financial segment and product line information can be found in the consolidated financial statements.

## Product Information

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
Revenue by product type:				
GaAs substrates	\$ 12,901	\$ 18,735	\$ 39,994	\$ 52,593
InP substrates	1,649	1,522	4,433	4,458
Ge substrates	2,007	2,954	7,078	8,645
Raw materials and other	4,251	5,094	17,942	17,206
Total	\$ 20,808	\$ 28,305	\$ 69,447	\$ 82,902

## Geographical Information

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

	Three Months Ended September 30,		Nine Months Ended September 30	
	2012	2011	2012	2011
Revenue by geographic region:				
North America*	\$ 3,230	\$ 6,049	\$ 12,663	\$ 16,253
Europe	5,148	5,831	14,519	17,063
Japan	2,404	3,951	7,196	11,358
Taiwan	3,490	2,592	9,130	8,201
Asia Pacific	6,536	9,882	25,939	30,027
Total	\$ 20,808	\$ 28,305	\$ 69,447	\$ 82,902

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\*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):

	September 30, 2012	As of December 31, 2011
Long-lived assets by geographic region:		



North America	\$ 350	\$ 484
China	35,851	33,798
	\$ 36,201	\$ 34,282

#### Significant Customers

One customer represented 14.3% of our revenue for the three months ended September 30, 2012 while one customer represented 21.3% of our revenue for the three months ended September 30, 2011. One customer represented 15.6% of our revenue for the nine months ended September 30, 2012 while one customer represented 18.9% of our revenue for the nine months ended September 30, 2011. Our top five customers represented 37.3% and 39.4% of our revenue for the three months ended September 30, 2012 and 2011, respectively. Our top five customers represented 37.0% and 37.2% of our revenue for the nine months ended September 30, 2012 and 2011, respectively.

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We perform ongoing credit evaluations of our customers' financial condition, and limit the amount of credit extended when deemed necessary, but generally do not require collateral. One customer accounted for 18.3% or more of our trade accounts receivable balance as of September 30, 2012. One customer accounted for 32.4% or more of our trade accounts receivable balance as of December 31, 2011.

#### Note 10. 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.

Our investments are summarized below (in thousands):

Company	Investment Balance as of		Accounting Method	Ownership Percentage	
	September 30, 2012	December 31, 2011			
Beijing JiYa Semiconductor Material Co., Ltd	\$ 3,331	\$ 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	%
	\$ 4,333	\$ 1,998			
Donghai County Dongfang High Purity Electronic Materials Co., Ltd.	\$ 2,045	\$ 2,167	Equity	46	%
Xilingol Tongli Germanium Co. Ltd	3,992	3,881	Equity	25	%
Emeishan Jia Mei High Purity Metals Co., Ltd	1,101	1,001	Equity	25	%
	\$ 7,138	\$ 7,049			

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

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

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

Although we have representation on the boards of directors of each of these companies, the daily operations of each of these companies are managed by local management and not by us. Decisions concerning their respective short term strategy and operations, any capacity expansion and annual capital expenditures, and decisions concerning sales of finished product, are made by local management without input from us.

During the three months ended September 30, 2012 and 2011, the three consolidated joint ventures had income of \$1.8 million and \$3.3 million, respectively, of which \$512,000 and \$1.4 million, respectively, were allocated to minority interests, resulting in income of \$1.2 million and \$1.9 million, respectively, included in our net income. During the nine months ended September 30, 2012 and 2011, the three consolidated joint ventures had income of \$7.0 million and \$10.4 million, respectively, of which \$2.9 million and \$4.5 million, respectively, were allocated to minority interests, resulting in income of \$4.1 million and \$6.0 million, respectively, included in our net income.

The investment balances for three equity investment entities that are not consolidated are included in “other assets” in our condensed consolidated balance sheets and totaled \$7.1 million and \$7.0 million as of September 30, 2012 and December 31, 2011, 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:

- all three companies have sustainable businesses of their own;

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- 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.

These three equity investment entities had net equity earnings of \$206,000 and \$124,000 for the three months ended September 30, 2012 and 2011, respectively, and recorded as “other income, net” in the condensed consolidated statements of operations. These three equity investment entities had net equity earnings of \$78,000 and \$506,000 for the nine months ended September 30, 2012 and 2011, respectively, and recorded as “other income, net” in the condensed consolidated statements of operations.

Net income recorded from all of these joint ventures was \$1.5 million and \$2.1 million for the three months ended September 30, 2012 and 2011, respectively. Net income recorded from all of these joint ventures was \$4.2 million and \$6.5 million for the nine months ended September 30, 2012 and 2011, respectively. Undistributed retained earnings relating to all our investments in all these companies were \$28.0 million and \$23.8 million as of September 30, 2012 and December 31, 2011, respectively.

We also maintain minority investments indirectly in privately-held companies by our consolidated joint ventures. These minority investments are accounted for under the equity method in the books of our consolidated joint ventures. As of September 30, 2012 and December 31, 2011, our consolidated joint ventures included these minority investments in “other assets” in the condensed consolidated balance sheets with a carrying value of \$2.0 million and \$1.3 million, respectively.

We also maintain minority investments directly in two privately-held companies accounted for under the cost method and we do not have the ability to exercise significant influence over their operations. As of both September 30, 2012 and December 31, 2011, 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 11. Commitments and Contingencies

Indemnification Agreements

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

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

## 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 nine months ended September 30, 2012 and 2011 (in thousands):

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	Three Months Ended September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
Beginning accrued warranty and related costs	\$ 740	\$ 877	\$ 1,003	\$ 740
Benefits to cost of revenue	(135 )	(139 )	(637 )	(410 )
Actual warranty expenditures	92	74	331	482
Ending accrued warranty and related costs	\$ 697	\$ 812	\$ 697	\$ 812

**Contractual Obligations**

We lease certain office space, manufacturing facilities and equipment under long-term operating leases expiring at various dates through February 2016. 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 entered into a royalty agreement with a vendor effective December 3, 2010 with a term of eight years, terminating December 31, 2018. We and our related companies are granted a worldwide, nonexclusive, royalty bearing, irrevocable license to certain patents for the term on the agreement. We shall pay a total of \$7.0 million in royalty payments over eight years that began in 2011 based on future royalty bearing sales.

Outstanding contractual obligations as of September 30, 2012 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	\$1,114	\$ 395	\$664	\$55	\$—
Royalty agreement	4,439	913	1,600	1,207	719
Total	\$5,553	\$ 1,308	\$2,264	\$1,262	\$719

**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 is canceled. As of September 30, 2012, 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 12. Foreign Exchange Transaction Gains**

We incurred net foreign currency transaction exchange gains of \$114,000 and \$180,000 for the three months ended September 30, 2012 and 2011, respectively. We incurred net foreign currency transaction exchange gains of \$55,000 and \$50,000 for the nine months ended September 30, 2012 and 2011, respectively. These amounts are included in

“other income, net” on the condensed consolidated statements of operations.

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Note 13. Income Taxes

We account for income taxes in accordance with ASC topic 740, Income Taxes (“ASC 740”) which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. ASC 740 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized. We recognize interest and penalties related to uncertain tax positions in income tax expense. As of September 30, 2012, we do not have any gross unrecognized tax benefits, nor any accrued interest and penalties related to uncertain tax positions. As a result of the implementation of ASC 740 on January 1, 2007, we identified \$16.4 million in liability for unrecognized tax benefits. Of this amount, none was accounted for as a reduction to the January 1, 2007 balance of retained earnings. The amount decreased the tax loss carry-forwards in the U.S. which are fully offset by a valuation allowance. We file income tax returns in the U.S. federal, various states and foreign jurisdictions. We have substantially concluded all U.S. federal and state income tax matters through December 31, 2008. Provision for (benefit from) income taxes for three and nine months ended September 30, 2012 and 2011 were mostly related to our China subsidiary and our China joint venture operations. The income tax benefit recorded in the three months ended September 30, 2012 is the result of some refunds received by one of the China joint ventures and the refund of some previously paid U.S. based state income taxes. We have made a tax election in China whereby certain minimum foreign withholding taxes are treated as an expense and not a tax credit. Besides the state tax liabilities, no Federal income tax expense has been provided for the three and nine months ended September 30, 2012 and 2011 due to the valuation allowance being available.

Note 14. Recent Accounting Pronouncements

There have been no new accounting pronouncements during the nine months ended September 30, 2012, as compared to the recent accounting pronouncements described in our Annual Report on Form 10-K for the year ended December 31, 2011, that are of material significance, or potential significance, to us.



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

This quarterly report on Form 10-Q, including the following sections, contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, particularly statements relating to our expectations regarding results of operations, customer demand, our ability to expand our markets and increase sales, industry trends, customer qualifications of our products, gross margins, the impact of the adoption of certain accounting pronouncements, our investments in capital projects, and our belief that we have adequate cash and investments to meet our needs over the next 12 months. These forward-looking statements are based upon management's current views with respect to future events and financial performance, and are subject to certain risks and uncertainties that could cause actual results to differ materially from historical results or those anticipated in such forward-looking statements. Such risks and uncertainties include those set forth under the section entitled "Risk Factors" below, which identify important factors that could cause actual results to differ materially from those predicted in any such forward-looking statements. We caution investors that actual results may differ materially from those projected in the forward-looking statements as a result of certain risk factors identified in this Form 10-Q and other filings we have made with the Securities and Exchange Commission. Forward-looking statements may be identified by the use of terms such as "anticipates," "believes," "estimates," "expects," "intends," and similar expressions. Statements concerning 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, 2011 and the condensed consolidated financial statements included elsewhere in this report.

## Overview

We are a leading worldwide developer and producer of high-performance compound and single element semiconductor substrates 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)
			· Direct broadcast television
			· High-performance transistors
			· Satellite communications
GaAs (semi-conducting)		2", 3", 4"	High brightness light emitting diodes
			· Lasers
			· Optical couplers
InP		2", 3", 4"	Broadband and fiber optic communications
Ge		2", 4", 6"	Satellite and terrestrial solar cells

We manufacture all of our semiconductor substrates using our proprietary vertical gradient freeze (VGF) technology. Most of our revenue is from sales of GaAs substrates. We manufacture all of our products in the People's Republic of China (PRC or China), which generally has favorable costs for facilities and labor compared to comparable facilities in the United States, Europe or Japan. We also have joint ventures in China which provide us pricing advantages, reliable supply and enhanced sourcing lead-times for key raw materials which are central to our final manufactured products. These joint ventures produce products including 99.99% pure gallium (4N Ga), high purity gallium, arsenic, germanium, germanium dioxide, pyrolytic boron nitride (pBN) crucibles and boron oxide. AXT's ownership interest in these entities ranges from 25% to 83%. We consolidate, for accounting purposes, the joint ventures in which we have majority or controlling financial interest and significant influence on management, and employ equity accounting for the joint ventures in which we have a smaller ownership interest. We purchase portions of the materials produced by these ventures for our own use and the joint ventures sell the remainder of their production to third parties. We use our direct sales force in the United States and China and independent sales representatives in Europe and other parts of Asia to market our substrates. We believe that, as the demand for compound semiconductor substrates increases, we are positioned to leverage our PRC-based manufacturing capabilities and access to favorably priced raw materials to increase our market share.

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### Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations is based upon our condensed consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States of America. We make estimates, assumptions and judgments that can have significant impact on 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 we believe 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.

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

### Revenue Recognition

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

We provide 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 September 30, 2012 and December 31, 2011, our accounts receivable, net, balance was \$16.9 million and \$18.0 million, respectively, with no allowance for doubtful accounts. If actual uncollectible accounts differ substantially from our estimates, revisions to the estimated allowance for doubtful accounts would be required, which could have a material impact on our financial results for the affected period.

The allowance for sales returns is also deducted from gross accounts receivable. As of September 30, 2012 and December 31, 2011, our allowance for sales returns was \$167,000 and \$124,000, 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 September 30, 2012 and December 31, 2011, accrued product warranties totaled \$697,000 and \$1.0 million, 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.

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### 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 September 30, 2012 and December 31, 2011, we had an inventory reserve of \$6.9 million and \$12.3 million, respectively, for excess and obsolete inventory. If actual demand for our products were to be substantially lower than estimated, additional inventory adjustments for excess or obsolete inventory might be required, which could have a material impact on our business, financial condition and results of operations.

### Impairment of Investments

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

We invest in equity instruments of privately-held companies for business and strategic purposes. These investments are classified as other assets and are accounted for under the cost method as we do not have the ability to exercise significant influence over their operations. We monitor our investments for impairment and record reductions in carrying value when events or changes in circumstances indicate that the carrying value may not be recoverable. Determination of impairment is highly subjective and is based on a number of factors, including an assessment of the strength of investee's management, the length of time and extent to which the fair value has been less than our cost basis, the financial condition and near-term prospects of the investee, fundamental changes to the business prospects of the investee, share prices of subsequent offerings, and our intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in our carrying value. We had no write-downs for the three and nine months ended September 30, 2012 and 2011.

### Fair Value of Investments

In the current market environment, the assessment of the fair value of debt instruments can be difficult and subjective. 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.

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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 September 30, 2012, 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, Property, Plant and Equipment (“ASC 360”). When events and circumstances indicate that long-lived assets may be impaired, we compare the carrying value of the long-lived assets to the projection of future undiscounted cash flows attributable to these assets. In the event that the carrying value exceeds the future undiscounted cash flows, we record an impairment charge against income equal to the excess of the carrying value over the assets’ fair value. Fair values are determined based on quoted market values, discounted cash flows or internal and external appraisals, as applicable.

### 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.

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 13—“Income Taxes” in the notes to condensed financial statements for additional information.

### Results of Operations

## Revenue

	Three Months Ended September 30,		Increase (Decrease)	% Change	
	2012	2011 (\$ in thousands)			
GaAs	\$12,901	\$ 18,735	\$(5,834 )	(31.1 )	%
InP	1,649	1,522	127	8.3	%
Ge	2,007	2,954	(947 )	(32.1 )	%
Raw materials and other	4,251	5,094	(843 )	(16.5 )	%
Total revenue	\$20,808	\$ 28,305	\$(7,497 )	(26.5 )	%

Revenue decreased \$7.5 million, or 26.5%, to \$20.8 million for the three months ended September 30, 2012 from \$28.3 million for the three months ended September 30, 2011. Total GaAs substrate revenue decreased \$5.8 million, or 31.1%, to \$12.9 million for the three months ended September 30, 2012 from \$18.7 million for the three months ended September 30, 2011. The decrease in GaAs substrate revenue was primarily due to the softer demand environment worldwide in both the light emitting diode (LED) market that uses semi-conducting (SC) substrates and wireless devices market that uses semi-insulating (SI) substrates compared to the same period last year.



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Sales of 2 inch, 3 inch and 4 inch diameter GaAs substrates, which are mainly used in LED applications, were \$9.3 million for the three months ended September 30, 2012 compared with \$11.8 million for the three months ended September 30, 2011. The decrease in revenue from smaller diameter substrates was primarily due to weaker demand in LED applications in all geographic regions except Taiwan. We expect revenue from semi-conducting GaAs substrates to decline next quarter primarily due to weaker demand from customers in China in consumer applications markets.

Sales of 5 inch and 6 inch diameter GaAs substrates, which are mainly used in wireless devices, were \$3.6 million for the three months ended September 30, 2012 compared to \$6.9 million for the three months ended September 30, 2011. The decrease in revenue from larger diameter substrates was primarily due to lower demand in the wireless devices market compared to the same period last year. We expect revenue from semi-insulating GaAs substrate to decline next quarter.

InP substrate revenue increased \$127,000, or 8.3%, to \$1.6 million for the three months ended September 30, 2012 from \$1.5 million for the three months ended September 30, 2011 primarily due to increased demand in the optical networking industry. We expect InP revenue remain stable next quarter.

Ge substrate revenue decreased \$947,000, or 32.1%, to \$2.0 million for the three months ended September 30, 2012 from \$3.0 million for the three months ended September 30, 2011 primarily due to fewer planned satellite launches particularly in Asia compared to the same period last year. We expect Ge substrate revenue to decline moderately due to customer mix in different geographic regions.

Raw materials revenue decreased \$843,000, or 16.5%, to \$4.3 million for the three months ended September 30, 2012 from \$5.1 million for the three months ended September 30, 2011. The decrease in raw materials revenue was primarily due to fluctuation in demand for 4N raw gallium as well as from decreased selling prices. We expect our third party raw material revenue to continue to decline next quarter as a result of anticipated decreases in average selling prices.

	Nine Months Ended September 30,		Increase (Decrease)	% Change	
	2012	2011			
	(\$ in thousands)				
GaAs	\$39,994	\$52,593	\$(12,599 )	(24.0 )	%
InP	4,433	4,458	(25 )	(0.6 )	%
Ge	7,078	8,645	(1,567 )	(18.1 )	%
Raw materials and other	17,942	17,206	736	4.3	%
Total revenue	\$69,447	\$82,902	\$(13,455 )	(16.2 )	%

Revenue decreased \$13.5 million, or 16.2%, to \$69.4 million for the nine months ended September 30, 2012 from \$82.9 million for the nine months ended September 30, 2011. Total GaAs substrate revenue decreased \$12.6 million, or 24.0%, to \$40.0 million for the nine months ended September 30, 2012 from \$52.6 million for the nine months ended September 30, 2011. The decrease in GaAs substrate revenue was primarily due to the softer demand environment worldwide in both the light emitting diode (LED) market and wireless devices market compared to the same period last year.

Sales of 2 inch, 3 inch and 4 inch diameter GaAs substrates were \$27.7 million for the nine months ended September 30, 2012 compared with \$34.9 million for the nine months ended September 30, 2011. The decrease in revenue from smaller diameter substrates was primarily due to weaker demand in LED market in all geographic regions except Taiwan.

Sales of 5 inch and 6 inch diameter GaAs substrates were \$12.3 million for the nine months ended September 30, 2012 compared to \$17.7 million for the nine months ended September 30, 2011. The decrease in revenue from larger diameter substrates was primarily due to lower demand for semi-insulating GaAs substrate from customers in the wireless devices market compared to the same period last year.

InP substrate revenue decreased slightly by \$25,000, or 0.6%, to \$4.4 million for the nine months ended September 30, 2012 from \$4.5 million for the nine months ended September 30, 2011 and resulted from customer mix in the optical networking industry.

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Ge substrate revenue decreased \$1.6 million, or 18.1%, to \$7.1 million for the nine months ended September 30, 2012 from \$8.6 million for the nine months ended September 30, 2011 primarily due to fewer planned satellite launches particular in Asia compared to the same period last year.

Raw materials revenue increased \$736,000, or 4.3%, to \$17.9 million for the nine months ended September 30, 2012 from \$17.2 million for the nine months ended September 30, 2011 primarily due to increased sales of pyrolytic boron nitride (pBN) crucibles, partially offset by decreased revenue from sales of 4N raw gallium resulting from decreased selling prices.

## Revenue by Geographic Region

	Three Months Ended September 30,		Increase (Decrease)		% Change	
	2012	2011				
	(\$ in thousands)					
North America *	\$3,230	\$6,049	\$(2,819)	)	(46.6)	) %
% of total revenue	15.5	% 21.4	%			
Europe	5,148	5,831	(683)	)	(11.7)	) %
% of total revenue	24.7	% 20.6	%			
Japan	2,404	3,951	(1,547)	)	(39.2)	) %
% of total revenue	11.6	% 14.0	%			
Taiwan	3,490	2,592	898		34.6	%
% of total revenue	16.8	% 9.2	%			
Asia Pacific (excluding Japan and Taiwan)	6,536	9,882	(3,346)	)	(33.9)	) %
% of total revenue	31.4	% 34.9	%			
Total revenue	\$20,808	\$28,305	\$(7,497)	)	(26.5)	) %

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\*Primarily the United States

Revenue from customers in North America decreased by \$2.8 million, or 46.6%, to \$3.2 million for the three months ended September 30, 2012 from \$6.0 million for the three months ended September 30, 2011 primarily due to decreased sales from all substrates, partially offset by increased sales of 4N raw gallium.

Revenue from customers in Europe decreased by \$683,000, or 11.7%, to \$5.1 million for the three months ended September 30, 2012 from \$5.8 million for the three months ended September 30, 2011 primarily due to decreased sales of substrates and raw materials to customers in Germany and United Kingdom, partially offset by increased substrates sales to customers in France.

Revenue from customers in Japan decreased by \$1.5 million, or 39.2%, to \$2.4 million for the three months ended September 30, 2012 from \$4.0 million for the three months ended September 30, 2011 primarily due to decreased sales of GaAs substrates and InP substrate, partially offset by increased sales of 4N raw gallium and Ge substrates.

Revenue from customers in Taiwan increased by \$898,000, or 34.6%, to \$3.5 million for the three months ended September 30, 2012 from \$2.6 million for the three months ended September 30, 2011 primarily due to increased sales of semi-conducting GaAs substrates and InP substrate, partially offset by decreased sales of semi-insulating GaAs substrates from a major customer. We expect revenue from customers in Taiwan to decline next quarter primarily due to decreased demand from a major customer for semi-conducting GaAs substrates.

Revenue from customers in Asia Pacific (excluding Japan and Taiwan) decreased by \$3.3 million, or 33.9%, to \$6.5 million for the three months ended September 30, 2012 from \$9.9 million for the three months ended September 30, 2011 primarily due to decreased sales of 4N raw gallium, semi-conducting GaAs substrates and Ge substrates to customers in China, decreased sales of GaAs substrates to customers in Singapore, partially offset by increased sales of pyrolytic boron nitride (pBN) crucibles to customers in Korea.

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	Nine Months Ended September 30,		Increase (Decrease)		% Change	
	2012	2011				
	(\$ in thousands)					
North America *	\$12,663	\$16,253	\$(3,590)	)	(22.1)	) %
% of total revenue	18.2	% 19.6	%			
Europe	14,519	17,063	(2,544)	)	(14.9)	) %
% of total revenue	20.9	% 20.6	%			
Japan	7,196	11,358	(4,162)	)	(36.6)	) %
% of total revenue	10.4	% 13.7	%			
Taiwan	9,130	8,201	929		11.3	%
% of total revenue	13.2	% 9.9	%			
Asia Pacific (excluding Japan and Taiwan)	25,939	30,027	(4,088)	)	(13.6)	) %
% of total revenue	37.3	% 36.2	%			
Total revenue	\$69,447	\$82,902	\$(13,455)	)	(16.2)	) %

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\*Primarily the United States

Revenue from customers in North America decreased by \$3.6 million, or 22.1%, to \$12.7 million for the nine months ended September 30, 2012 from \$16.3 million for the nine months ended September 30, 2011 primarily due to decreased sales from GaAs substrates and InP substrate, partially offset by increased sales of 4N raw gallium.

Revenue from customers in Europe decreased by \$2.5 million, or 14.9%, to \$14.5 million for the nine months ended September 30, 2012 from \$17.1 million for the nine months ended September 30, 2011 primarily due to decreased sales of GaAs substrates and raw materials to customers in Germany and United Kingdom, partially offset by increased substrates sales to customers in France.

Revenue from customers in Japan decreased by \$4.2 million, or 36.6%, to \$7.2 million for the nine months ended September 30, 2012 from \$11.4 million for the nine months ended September 30, 2011 primarily due to decreased sales of GaAs substrates and 4N raw gallium.

Revenue from customers in Taiwan increased by \$929,000, or 11.3%, to \$9.1 million for the nine months ended September 30, 2012 from \$8.2 million for the nine months ended September 30, 2011 primarily due to increased sales of semi-conducting GaAs substrates and InP substrates, partially offset by decreased sales of semi-insulating GaAs substrates to a major customer.

Revenue from customers in Asia Pacific (excluding Japan and Taiwan) decreased by \$4.1 million, or 13.6%, to \$25.9 million for the nine months ended September 30, 2012 from \$30.0 million for the nine months ended September 30, 2011 primarily due to decreased sales of 4N raw gallium, Ge substrates and semi-conducting GaAs substrates to customers in China, decreased sales of semi-conducting GaAs substrates to customers in Singapore, partially offset by increased sales of pyrolytic boron nitride (pBN) crucibles to customers in Korea.

## Gross Margin

	Three Months Ended September 30,		Increase (Decrease)		% Change	
	2012	2011				
	(\$ in thousands)					

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Gross profit	\$	5,466		\$	12,237		\$	(6,771 )		(55.3 )	%
Gross Margin %		26.3	%		43.2	%					

Gross margin decreased to 26.3% of total revenue for the three months ended September 30, 2012 from 43.2% of total revenue for the three months ended September 30, 2011. Higher priced raw material in our inventory and lower average selling prices due to product mix and customer mix, and lower volumes negatively impacted the gross margin for all substrates for the three months ended September 30, 2012. During the three months ended September 30, 2012, gross margins for raw material sales also decreased due to decreased selling prices of 4N raw gallium compared to the same period last year.

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	Nine Months Ended September 30,			Increase (Decrease)	% Change
	2012	2011			
	(\$ in thousands)				
Gross profit	\$ 21,168	\$ 36,923	\$ (15,755 )	(42.7 )	%
Gross Margin %	30.5	44.5			%

Gross margin decreased to 30.5% of total revenue for the nine months ended September 30, 2012 from 44.5% of total revenue for the nine months ended September 30, 2011. Approximately \$1.3 million, or 1.9% of total revenue for the nine months ended September 30, 2012 was expensed for supplemental and retroactive VATs levied by the tax authorities in the People's Republic of China (PRC) which was applicable for the period from July 1, 2011 to June 30, 2012. In addition, higher priced raw material in our inventory and lower average selling prices due to product mix and customer mix also negatively impacted the gross margins for all substrates for the nine months ended September 30, 2012. During the nine months ended September 30, 2012, gross margins for raw material sales also decreased due to decreased selling prices of 4N raw gallium compared to the same period last year.

## Selling, General and Administrative Expenses

	Three Months Ended September 30,			Increase (Decrease)	% Change
	2012	2011			
	(\$ in thousands)				
Selling, general and administrative expenses	\$ 3,950	\$ 3,555	\$ 395	11.1	%
% of total revenue	19.0	12.6			%

Selling, general and administrative expenses increased \$395,000 or 11.1% to \$4.0 million for the three months ended September 30, 2012 from \$3.6 million for the three months ended September 30, 2011. The increase was primarily due to higher labor related costs including salaries and retirement benefit from our joint ventures, higher sales commission expenses, and higher stock-based compensation expenses resulting from the new options and awards granted in 2011.

	Nine Months Ended September 30,			Increase (Decrease)	% Change
	2012	2011			
	(\$ in thousands)				
Selling, general and administrative expenses	\$ 11,709	\$ 10,959	\$ 750	6.8	%
% of total revenue	16.9	13.2			%

Selling, general and administrative expenses increased \$750,000, or 6.8%, to \$11.7 million for the nine months ended September 30, 2012 from \$11.0 million for the nine months ended September 30, 2011. The increase was primarily due to higher labor related costs including salaries and retirement benefit from our joint ventures, higher stock-based compensation expenses resulting from the new options and awards granted in 2011, higher sales commission expenses and higher professional fees.

## Research and Development

Three Months Ended	Increase
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	September 30,				
	2012	2011	(Decrease)	% Change	
	(\$ in thousands)				
Research and development	\$ 844	\$ 612	\$ 232	37.9	%
% of total revenue	4.1	2.2			%

Research and development expenses increased \$232,000, or 37.9%, to \$844,000 for the three months ended September 30, 2012 from \$612,000 for the three months ended September 30, 2011. The increase was primarily due to higher labor related costs including salaries and bonus and higher stock-based compensation expenses mainly related to the hiring of a Chief Scientist in March 2012 and higher product testing costs.



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	Nine Months Ended September 30,			Increase (Decrease)	% Change
	2012	2011			
	(\$ in thousands)				
Research and development	\$ 2,593	\$ 1,816	\$	777	42.8 %
% of total revenue	3.7 %	2.2 %			

Research and development expenses increased \$777,000, or 42.8%, to \$2.6 million for the nine months ended September 30, 2012 from \$1.8 million for the nine months ended September 30, 2011. The increase was primarily due to higher labor related costs including salaries and bonus and higher stock-based compensation expenses mainly related to the hiring of a Chief Scientist in March 2012, higher product testing costs and higher health insurance expenses.

## Interest Income, net

	Three Months Ended September 30,			Increase (Decrease)	% Change
	2012	2011			
	(\$ in thousands)				
Interest income, net	\$ 52	\$ 103	\$	(51 )	(49.5 ) %
% of total revenue	0.2	0.4	%		

Interest income, net decreased \$51,000 to \$52,000 for the three months ended September 30, 2012 from \$103,000 for the three months ended September 30, 2011. Interest income, net for the three months ended September 30, 2012 was lower compared to the same period last year primarily due to lower interest rates from investments.

	Nine Months Ended September 30,				Increase (Decrease)	% Change
	2012		2011			
	(\$ in thousands)					
Interest income, net	\$	202	\$	259	\$ (57 )	(22.0 ) %
% of total revenue		0.3 %		0.3 %		

Interest income, net decreased \$57,000 to \$202,000 for the nine months ended September 30, 2012 from \$259,000 for the nine months ended September 30, 2011. Interest income, net for the nine months ended September 30, 2012 was lower compared to the same period last year primarily due to lower interest rates from investments.

## Other Income, net

	Three Months Ended September 30,				Increase (Decrease)	% Change
	2012		2011			
	(\$ in thousands)					
Other income, net	\$	492	\$	356	\$ 136	38.2 %
% of total revenue		2.4 %		1.3 %		

Other income, net increased \$136,000 to \$492,000 for the three months ended September 30, 2012 from \$356,000 for the three months ended September 30, 2011 primarily due to higher investment income from our minority-owned joint ventures that are not consolidated, partially offset by lower net foreign exchange gains on our Yen denominated

accounts receivable and transactions realized by our joint ventures in China.

	Nine Months Ended September 30,		Increase (Decrease)		% Change
	2012	2011			
	(\$ in thousands)				
Other income, net	\$ 314	\$ 443	\$ (129 )	(29.1 )	%
% of total revenue	0.5	0.5			%

Other income, net decreased \$129,000 to \$314,000 for the nine months ended September 30, 2012 from \$443,000 for the nine months ended September 30, 2011 primarily due to higher withholding tax on foreign dividends, a loss on disposal of equipments from our joint ventures, offset by agency commission recognized by one of our joint ventures and higher investment income from our minority-owned joint ventures that are not consolidated.

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## Provision for (Benefit from) Income Taxes

	Three Months Ended September 30,			Increase	%
	2012	2011		(Decrease)	Change
	(\$ in thousands)				
Provision for (benefit from) income taxes	\$ (228 )	\$ 667		(895 )	NM
% of total revenue	(1.1 ) %	2.4 %			

NM = % not meaningful

Provision for (benefit from) income taxes for three months ended September 30, 2012 and 2011 was mostly related to our China subsidiary and our China joint venture operations, with income tax benefits in the three months ended September 30, 2012 compared to income tax provisions in the three months ended September 30, 2011 primarily due to tax refunds expected for state income taxes as well as tax refunds received by one of our China joint ventures, and decreased sales and decreased net income in the three months ended September 30, 2012 compared to the same period last year. Besides the state taxes liabilities, no federal income taxes have been provided for U.S. operations due to our available net operating loss carryforwards.

	Nine Months Ended September 30,			Increase	%
	2012	2011		(Decrease)	Change
	(\$ in thousands)				
Provision for income taxes	\$ 559	\$ 2,633		\$ (2,074 )	(78.8 ) %
% of total revenue	0.8 %	3.2 %			

Provision for income taxes for nine months ended September 30, 2012 and 2011 was mostly related to our China subsidiary and our China joint venture operations, with the decrease in the nine months ended September 30, 2012 compared to the nine months ended September 30, 2011 primarily due to decreased sales and decreased net income in the nine months of 2012 compared to the same period last year and tax refunds expected in 2012 for state income taxes as well as tax refunds received by one of our China joint ventures. Besides the state taxes liabilities, no federal income taxes have been provided for U.S. operations due to our available net operating loss carryforwards. Our estimated tax rate can vary greatly from period to period because of the change in the mix of taxable income between the U.S. and China based operations.

## Noncontrolling interest

	Three Months Ended September 30,			Increase	%
	2012	2011		(Decrease)	Change
	(\$ in thousands)				
Noncontrolling interest	\$ 512	\$ 1,378		\$ (866 )	(62.8 ) %
% of total revenue	2.5 %	4.9 %			

Noncontrolling interest decreased \$866,000 to \$512,000 for the three months ended September 30, 2012 from \$1.4 million for the three months ended September 30, 2011 as a result of lower profitability from our China joint venture operations as raw materials sales have decreased due to decreased selling prices compared to the same period last

year.

	Nine Months Ended September 30,			Increase (Decrease)	% Change
	2012	2011			
	(\$ in thousands)				
Noncontrolling interest	\$ 2,957	\$ 4,463	\$ (1,506 )	(33.7 )	%
% of total revenue	4.3	% 5.4	%		

Noncontrolling interest decreased \$1.5 million to \$3.0 million for the nine months ended September 30, 2012 from \$4.5 million for the nine months ended September 30, 2011 as a result of lower profitability from our China joint venture operations as profits from raw materials sales have decreased due to decreased selling prices compared to the same period last year.

#### Liquidity and Capital Resources

We consider cash and cash equivalents, short-term investments and long-term investments as liquid and available for use within two years in our current operations. Short-term investments and long-term investments are comprised of U.S. government securities and investment-grade corporate notes and bonds. As of September 30, 2012, our principal sources of liquidity were \$51.4 million of which \$14.9 million was held by our consolidated joint ventures, consisting of cash and cash equivalents of \$35.5 million, short-term investments of \$10.6 million and long-term investments of \$5.4 million.

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Cash and cash equivalents increased \$9.3 million and short-term investments and long-term investments increased \$1.5 million during the nine months ended September 30, 2012. Cash and cash equivalents increased \$677,000 and short-term investments and long-term investments decreased \$2.5 million during the nine months ended September 30, 2011.

Net cash provided by operating activities of \$19.6 million for the nine months ended September 30, 2012 was primarily comprised of our net income of \$6.8 million, adjusted for non-cash items of depreciation of \$2.8 million, stock-based compensation of \$873,000, amortization of marketable securities premium of \$220,000, and loss on disposal of property, plant and equipment of \$176,000, and a net change of \$8.6 million in assets and liabilities. The \$8.6 million net change in assets and liabilities primarily resulted from a \$6.1 million decrease in inventories, a \$1.9 million decrease in prepaid expenses, a \$1.1 million decrease in accounts receivable, a \$1.3 million increase in accounts payable, partially offset by a \$824,000 decrease in other long-term liabilities, a \$795,000 decrease in accrued liabilities and a \$97,000 increase in other assets.

Net cash provided by operating activities of \$12.0 million for the nine months ended September 30, 2011 was primarily comprised of our net income of \$22.2 million, adjusted for non-cash items of depreciation of \$2.5 million, amortization of marketable securities premium of \$279,000, stock-based compensation of \$638,000, realized loss on sales of investments of \$8,000 and a net change of \$13.6 million in assets and liabilities, partially offset by gain on disposal of property, plant and equipment of \$30,000. The \$13.6 million net change in assets and liabilities primarily resulted from a \$8.2 million increase in inventories, \$3.0 million increase in prepaid expenses, a \$1.4 million increase in other assets, a \$1.2 million decrease in accounts payable and accrued liabilities and a \$848,000 decrease in other long-term liabilities, partially offset by a \$1.1 million decrease in accounts receivable.

Net cash used in investing activities of \$6.5 million for the nine months ended September 30, 2012 was primarily from the purchase of property, plant and equipment of \$5.0 million and the purchase of investments totaling \$8.2 million offset by the sale of investments totaling \$6.7 million.

Net cash used in investing activities of \$11.0 million for the nine months ended September 30, 2011 was primarily attributable to the purchase of property, plant and equipment of \$9.6 million, investments in new joint ventures of \$2.6 million, loan from one of our consolidated joint ventures to its equity investment entity of \$775,000 and the purchase of investments totaling \$14.0 million offset by the sale of investments totaling \$15.9 million.

In January 2012, we agreed with the Administrative Commission of Tianjin Economy and Technology Development Zone to establish a second manufacturing facility in Tianjin, China. The arrangement provides us with land use rights for approximately 32 acres of industrial land located in Yixian Scientific and Industrial Park to construct a compound semiconductor substrate manufacturing facility that would be completed in phases by 2017. We agreed to provide \$12.5 million in the first phase of the construction of the facility and have an understanding with our BoYu joint venture that it will provide the RMB 32.0 million, or approximately \$5.0 million, that is anticipated to be required for the portion of the project devoted to crystal support, in exchange for land use rights, enterprise and individual income tax rebates, employee hiring and development subsidies, and other benefits. Our funding of the project is dependent upon the completion of environmental studies and the grant of permits. We expect to fund the first phase of the construction of the facility with cash flow generated by our normal operations supplemented by our existing line of credit. The investment of \$5.0 million will be funded by our BoYu joint venture.

In January 2012, we increased the credit facility line of credit maintained by us with UBS Bank USA from \$3.0 million to \$10.0 million at an annual interest rate of 1.65% above the current 30-day LIBOR (London Interbank Offered Rate). As of September 30, 2012 and December 31, 2011, we had not used any portion of this line of credit.

Net cash used in financing activities of \$3.8 million for the nine months ended September 30, 2012 consisted of \$4.1 million net dividends paid by our joint ventures partially offset by net proceeds of \$276,000 on the issuance of common stock pursuant to stock option exercises.

Net cash used in financing activities of \$999,000 for the nine months ended September 30, 2011 consisted of dividend payments of \$1.6 million by our joint ventures, partially offset by net proceeds of \$637,000 on the issuance of common stock pursuant to stock option exercises.

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We believe that we have adequate cash and investments to meet our needs over the next 12 months. If our sales decrease, however, our ability to generate cash from operations will be adversely affected which could adversely affect our future liquidity, require us to use cash at a more rapid rate than expected, and require us to seek additional capital. There can be no assurance that such additional capital will be available or, if available it will be on terms acceptable to us. On September 13, 2011, our registration statement on Form S-3 was declared effective by the Securities and Exchange Commission (SEC). We may from time to time offer up to \$60.0 million of common stock, preferred stock, depositary shares, warrants, debt securities and/or units in one or more offerings and in any combination. We intend to use the net proceeds from any sale of securities under the shelf registration statement for general corporate purposes, which may include capital expenditures in connection with our planned expansion of our manufacturing facilities in China. The timing of any offering will be at our discretion and will depend on many factors, including the prevailing market conditions. Specific terms and share prices of any future offering under the registration statement will be established at the time of any such offering, and will be described in a prospectus supplement that we will file with the SEC.

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.”

We lease certain office space, manufacturing facilities and equipment under long-term operating leases expiring at various dates through February 2016. 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 \$107,000 and \$121,000 for the three months ended September 30, 2012 and 2011, respectively and \$334,000 and \$365,000 for the nine months ended September 30, 2012 and 2011, respectively.

We entered into a royalty agreement with a vendor effective December 3, 2010 with a term of eight years, terminating December 31, 2018. We and our related companies are granted a worldwide, nonexclusive, royalty bearing, irrevocable license to certain patents for the term on the agreement.

Outstanding contractual obligations as of September 30, 2012 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	\$ 1,114	\$ 395	\$ 664	\$ 55	\$—
Royalty agreement	4,439	913	1,600	1,207	719
Total	\$5,553	\$ 1,308	\$ 2,264	\$ 1,262	\$ 719

## Recent Accounting Pronouncements

There have been no new accounting pronouncements during the nine months ended September 30, 2012, as compared to the recent accounting pronouncements described in our Annual Report on Form 10-K for the year ended December 31, 2011, that are of material significance, or potential significance, to us.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

## Foreign Currency Risk

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

We manage against these risks by actively monitoring 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 cannot be certain that any such hedging activities will be effective, or available to us at commercially reasonable rates. As of September 30, 2012 and December 31, 2011, we had no outstanding commitments with respect to foreign exchange contracts.



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During the three and nine months ended September 30, 2012, we recorded a net foreign exchange gain of \$114,000 and \$55,000 respectively, included as part of “other income, net” in our condensed consolidated statements of operations. During the three and nine months ended September 30, 2012, we recorded unrealized foreign currency loss of \$166,000 and gain of \$73,000 respectively, included in the balance of “accumulated other comprehensive income” on our condensed consolidated balance sheets.

**Interest Rate Risk**

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

Instrument	Balance as of September 30, 2012	Current Interest Rate	Projected Annual Interest Income/(Expense)	Proforma 10% Interest Rate Decline Income/(Expense)	Proforma 10% Interest Rate Increase Income/(Expense)
Cash	\$ 27,490	0.25	% \$ 69	\$ 62	\$ 76
Cash equivalents	8,013	0.13	10	9	11
Investment in debt and equity instruments	15,944	2.97	474	426	521
			\$ 553	\$ 497	\$ 608

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

**Credit Risk**

We perform periodic credit evaluations of our customers' financial condition and generally do not require collateral. One customer accounted for 18.3% or more of our trade accounts receivable balance as of September 30, 2012. One customer accounted for 32.4% or more of our trade accounts receivable balance as of December 31, 2011.

**Equity Risk**

We maintain minority investments directly, and indirectly by 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 consolidated balance sheets and are either accounted for under the cost method or under equity method 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 September 30, 2012 and December 31, 2011, the direct minority investments totaled \$392,000, and the indirect minority investments by our joint ventures totaled \$2.0 million and \$1.3 million, 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.

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Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting was made in the three months ended September 30, 2012 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

Other than with respect to the risk factors set forth below, there have been no material changes from the risk factors previously disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2011.

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

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

None

Item 3. Defaults upon Senior Securities

None

Item 4. Mine Safety Disclosures

Not applicable

Item 5. Other Information

None



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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: November 9, 2012

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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