

GT Advanced Technologies Inc.  
Form 10-Q  
February 07, 2012

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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
WASHINGTON, D.C. 20549  
  
**FORM 10-Q**

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

**For the quarterly period ended December 31, 2011**

**or**

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

**For the transition period**                      **to**  
**Commission file number: 001-34133**

**GT Advanced Technologies Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State of incorporation)

**03-0606749**  
(I.R.S. Employer Identification No.)

**243 Daniel Webster Highway**  
**Merrimack, New Hampshire**  
(Address of principal executive offices)

**03054**  
(Zip Code)

Registrant's telephone number, including area code: **(603) 883-5200**

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

Indicated by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulations S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No o

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

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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 ☒

As of January 31, 2012, approximately 119,751,885 shares of the registrant's common stock, \$0.01 par value per share, were issued and outstanding.

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**GT ADVANCED TECHNOLOGIES INC.  
QUARTERLY REPORT ON FORM 10-Q  
FOR THE QUARTERLY PERIOD ENDED DECEMBER 31, 2011**

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Table of Contents**PART I FINANCIAL INFORMATION****Item 1 Financial Statements**

**GT Advanced Technologies Inc.**  
**Condensed Consolidated Balance Sheets**  
(In thousands, except per share data)  
(Unaudited)

	December 31, 2011	April 2, 2011
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 206,878	\$ 362,749
Restricted cash	96,202	
Accounts receivable, net	51,468	87,134
Inventories	198,624	127,572
Deferred costs	221,919	125,805
Vendor advances	55,226	20,044
Deferred income taxes	31,698	62,539
Refundable income taxes	1,516	21,780
Prepaid expenses and other current assets	16,681	17,114
Total current assets	880,212	824,737
Property, plant and equipment, net	81,904	54,441
Other assets	32,740	9,930
Intangible assets, net	88,903	22,705
Deferred cost	7,801	129,301
Goodwill	102,152	85,178
Total assets	\$ 1,193,712	\$ 1,126,292
<b>Liabilities and stockholders' equity</b>		
Current liabilities:		
Current portion of long-term debt	\$	\$ 18,750
Accounts payable	69,854	63,401
Accrued expenses	35,679	39,987
Contingent consideration	17,511	4,837
Customer deposits	307,879	144,429
Deferred revenue	408,032	247,495
Accrued income taxes	6,897	23,014
Total current liabilities	845,852	541,913
Long-term debt		101,563
Deferred income taxes	52,008	59,080
Deferred revenue	23,021	198,022
Contingent consideration	6,202	6,391
Other non-current liabilities	687	817

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Accrued income taxes	19,491	16,566
Total liabilities	947,261	924,352
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Preferred stock, 10,000 shares authorized, none issued and outstanding		
Common stock, \$0.01 par value; 500,000 shares authorized, 119,704 and 125,683 shares issued and outstanding as of December 31, 2011 and April 2, 2011, respectively	1,197	1,257
Additional paid-in capital	113,627	123,338
Accumulated other comprehensive loss	(1,514)	(2,852)
Retained earnings	133,141	80,197
Total stockholders' equity	246,451	201,940
Total liabilities and stockholders' equity	\$ 1,193,712	\$ 1,126,292

See accompanying notes to these condensed consolidated financial statements.

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**GT Advanced Technologies Inc.**
**Condensed Consolidated Statements of Operations**

(In thousands, except per share data)

(Unaudited)

	Three Months Ended		Nine Months Ended	
	December 31, 2011	January 1, 2011	December 31, 2011	January 1, 2011
Revenue	\$ 153,028	\$ 262,898	\$ 601,815	\$ 627,357
Cost of revenue	87,030	140,815	327,343	366,226
Gross profit	65,998	122,083	274,472	261,131
Operating expenses:				
Research and development	13,344	6,739	34,624	15,776
Selling and marketing	3,789	4,479	17,056	13,518
General and administrative	14,301	14,158	52,878	37,745
Amortization of intangible assets	2,822	1,865	5,652	3,522
Total operating expenses	34,256	27,241	110,210	70,561
Income from operations	31,742	94,842	164,262	190,570
Other income (expense):				
Interest income	224	130	451	490
Interest expense	(6,827)	(380)	(12,181)	(976)
Other, net	2,036	580	2,110	(92)
Income before income taxes	27,175	95,172	154,642	189,992
Provision for income taxes	11,835	31,588	50,318	67,131
Net income	\$ 15,340	\$ 63,584	\$ 104,324	\$ 122,861
Net income per share:				
Basic	\$ 0.12	\$ 0.47	\$ 0.83	\$ 0.86
Diluted	\$ 0.12	\$ 0.46	\$ 0.82	\$ 0.85
Weighted-average number of shares used in per share calculations:				
Basic	123,628	136,562	125,430	143,124
Diluted	124,946	138,707	127,646	145,125

See accompanying notes to these condensed consolidated financial statements.

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**GT Advanced Technologies Inc.**
**Condensed Consolidated Statements of Cash Flows**

(In thousands)

(Unaudited)

	<b>Nine Months Ended</b>	
	<b>December 31,</b>	<b>January 1,</b>
	<b>2011</b>	<b>2011</b>
<b>Cash flows from operating activities:</b>		
Net income	\$ 104,324	\$ 122,861
<i>Adjustments to reconcile net income to net cash provided by operating activities:</i>		
Amortization expense	5,652	3,522
Depreciation expense	6,433	3,555
Contingent consideration expense	3,083	1,000
Deferred income tax expense	9,541	8,107
Provision for excess and obsolete inventory	9,440	2,122
Share-based compensation expense	10,557	5,663
Excess tax benefits from share-based awards	(3,458)	(1,252)
Amortization of deferred financing costs	9,416	562
Other adjustments, net	(1,845)	184
<i>Changes in operating assets and liabilities (excluding impact of acquired assets and assumed liabilities):</i>		
Restricted cash	(96,202)	
Accounts receivable	35,100	(46,173)
Inventories	(79,897)	(50,643)
Deferred costs	25,386	(21,762)
Vendor advances	(56,298)	(841)
Prepaid expenses and other assets	1,241	1,523
Accounts payable and accrued expenses	(9,113)	57,621
Customer deposits	161,427	45,663
Deferred revenue	(14,464)	53,776
Income taxes	7,174	(659)
Other, net	3,825	23
<i>Net cash provided by operating activities</i>	<b>131,322</b>	<b>184,852</b>
<b>Cash flows from investing activities:</b>		
Proceeds from sales of short-term investments		20,000
Purchases and deposits of property, plant and equipment	(34,010)	(10,620)
Other investing activities	392	
Acquisitions, net of acquired cash	(60,428)	(22,770)
<i>Net cash used in investing activities</i>	<b>(94,046)</b>	<b>(13,390)</b>
<b>Cash flows from financing activities:</b>		
Borrowings under credit facility		125,000
Principal payments under credit facility	(120,313)	
Proceeds and related excess tax benefits from exercise of share-based awards	9,516	7,328
Payments of contingent consideration from business combinations	(4,456)	
Payments related to share repurchases to satisfy statutory minimum tax withholdings	(2,801)	(1,260)
Repurchase of common stock	(60,000)	(203,476)
Share repurchase contract	(15,000)	
Deferred financing costs	(102)	(9,858)
Other financing activities	(167)	
<i>Net cash used in financing activities</i>	<b>(193,323)</b>	<b>(82,266)</b>
Effect of foreign exchange rates on cash	176	415
<i>(Decrease) increase in cash and cash equivalents</i>	<b>(155,871)</b>	<b>89,611</b>
Cash and cash equivalents at beginning of period	362,749	230,748

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Cash and cash equivalents at end of period	\$	206,878	\$	320,359
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## **Supplemental cash flow information:**

Cash paid for interest	\$	2,850	\$	103
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## **Non-cash investing and financing activities:**

Increase in accounts payable and accrued expenses for property, plant and equipment	\$	4,015	\$	6,316
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Contingent consideration from acquisitions	\$	13,858	\$	12,500
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Property, plant and equipment acquired under capital lease	\$	1,021	\$	
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See accompanying notes to these condensed consolidated financial statements.



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**GT Advanced Technologies Inc.**

**Notes to Condensed Consolidated Financial Statements**

**(In thousands, except per share data)**

**1. Basis of Presentation**

These accompanying unaudited condensed consolidated financial statements of GT Advanced Technologies Inc. and subsidiaries (the "Company") have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP") and the Securities and Exchange Commission's ("SEC") instructions for interim financial information. In the opinion of management, the accompanying financial statements contain all adjustments consisting of normal recurring adjustments necessary to present fairly in all material respects the financial position, results of operations and cash flows for the periods presented. The results for the three and nine months ended December 31, 2011 are not necessarily indicative of the results to be expected for the fiscal year ending March 31, 2012 or for any other interim period or for any future year. The accompanying financial statements should be read in conjunction with the audited consolidated financial statements and footnotes included in the Company's Annual Report on Form 10-K ("Annual Report") for the fiscal year ended April 2, 2011, filed with the SEC on May 25, 2011.

The condensed consolidated balance sheet as of April 2, 2011 has been derived from the audited financial statements as of that date but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements.

Effective August 8, 2011, the Company changed its name from GT Solar International, Inc. to GT Advanced Technologies Inc. The name change was effected pursuant to Section 253 of the General Corporation Law of the State of Delaware by the merger of a wholly-owned subsidiary of the Company into the Company.

*Fiscal Year End*

The Company's reporting period is based on a 52 week year that ends on the Saturday closest to March 31 which in certain years results in a 53 week fiscal year. The Company's quarterly reporting includes 13 week periods, unless otherwise noted. The Company uses the terms quarterly, monthly, and annual in describing its financial results.

*Reclassifications*

Two reclassifications have been made to prior year condensed consolidated statement of cash flows to conform to the current year presentation which increased the number of items separately stated. Specifically, excess tax benefits from share-based awards is now stated separately and was previously included in the change in deferred income tax expense as well as the change in income taxes. Amortization of deferred financing costs is now stated separately and was previously included in other adjustments.

**2. Significant Accounting Policies**

The Company's significant accounting policies are disclosed in Note 2 to the Consolidated Financial Statements included in the Company's Annual Report for the fiscal year ended April 2, 2011, filed with the SEC on May 25, 2011. There were no significant changes to the significant accounting policies during the nine months ended December 31, 2011, with the exception of the changes to the Company's revenue recognition policy noted below.

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**GT Advanced Technologies Inc.**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(In thousands, except per share data)**

**2. Significant Accounting Policies (Continued)**

***Revenue Recognition***

On April 3, 2011, the Company prospectively adopted the provisions of Accounting Standards Update ("ASU") 2009-13, *Revenue Recognition (Topic 605) Multiple-Deliverable Revenue Arrangements* ("ASU 2009-13") for new and materially modified arrangements originating on or after April 3, 2011. ASU 2009-13 amended the accounting standards for multiple-deliverable revenue arrangements to require an entity to allocate revenue in an arrangement on the basis of the relative selling price of deliverables. When applying the relative selling price method, the selling price for each deliverable is determined using vendor-specific objective evidence of selling price ("VSOE"), if it exists, or third-party evidence of selling price ("TPE"). If neither VSOE nor TPE exists, then the vendor uses its best estimate of the selling price ("ESP") for that deliverable. The use of the residual method was eliminated by ASU 2009-13.

The majority of the Company's contracts involve the sale of equipment and services under multiple element arrangements. The multiple-deliverable revenue guidance requires that the Company evaluate each deliverable in an arrangement to determine whether such deliverable would represent a separate unit of accounting. The product or service constitutes a separate unit of accounting when it fulfills the following criteria: (a) the delivered item(s) has value to the customer on a standalone basis and (b) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probable and substantially in the control of the Company. The Company's sales arrangements do not include a general right of return.

For transactions entered into prior to the adoption of ASU 2009-13, the Company assesses whether the deliverables specified in a multiple-element arrangement should be treated as separate units of accounting for revenue recognition purposes described above and whether objective and reliable evidence of fair value exists for these separate units of accounting. The Company applies the residual method when objective and reliable evidence of fair value exists for all of the undelivered elements in a multiple-element arrangement. If objective evidence does not exist for the undelivered elements of the arrangement, all revenue is deferred until such evidence does exist, or until all elements for which the Company does not have objective evidence of fair value are delivered, whichever is earlier assuming all other revenue recognition criteria are met.

In certain circumstances, the Company enters into contracts that grant contractual rights which are considered a separate element and require revenue to be recognized ratably over the period commencing when all other elements have been delivered and other contract criteria have been met and through the period when such rights expire. Upon the adoption of ASU 2009-13, management will allocate arrangement consideration based on the ESP of the contractual rights, which will be recognized ratably through the period when such rights expire.

Should the Company materially modify certain arrangements, the amount of previously deferred revenue could be materially impacted based on the application of ASU 2009-13 to the modified arrangement. The anticipated timing of revenue recognition for multiple element arrangements will generally not be significantly affected under ASU 2009-13 since the Company maintained objective evidence of fair value for the majority of the undelivered elements in its arrangements. For those arrangements where the Company has not historically had VSOE for the undelivered elements, such as certain contractual rights or ancillary products, revenue may be recognized earlier under ASU 2009-13, as compared to the prior guidance.

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**GT Advanced Technologies Inc.**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(In thousands, except per share data)**

**2. Significant Accounting Policies (Continued)**

During the three months ended December 31, 2011, the Company materially modified one existing customer contract that was previously accounted for under the revenue guidance in effect prior to the adoption of ASU 2009-13. As a result of this modification, the Company recorded revenue of \$19,451 in the three and nine month periods ended December 31, 2011. Under guidance in effect prior to the adoption of ASU 2009-13, the Company did not have reliable evidence of fair value for certain deliverables, and accordingly, only \$6,513 would have been recognized as revenue in the three and nine month periods ended December 31, 2011.

When a customer fails to perform its contractual obligations and such failure continues after notice of breach and a cure period, the Company may terminate the contract. The Company's contracts generally do not contain cancellation provisions and in the event of a customer breach, the customer may be liable for contractual damages. At the time of termination, the Company records as revenues any non-refundable deposits or deferred revenue amounts and records as cost of revenue any previously deferred cost as well as any related costs to terminate the contract including excess or obsolete inventory or unrecoverable vendor advances or other purchase commitment costs as a result of the termination. During the nine months ended December 31, 2011 and January 1, 2011, the Company recognized \$29.1 million and \$44.4 million in revenue as a result of contract terminations, respectively.

**3. Recent Accounting Pronouncements**

*Recently Adopted Accounting Pronouncements*

On April 3, 2011, the Company adopted ASU 2009-13, *Multiple-Deliverable Revenue Arrangements*. The impact of the Company's adoption of this pronouncement is discussed above in the significant accounting policies within Note 2 to these condensed consolidated financial statements.

*Accounting Pronouncements Not Yet Adopted*

In June 2011, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update No. 2011-05, *Presentation of Comprehensive Income*. This standard eliminates the current option to report other comprehensive income and its components in the statement of changes in stockholders' equity. The amendment requires that all non-owner changes in stockholders' equity be presented either in a single statement of comprehensive income or in two separate but consecutive statements. The standard is intended to enhance comparability between entities that report under U.S. GAAP and those that report under International Financial Reporting Standards, and to provide a more consistent method of presenting non-owner transactions that affect an entity's equity. The amendments in this update are to be applied retrospectively. The amendments are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011, which for the Company would be the fiscal year beginning April 1, 2012. The Company has not yet determined which method it will elect to present comprehensive income under the new standard.

In September 2011, the FASB issued Accounting Standards Update No. 2011-08, *Testing Goodwill for Impairment*, which amends the guidance on testing goodwill for impairment. Under the revised guidance, entities testing goodwill for impairment have the option of performing a qualitative assessment before calculating the fair value of the reporting unit. If entities determine, on the basis of qualitative factors, that the fair value of the reporting unit is more likely than not less than the carrying amount, the two-step

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**GT Advanced Technologies Inc.**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(In thousands, except per share data)**

**3. Recent Accounting Pronouncements (Continued)**

impairment test would be required. This amendment does not change how goodwill is calculated or assigned to reporting units, nor does it revise the requirement to test goodwill annually for impairment. In addition, it does not amend the requirement to test goodwill for impairment between annual tests if events or circumstances warrant; however, it does revise the examples of events and circumstances that an entity should consider. This update is effective for fiscal years beginning after December 15, 2011, and early adoption is permitted. The Company plans to adopt this new standard for the fiscal year beginning on April 1, 2012.

**4. Acquisition of Confluence Solar, Inc.**

On August 24, 2011, the Company acquired 100% of the outstanding shares of stock of privately-held Confluence Solar, Inc. ("Confluence Solar") the developer of HiCz , a continuously-fed Czochralski (HiCz ) growth technology that enables the production of high efficiency monocrystalline solar ingots. The purchase consideration consisted of \$61,090 in cash and a potential additional \$20,000 of contingent consideration. The fair value of the contingent consideration was estimated at \$13,858 at the date of acquisition. During the three months ended December 31, 2011, the Company recorded a purchase price adjustment resulting in a reduction in the fair value of the cash consideration by \$511.

The acquisition of Confluence Solar is intended to expand the Company's photovoltaic, or PV, product portfolio and expand its business into more advanced crystal growth technologies that are designed to increase cell efficiencies and enable customers to produce high-performance monocrystalline silicon ingots at lower costs.

The transaction has been accounted for as a business combination and is included in the Company's results of operations from August 24, 2011, the date of acquisition. The acquired business did not contribute material revenues from the acquisition date to December 31, 2011. The results of the acquired business are included in the Company's PV business reporting segment.

During the three months ended December 31, 2011, the Company continued to refine the fair value of the net assets acquired from the acquisition of Confluence Solar. The impact of these changes decreased the fair value of amounts allocated to goodwill by \$13,447 and increased the amount allocated to deferred tax assets. These changes were attributable to the ongoing determination of the facts and circumstances related to the assumptions applied in the determination of the relative tax basis of net assets acquired.

As of December 31, 2011, the purchase price (including the estimated contingent consideration) and related allocations for the acquisition are preliminary. As a result of the preliminary purchase price allocation, the Company recognized approximately \$17,346 of goodwill, which is primarily due to expected synergies between the Company's experience in equipment development and the acquired technology which is expected to drive new product development. The goodwill created by the transaction is

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nondeductible for tax purposes. A summary of the preliminary purchase price allocation for the acquisition of Confluence Solar is as follows:

*Fair value of consideration transferred:*

Cash	\$	61,090
Contingent consideration obligations		13,858
Purchase price adjustment		(511)
<b>Total fair value of consideration</b>	<b>\$</b>	<b>74,437</b>

*Fair value of assets acquired and liabilities assumed:*

Cash	\$	151
Inventories		320
Prepaid expenses and other assets		1,080
Property, plant and equipment		6,616
Intangible assets		71,850
Deferred tax assets		13,570
Goodwill		17,346
Accounts payable		(3,627)
Accrued expenses and other non-current liabilities		(452)
Customer deposits		(2,000)
Capital lease liability		(735)
Deferred tax liabilities		(29,682)
<b>Total net assets acquired</b>	<b>\$</b>	<b>74,437</b>

The purchase consideration includes contingent consideration payable by the Company upon the attainment of a financial target, an operational target and technical targets through the period ending March 31, 2013. Specifically, the contingent consideration is based upon the achievement of (i) a certain revenue target during the period from September 1, 2011 through December 31, 2012, (ii) operational targets related to the commissioning of a certain number of monocrystalline ingot pullers by May 31, 2012, (iii) demonstration of certain technical processes related to Czochralski growth processes on or before March 31, 2013 and (iv) achievement of technical acceptance and commercial delivery on volume orders of certain materials by June 30, 2012. The Company determined the fair value of the contingent consideration obligations based on a probability-weighted income approach derived from financial performance estimates and probability assessments of the attainment of the technical and operational targets. The undiscounted probable outcome that the Company initially used to value the contingent consideration arrangement was \$15,000. During the three and nine months ended December 31, 2011, the Company recorded contingent consideration expense related to this transaction of \$239 and \$333, respectively, as general and administrative expenses.

The Company incurred transaction costs of \$1,367 for nine months ended December 31, 2011 which consisted primarily of advisory services and due diligence. These costs have been recorded as general and administrative expense.

Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****4. Acquisition of Confluence Solar, Inc. (Continued)**

The acquisition of Confluence Solar did not have a material effect on the Company's results of operations. Pro forma results of operations have not been presented due to the immaterial nature of these amounts.

**5. Fair Value Measurements**

Fair value is an exit price, representing the amount that would be received from the sale of an asset or paid to transfer a liability in an orderly transaction between market participants based on assumptions that market participants would use in pricing an asset or liability. As a basis for classifying the assumptions used, a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value, is applied as follows: (Level 1) observable inputs such as quoted prices in active markets for identical assets or liabilities; (Level 2) inputs other than the quoted prices in active markets that are observable either directly or indirectly; and (Level 3) unobservable inputs in which there is little or no market data, which requires the Company to develop its own assumptions. This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value.

The following table provides the assets and liabilities measured and reported at fair value on a recurring basis at December 31, 2011 and April 2, 2011:

<b>December 31, 2011</b>				
	<b>Total Carrying Value</b>	<b>Fair Value Measurements Using</b>		
		<b>(Level 1)</b>	<b>(Level 2)</b>	<b>(Level 3)</b>
<b>Assets:</b>				
Bank time deposits (restricted cash)	\$ 96,202		\$ 96,202	
Forward foreign exchange contracts assets	\$ 101		\$ 101	
<b>Liabilities:</b>				
Forward foreign exchange contracts liabilities	\$ (2,487)		\$ (2,487)	
Contingent consideration	\$ 23,713			\$ 23,713

<b>April 2, 2011</b>				
	<b>Total Carrying Value</b>	<b>Fair Value Measurements Using</b>		
		<b>(Level 1)</b>	<b>(Level 2)</b>	<b>(Level 3)</b>
<b>Assets:</b>				
Money market mutual funds	\$ 196,118	\$ 196,118		
Forward foreign exchange contracts assets	\$ 374		\$ 374	
<b>Liabilities:</b>				
Contingent consideration	\$ 11,228			\$ 11,228

The Company's bank time deposits are valued using quoted prices for securities with similar characteristics and other observable inputs (such as interest rates that are observable at commonly quoted intervals). The Company's money market mutual funds are valued using readily available market prices. As of December 31, 2011, amounts held as restricted cash were related to cash collateralized letters of credits which represent performance guarantees issued against customer deposits. Accordingly, the Company

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**GT Advanced Technologies Inc.**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(In thousands, except per share data)**

**5. Fair Value Measurements (Continued)**

reflects the changes in restricted cash in operating activities in the condensed consolidated statement of cash flows. These amounts are not deposited to restricted cash accounts for investment purposes.

The Company's counterparties to its forward foreign exchange contracts are financial institutions. These forward foreign exchange contracts are measured at fair value using a valuation which represents a good faith estimate of the midmarket value of the position, based on estimated bids and offers for the positions, which are updated each reporting period. The Company considers the effect of credit standings in these fair value measurements. There have been no changes in the valuation techniques used to measure the fair value of the Company's forward foreign exchange contracts (see Note 8 below for additional information about the Company's derivatives and hedging activities).

The Company determined the fair value of its contingent consideration obligations based on a probability-weighted income approach derived from financial performance estimates and probability assessments of the attainment of certain targets. The key assumptions as of December 31, 2011 related to the contingent consideration from the acquisition of Confluence Solar used in the model include: (i) discount rates of 5.12% for the purpose of discounting the expected cash flows; and (ii) probability factors related to the attainment of the financial target, operational target and certain technical targets.

As of December 31, 2011, the key assumptions related to the contingent consideration from the acquisition of Crystal Systems used in the model include: (i) discount rates of 5.12% for the purpose of discounting the expected cash flows for one of the technical targets and the financial target; (ii) probability adjusted revenue and gross margin levels for the period ending March 31, 2012; and (iii) probability factors related to the attainment of certain technical targets. During the nine months ended December 31, 2011, the Company revised the probability factors associated with the furnace commissioning, the development of ingot growth processes and revenue targets to 100%. The change in the probability factors increased contingent consideration expense by \$2,470 for the nine months ended December 31, 2011.

The Company recorded contingent consideration expense within general and administrative expense in the condensed consolidated statements of operations and amounts to a total of \$464 and \$3,931 for the three and nine months ended December 31, 2011, respectively, all of which was allocated to the corporate services reporting segment. The undiscounted outcome that the Company initially used to value the contingent consideration arrangement was \$15,000 for the acquisition of Confluence Solar and between \$16,000 and \$18,650 for the acquisition of Crystal Systems. Changes in the fair value of the Company's

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**GT Advanced Technologies Inc.**
**Notes to Condensed Consolidated Financial Statements (Continued)**

(In thousands, except per share data)

**5. Fair Value Measurements (Continued)**

Level 3 contingent consideration obligations during the period from April 3, 2011 to December 31, 2011 were as follows:

	<b>Three Months Ended</b>		<b>Nine Months Ended</b>	
	<b>December 31,</b>	<b>January 1,</b>	<b>December 31,</b>	<b>January 1,</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>
Fair value as of the beginning of the period	\$ 23,249	\$ 13,943	\$ 11,228	\$
Acquisition date fair value of contingent consideration obligations related to acquisitions			13,858	12,500
Changes in the fair value of contingent consideration obligations	464	(443)	3,931	1,000
Payments of contingent consideration obligations			(5,304)	
Fair value at the end of the period	\$ 23,713	\$ 13,500	\$ 23,713	\$ 13,500

The carrying amounts reflected in the Company's condensed consolidated balance sheets for cash, accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses and customer deposits approximate fair value due to their short-term maturities.

**6. Goodwill and Other Intangible Assets**

The following table contains the change in the Company's goodwill during the nine months ended December 31, 2011:

	<b>Photovoltaic Business</b>	<b>Sapphire Business</b>	<b>Total</b>
Balance as of April 3, 2011	\$ 42,600	\$ 42,578	\$ 85,178
Adjustment related to the acquisition of Crystal Systems, Inc.		(372)	(372)
Acquisition of Confluence Solar, Inc.	17,346		17,346
Balance as of December 31, 2011	\$ 59,946	\$ 42,206	\$ 102,152



Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****6. Goodwill and Other Intangible Assets (Continued)**

No impairment losses have been recorded on the Company's goodwill. Acquired intangible assets subject to amortization at December 31, 2011 and April 2, 2011 consisted of the following:

	Weighted Average Amortization Period	December 31, 2011			April 2, 2011		
		Gross Amount	Accumulated Amortization	Net	Gross Amount	Accumulated Amortization	Net
<b>Photovoltaic &amp; Polysilicon:</b>							
Customer relationships	5.4 years	\$ 5,150	\$ 4,312	\$ 838	\$ 4,200	\$ 3,675	\$ 525
Technology	9.4 years	74,200	10,331	63,869	8,000	8,000	
Trade names / Trademarks	8.6 years	7,100	2,565	4,535	2,400	2,100	300
Supplier relationships	5.0 years	1,100	1,100		1,100	1,100	
Subtotal:		87,550	18,308	69,242	15,700	14,875	825
<b>Sapphire:</b>							
Customer relationships	6.0 years	\$ 4,100	\$ 968	\$ 3,132	\$ 4,100	\$ 456	\$ 3,644
Technology	10.0 years	17,300	2,450	14,850	17,300	1,153	16,147
Order backlog	1.2 years	500	471	29	500	300	200
Trade names	8.0 years	1,100	196	904	1,100	92	1,008
Non-compete agreements	5.8 years	1,000	254	746	1,000	119	881
Subtotal:		24,000	4,339	19,661	24,000	2,120	21,880
		\$ 111,550	\$ 22,647	\$ 88,903	\$ 39,700	\$ 16,995	\$ 22,705

The weighted average remaining amortization periods for the (i) photovoltaic, polysilicon and (ii) sapphire intangibles were 7.84 years and 7.46 years, respectively, as of December 31, 2011. As of December 31, 2011, the estimated future amortization expense for the Company's intangible assets is as follows:

Fiscal Year Ending	Amortization Expense
2012 (remaining three months)	\$ 2,546
2013	10,153
2014	10,137
2015	9,913
2016	9,770
2017	9,237
Thereafter	37,147

Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****7. Customer Concentrations**

The following customers comprised 10% or more of the Company's total accounts receivable or revenues as of or for the periods indicated:

	Three Months Ended		January 1,		Nine Months Ended		January 1,		December 31,		As of		
	December 31, 2011	% of Revenue	2011	% of Revenue	December 31, 2011	% of Revenue	2011	% of Revenue	December 31, 2011	% of Accounts Receivable	December 31, 2011	% of Accounts Receivable	
Photovoltaic Customers													
Customer #1	*	*	*	*	\$67,869	11%	*	*	*	*	\$11,821	14%	*
Customer #2	*	*	\$50,150	19%	*	*	*	*	*	*	*	*	*
Customer #3	*	*	34,608	13%	*	*	\$172,259	27%	*	*	*	*	*
Customer #4	*	*	*	*	*	*	*	*	*	*	11,100	13%	*
Customer #5	*	*	*	*	*	*	*	*	*	*	9,743	11%	*
Polysilicon Customers													
Customer #6	\$64,047	42%	*	*	134,342	22%	*	*	\$6,934	13%	*	*	*
Customer #7	*	*	*	*	*	*	*	*	12,961	25%	*	*	*
Sapphire Customers													
Customer #8	20,268	13%	*	*	*	*	*	*	*	*	*	*	*
Customer #9	*	*	*	*	*	*	*	*	11,483	22%	*	*	*

\*

Amounts from these customers were less than 10% of the total as of or for the respective period.

The Company requires most of its customers to either post letters of credit or make advance payments of a portion of the selling price prior to delivery. Approximately \$37,075 (or 72%) and \$76,548 (or 88%) of total accounts receivable as of December 31, 2011 and April 2, 2011, respectively, were secured by letters of credit.

**8. Derivative and Hedging Activities**

The Company enters into forward foreign currency exchange contracts to hedge portions of foreign currency denominated inventory purchases. These contracts typically expire within 12 months of entering into the contract. As of December 31, 2011, the Company had forward foreign currency exchange contracts with notional amounts of 29,036 Euros.

The following table sets forth the balance sheet location and fair value of the Company's forward foreign currency exchange contracts at December 31, 2011 and April 2, 2011:

		Balance Sheet Location	December 31, 2011 Fair Value	April 2, 2011 Fair Value
<i>Instruments Designated as Cash Flow Hedges</i>				
Forward foreign currency exchange contracts	assets	Other current assets	\$ 64	\$ 374
Forward foreign currency exchange contracts	liabilities	Accrued expenses	\$ (1,070)	\$

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## GT Advanced Technologies Inc.

## Notes to Condensed Consolidated Financial Statements (Continued)

(In thousands, except per share data)

## 8. Derivative and Hedging Activities (Continued)

	Balance Sheet Location	December 31, 2011 Fair Value	April 2, 2011 Fair Value
<i>Derivatives Not Designated as Hedging Instruments</i>			
Forward foreign currency exchange contracts assets	Other current assets	\$ 37	\$
Forward foreign currency exchange contracts liabilities	Accrued expenses	\$ (1,417)	\$

The following table sets forth the effect of the Company's forward foreign currency exchange contracts designated as hedging instruments on the consolidated statements of operations for the three and nine months ended December 31, 2011 and January 1, 2011:

*Instruments Designated as Cash Flow Hedges*

	Amount of (Gain) or Loss Recognized in OCI on Derivative (Effective Portion)	Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Location of Gain or (Loss) Recognized in Income on Derivative (Ineffective Portion)	Amount of Gain or (Loss) Recognized in Income on Derivative (Ineffective Portion)
<b>Three Months Ended</b>					
December 31, 2011	\$ 1,229	Cost of revenue	\$ (1,239)	Other, net	\$
January 1, 2011	\$ 404	Cost of revenue	\$ (470)	Other, net	\$
<b>Nine Months Ended</b>					
December 31, 2011	\$ 3,459	Cost of revenue/ Research and Development	\$ (3,328)	Other, net	\$
January 1, 2011	\$ 813	Cost of revenue	\$ (666)	Other, net	\$

*Derivatives Not Designated as Hedging Instruments*

	Location of Gain or (Loss) Recognized in Income on Derivative	Amount of Gain or (Loss) Recognized in Income on Derivative
<b>Three Months Ended</b>		
December 31, 2011	Other, net	\$ (1,363)
January 1, 2011	Other, net	\$
<b>Nine Months Ended</b>		
December 31, 2011	Other, net	\$ (1,388)
January 1, 2011	Other, net	\$

During the nine months ended December 31, 2011, \$1,388 was reclassified into earnings as a result of the Company discontinuing cash flow hedging. Approximately \$2,234 of accumulated loss, included in other comprehensive income, as of December 31, 2011 is expected to be reclassified into earnings over the next twelve months.

Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****9. Inventories**

Inventories consisted of the following:

	<b>December 31, 2011</b>	<b>April 2, 2011</b>
Raw materials	\$ 160,661	\$ 97,607
Work-in-process	11,715	4,130
Finished goods	26,248	25,835
	\$ 198,624	\$ 127,572

**10. Warranty**

The following table presents warranty activities:

	<b>Nine Months Ended</b>	
	<b>December 31, 2011</b>	<b>January 1, 2011</b>
Product warranty liability, beginning of the period	\$ 6,943	\$ 1,280
Accruals for new warranties issued	3,345	6,489
Payments under warranty	(5,524)	(2,121)
Product warranty liability, end of period	\$ 4,764	\$ 5,648

**11. Income Taxes**

The Company accounts for income taxes at each interim period using its estimated annual effective tax rate which takes into account operations in the U.S. and in other tax jurisdictions. Any discrete tax adjustments are recorded in the specific quarter they arise.

The Company's effective tax rate was 43.6% and 33.2% for the three months ended December 31, 2011 and January 1, 2011, respectively, and 32.5% and 35.3% for the nine months ended December 31, 2011 and January 1, 2011, respectively. The effective tax rate is lower in the nine months ended December 31, 2011, principally due to proportionally higher expected levels of income in lower tax jurisdictions as a result of the Company's continued transition of its global operations center to Hong Kong. The effective tax rate is higher in the three months ended December 31, 2011 principally due to a change in forecast of the revenue mix by business line with proportionally higher levels of income expected in higher tax jurisdictions than was forecasted during the Company's second fiscal quarter. The Company reviews its expected annual effective income tax rates and makes changes on a quarterly basis as necessary based on certain factors such as changes in forecasted annual operating income by jurisdiction; changes to actual or forecasted permanent book to tax differences; impacts from future tax settlements with state, federal or foreign tax authorities; and impacts from tax law changes. Due to the volatility of these factors, the Company's consolidated effective income tax rate can change significantly on a quarterly basis.

Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****11. Income Taxes (Continued)**

A reconciliation of the change in unrecognized tax benefits for the nine months ended December 31, 2011 is as follows:

Unrecognized tax benefits at April 3, 2011	\$ 17,653
Increases related to current year tax positions	2,926
Increases related to prior year tax positions	

Unrecognized tax benefits at December 31, 2011	\$ 20,579
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The Company also recognizes interest and penalties related to unrecognized tax benefits as a component of income tax expense. To date the Company has recorded accruals for interest and penalties of \$331 for fiscal year ended March 31, 2012. Realization of the unrecognized tax benefits would affect the effective tax rate.

The Company files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. The Company is subject to examination by federal, state, and foreign tax authorities. The Company's U.S. tax returns are currently in appeals for fiscal years ended March 31, 2007 and 2008 and the Company plans to vigorously defend all tax positions taken. The Company is also under examination by the Internal Revenue Service, or IRS, for its fiscal years ended March 28, 2009 and April 3, 2010. During the nine months ended December 31, 2011 and January 1, 2011, the Company paid \$32,870 and \$75,332 for estimated taxes, respectively.

**12. Commitments and Contingencies***Purchase Commitments*

The Company's commitments to purchase raw materials, research and development and other services from various suppliers and vendors are estimated to be \$408,545 and \$293,251 as of December 31, 2011 and April 2, 2011, respectively. Substantially all of these commitments as of December 31, 2011 are due within the next twelve months. In addition, in connection with the acquisition of Confluence Solar, the Company agreed to fund at least \$25,000, or another amount as mutually agreed upon, of capital purchases related to Confluence Solar.

*Litigation Contingencies*

Beginning on August 1, 2008, seven putative securities class action lawsuits were commenced in the United States District Court for the District of New Hampshire, or the Court, against the Company, certain of its officers and directors, certain underwriters of its July 24, 2008 initial public offering and others, including certain of its investors, together called the "federal class actions." In addition, on September 18, 2008 a putative securities class action was filed in New Hampshire state court in the Superior Court for Hillsborough County, Southern District, or the State Court, under the caption *Hamel v. GT Solar International, Inc., et al.*, against the Company, certain of its officers and directors and certain underwriters of its July 24, 2008 initial public offering, called the "state class action." Both the federal class actions and the state class action asserted claims under various sections of the Securities Act of 1933, as amended. The plaintiffs in these actions alleged, among other things, that the defendants made false and materially misleading statements and failed to disclose material information in certain SEC filings,

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**GT Advanced Technologies Inc.**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(In thousands, except per share data)**

**12. Commitments and Contingencies (Continued)**

including the registration statement and prospectus for the Company's July 24, 2008 initial public offering, and other public statements, regarding its business relationship with LDK Solar, Ltd., one of its customers, JYT Corporation, one of its competitors, and certain of its products, including the DSS furnaces.

On March 7, 2011, the Company announced that it had reached an agreement in principle to settle both the federal class actions and the state class action. The parties subsequently memorialized their agreement in a stipulation of settlement (the "Settlement Agreement") that was filed with the Court. The Settlement Agreement provided, among other things, that: (i) the Company and all other defendants made no admission of liability or wrongdoing, (ii) the Company and all other defendants would receive a full and complete release of all claims that were or could have been brought against all defendants in both the federal and state securities actions, (iii) the Company would pay \$10,500 into a settlement fund. Of this amount, the Company contributed \$1,000 and the Company's liability insurers contributed the remaining \$9,500. The Company's contribution represented its contractual indemnification obligation to its underwriters.

On September 27, 2011, after a hearing to consider the fairness and adequacy of the settlement, the court entered a final judgment (the "Order") approving the settlement and dismissing the federal class actions. Pursuant to the Settlement Agreement, the state class action was also dismissed as a result of the entry of the Order.

A derivative suit, captioned *Fan v. GT Solar Int'l, Inc., et al.*, was filed in New Hampshire State Court on January 14, 2009, called the "derivative action." The derivative complaint is asserted nominally on the Company's behalf against certain of its directors and officers and alleges various claims for breach of fiduciary duty, unjust enrichment, abuse of control and gross mismanagement. The derivative action is premised on the same purported misconduct alleged in the federal class actions. On April 10, 2009, the court granted the Company's motion to stay the derivative action, pending resolution of a motion to dismiss then pending in the federal action. The derivative action, which remains stayed, is not included in the settlement of the federal and state class actions.

The Company intends to defend the derivative action vigorously. The Company is currently unable to estimate a range of payments, if any, it may be required to pay, or may agree to pay, with respect to the derivative action. However, the Company believes that the resolution of this suit will not result in a material effect to its consolidated financial statements. However, due to the inherent uncertainties that accompany litigation of this nature, there can be no assurance that the Company will be successful, and the resolution of the lawsuit could have a material effect on its consolidated financial statements.

The Company is subject to various other routine legal proceedings and claims incidental to its business, which management believes will not have a material effect on the Company's financial position, results of operations or cash flows.

***Customer Indemnifications***

In certain cases, the Company indemnifies, under pre-determined conditions and limitations, its customers for infringement of third-party intellectual property rights by the Company's products or services. The Company generally seeks to limit its liability for such indemnity to an amount not to exceed the sales price of the products or services subject to its indemnification obligations, but not all agreements contain such limitations on liability. The Company does not believe, based on information available, that it is probable that any material amounts will be paid under these indemnification provisions.

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**GT Advanced Technologies Inc.**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(In thousands, except per share data)**

**13. Long-Term Debt and Revolving Credit Facility**

On December 13, 2010, the Company entered into the Credit Agreement (the "Credit Agreement"), with Credit Suisse AG, Cayman Islands Branch, ("Credit Suisse") as administrative agent and collateral agent, and the lenders from time to time, party to the Credit Agreement. The Credit Agreement consisted of the term facility (the "Term Facility"), in an aggregate maximum principal amount of \$125,000 with a final maturity date of December 13, 2013 and the revolving facility (the "Revolving Facility"), in an aggregate maximum principal amount of \$75,000 with a final maturity date of December 13, 2013.

In November 2011, the Company terminated the Credit Agreement, as amended, and the Guarantee and Collateral Agreement which was entered into at the time the Credit Agreement was executed in order to secure the obligations under the Credit Agreement. On November 15, 2011, the Company paid \$91,267 to settle amounts owed under the Term Facility, which included principal of \$90,938 and accrued interest of \$329. There were no amounts outstanding under the Revolving Facility. In connection with the termination of the Credit Agreement, the Company recorded interest expense of \$6,103 related to the unamortized portion of debt financing costs. As of December 31, 2011, there is no debt outstanding.

**14. Share-Based Compensation**

The Company recorded \$3,660, \$1,761, \$10,557, and \$5,663 of expense related to share-based compensation during the three months ended December 31, 2011 and January 1, 2011, and the nine months ended December 31, 2011 and January 1, 2011, respectively. Share-based compensation cost capitalized as part of inventory was not material for all periods presented.

During the nine months ended December 31, 2011, the Company granted option awards to certain executives and employees of the Company to purchase 754 shares of the Company's common stock. The stock options are exercisable at a weighted average price of \$12.03 per share, which is based on the fair value of the Company's common stock on the dates of grant, and expire 10 years from the date of grant. The total fair value of the stock options granted during the nine month period ending December 31, 2011 was \$4,314 or \$5.72 per share. The fair value of the stock options was estimated using the Black-Scholes option pricing model which uses assumptions including the expected stock price volatility. The fair value of the Company's stock options were estimated using the following assumptions: no expected dividends, risk free interest rate of 2.0%, expected average life of 6.0 years and an expected stock price volatility of 47.9%.

During the nine months ended December 31, 2011, the Company granted restricted stock units to certain executives, employees and directors of the Company for 1,525 shares of the Company's common stock. Restricted stock units provide for the holder to receive shares of the Company's common stock at the time such units vest or restrictions on such units lapse in accordance with the terms of the restricted stock unit agreement. The total fair value of the restricted stock units, which was based on the fair value of the Company's common stock on the date of grant, was \$17,910 or \$11.74 on a weighted average per share basis.

During the nine months ended December 31, 2011, the Company granted to certain executives and employees 488 performance-based restricted stock units. The total fair value of these restricted stock units, which was based on the fair value of the Company's common stock on the date of grant, was \$5,781, or \$11.85 on a weighted average per share basis.

As of December 31, 2011, the Company had unamortized share-based compensation expense related to stock options, restricted stock unit awards and performance-based restricted stock unit awards of

Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****14. Share-Based Compensation (Continued)**

approximately \$30,839 after estimated forfeitures. The remaining unamortized share-based compensation expense related to stock options, restricted stock unit awards and performance-based restricted stock unit awards will be recognized over an estimated weighted average remaining requisite service period of 2.61 years.

**15. Stockholders' Equity**

The following table presents the changes in stockholders' equity for the nine months ended December 31, 2011:

	Common Stock Shares	Par Value	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
Balance as of April 3, 2011	125,683	\$ 1,257	\$ 123,338	\$ 80,197	\$ (2,852)	\$ 201,940
Net income				104,324		104,324
Other comprehensive income (loss)(1)						
Cash flow hedge of foreign exchange, net					760	760
Foreign currency translation adjustment					578	578
Retirement of common stock repurchased	(7,823)	(78)	(26,886)	(51,380)		(78,344)
Option exercises and vesting of restricted stock units	2,110	21	6,037			6,058
Share-based compensation expense			10,478			10,478
Excess tax benefit from share-based award activity			3,458			3,458
Minimum tax withholding payments for employee share-based awards	(266)	(3)	(2,798)			(2,801)
Balance as of December 31, 2011	119,704	\$ 1,197	\$ 113,627	\$ 133,141	\$ (1,514)	\$ 246,451

(1)

Note 17 below.

**Share Repurchase Program**

In November 2011, the Company's board of directors authorized a \$100,000 share repurchase program consisting of the purchase of \$75,000 of its common stock which was financed with existing cash through an accelerated share repurchase program, and the purchase of an additional \$25,000 of its common stock that may be made from time to time through open market repurchases or privately negotiated transactions, as determined by the Company's management. On November 18, 2011, the Company entered into an accelerated share repurchase agreement with UBS AG, under which the Company will repurchase \$75,000 of its common stock. The effective per share purchase price will be based on the average of the daily volume weighted average prices per share of the Company's common stock, less a discount, calculated during a period of up to four months. In connection with this agreement, in November 2011 the Company paid \$75,000 to UBS AG and at such time received 7,823 shares, of which:

\$60,000, or 80%, represents the value, based on the closing price of the Company's common stock on November 18, 2011, of the 7,823 shares of Company common stock that UBS AG delivered to the Company in November 2011; and





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**GT Advanced Technologies Inc.**
**Notes to Condensed Consolidated Financial Statements (Continued)**

(In thousands, except per share data)

**15. Stockholders' Equity (Continued)**

\$15,000, or 20%, represents an advance payment that, depending on the effective per share purchase price, either will cover additional shares UBS AG may be required to deliver to the Company or will be applied towards any additional amount that may be owed by the Company. This advanced payment is accounted for as a forward share repurchase contract in the statement of stockholders' equity, as a reduction to additional paid-in capital.

The excess of the cost of shares acquired over the par value was allocated to additional paid-in capital and retained earnings. As a result of the share repurchases, the Company reduced common stock and additional paid-in capital by an aggregate of \$26,886 and charged \$51,380 to retained earnings for the three and nine months ended December 31, 2011.

To account for changes in the fair value of the share repurchase contract from the trade date of November 18, 2011 to settlement date of November 23, 2011, the Company recorded a gain of \$3,344 to other income to reflect an appreciation of the fair value of the share repurchase contract over the three day settlement period. The value of the share repurchase contract has been included as a reduction in additional paid-in capital in the Company's condensed consolidated balance sheet.

**16. Earnings Per Share**

The following table sets forth the computation of the weighted average shares used in computing basic and diluted earnings per share:

	<b>Three Months Ended</b>		<b>Nine Months Ended</b>	
	<b>December 31,</b>	<b>January 1,</b>	<b>December 31,</b>	<b>January 1,</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>
Weighted average common shares basic(1)	123,628	136,562	125,430	143,124
Dilutive common stock options and restricted stock unit awards(2)	1,318	2,145	2,216	2,001
Weighted average common and common equivalent shares diluted	124,946	138,707	127,646	145,125

(1) On November 18, 2011, the Company repurchased 7,823 shares of the Company's common stock (see Note 15 above for additional information about the Company's accelerated share repurchase program). On November 12, 2010, the Company repurchased 26,500 shares of the Company's common stock from GT Solar Holdings, LLC. The impact of these repurchases on the weighted average shares was a reduction of 3,696, 14,560, 1,232 and 4,853, for the three months ended December 31, 2011 and January 1, 2011, and nine months ended December 31, 2011 and January 1, 2011, respectively.

(2) The Company has evaluated the accelerated share repurchase for its potential dilution and as a result, these additional shares were not included in the weighted average diluted earning per share calculation because their effect would be anti-dilutive.

Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****16. Earnings Per Share (Continued)**

Potential common stock equivalents excluded from the calculation of dilutive earnings per share because the effect would have been anti-dilutive are as follows:

	<b>Three Months Ended</b>		<b>Nine Months Ended</b>	
	<b>December 31,</b>	<b>January 1,</b>	<b>December 31,</b>	<b>January 1,</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>
Weighted average restricted stock units and common stock options having no dilutive effect	2,875	797	1,606	2,136

**17. Comprehensive Income**

The following table summarizes components of total comprehensive income for the three and nine months ended December 31, 2011 and January 1, 2011:

	<b>Three Months Ended</b>		<b>Nine Months Ended</b>	
	<b>December 31,</b>	<b>January 1,</b>	<b>December 31,</b>	<b>January 1,</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>
Net Income	\$ 15,340	\$ 63,584	\$ 104,324	\$ 122,861
Change in fair value of cash flow hedging instruments, net of tax effect of \$(204), \$(105), \$(498) and \$(19), respectively	830	(39)	760	(166)
Changes in unrealized gain on available for sale securities, net of tax effect of \$0, \$1, \$0, and \$2, respectively		(2)		(3)
Foreign currency translation adjustment	221	142	578	415
Comprehensive income	\$ 16,391	\$ 63,685	\$ 105,662	\$ 123,107

The following table summarizes the components of accumulated other comprehensive loss as of December 31, 2011 and April 2, 2011:

	<b>December 31,</b>	<b>April 2,</b>
	<b>2011</b>	<b>2011</b>
Cash flow hedges of foreign exchange, net of tax	\$ (2,762)	\$ (3,522)
Foreign currency translation adjustment	1,248	670
Total	\$ (1,514)	\$ (2,852)

**18. Segment Information**

The Company reports its results in three segments: the photovoltaic (PV) business, the polysilicon business and the sapphire business.

The PV business manufactures and sells directional solidification, or DSS, crystallization furnaces and ancillary equipment used to cast multicrystalline silicon ingots by melting and cooling polysilicon in a precisely controlled process. These ingots are used to make photovoltaic wafers which are, in turn, used to make solar cells. Included in the results of the PV business are the results of operations of Confluence

Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****18. Segment Information (Continued)**

Solar, a company that was acquired on August 24, 2011. Confluence Solar is the developer of HiCz , a continuously-fed Czochralski growth technology that enables the production of high efficiency monocrystalline solar ingots.

The polysilicon business manufactures and sells chemical vapor deposition, or CVD, reactors, used to react gases at high temperatures to produce polysilicon, the key raw material used in solar wafers and cells, while also providing engineering services and related equipment.

On July 29, 2010, the Company acquired 100% of the outstanding shares of stock of Crystal Systems. The sapphire business manufactures and sells advanced sapphire crystal growth systems that incorporate the Heat Exchanger Method technology, as well as sapphire materials used in LED applications, and sapphire components used in other specialty markets.

The Company evaluates performance and allocates resources based on revenues and operating income (loss) of each segment. Operating income (loss) for each segment includes selling, general and administrative expenses directly attributable to the segment including the amortization of acquired intangible assets. Corporate services include non-allocable overhead costs, including human resources, legal, finance, information technology, general and administrative, certain corporate integration expenses and corporate marketing expenses. Financial information for the Company's reportable segments is as follows:

	<b>Photovoltaic Business</b>	<b>Polysilicon Business</b>	<b>Sapphire Business</b>	<b>Corporate Services</b>	<b>Total</b>
<b>Three months ended December 31, 2011</b>					
Revenue	\$ 34,353	\$ 87,440	\$ 31,235	\$	\$ 153,028
Gross profit	13,102	39,881	13,015		65,998
Depreciation and amortization	2,451	174	1,968	662	5,255
Income (loss) from operations	(792)	36,552	6,810	(10,828)	31,742
<b>Three months ended January 1, 2011</b>					
Revenue	\$ 239,856	\$ 17,332	\$ 5,710	\$	\$ 262,898
Gross profit	112,908	6,852	2,323		122,083
Depreciation and amortization	908	152	1,486	826	3,372
Income (loss) from operations	103,303	3,816	(472)	(11,805)	94,842
<b>Nine months ended December 31, 2011</b>					
Revenue	\$ 344,171	\$ 209,334	\$ 48,310	\$	\$ 601,815
Gross profit	166,875	91,938	15,659		274,472
Depreciation and amortization	4,212	506	5,668	1,699	12,085
Income (loss) from operations	132,205	78,145	(263)	(45,825)	164,262
<b>Nine months ended January 1, 2011</b>					
Revenue	\$ 554,071	\$ 64,342	\$ 8,944	\$	\$ 627,357
Gross profit	230,187	27,622	3,322		261,131
Depreciation and amortization	2,536	679	1,898	1,964	7,077
Income (loss) from operations	205,445	17,559	(703)	(31,731)	190,570

Table of Contents**GT Advanced Technologies Inc.****Notes to Condensed Consolidated Financial Statements (Continued)****(In thousands, except per share data)****18. Segment Information (Continued)**

The following table presents revenue by geographic region, which is based on the destination of the shipments:

	<b>Three Months Ended</b>		<b>Nine Months Ended</b>	
	<b>December 31,</b>	<b>January 1,</b>	<b>December 31,</b>	<b>January 1,</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>
China	\$ 61,941	\$ 189,739	\$ 278,428	\$ 433,829
Korea	74,124	30,067	148,947	67,553
Other Asia	13,428	36,945	134,769	66,772
Europe	786	1,257	29,123	49,371
United States	2,272	2,488	8,566	6,707
Other	477	2,402	1,982	3,125
<b>Total</b>	<b>\$ 153,028</b>	<b>\$ 262,898</b>	<b>\$ 601,815</b>	<b>\$ 627,357</b>

**19. Subsequent Event***Credit Agreement*

On January 31, 2012, the Company, its U.S. operating subsidiary (the "U.S. Borrower") and its Hong Kong subsidiary (the "Hong Kong Borrower") entered into a credit agreement (the "Credit Agreement"), with Bank of America, N.A., as administrative agent, Swing Line Lender and L/C Issuer ("Bank of America") and the lenders from time to time party thereto. The Credit Agreement consists of a term loan facility (the "Term Facility") provided to the U.S. Borrower in an aggregate principal amount of \$75,000 with a final maturity date of January 31, 2016, a revolving credit facility (the "U.S. Revolving Credit Facility") available to the U.S. Borrower in an aggregate principal amount of \$25,000 with a final maturity date of January 31, 2016 and a revolving credit facility (the "Hong Kong Revolving Facility"; together with the U.S. Revolving Credit Facility, the "Revolving Credit Facility"; together with the "Term Facility", the "Credit Facilities") available to the Hong Kong Borrower in an aggregate principal amount of \$150,000 with a final maturity date of January 31, 2016. The Credit Facilities are available in the form of base rate loans based on Bank of America's prime rate plus a margin of 2.00% or Eurodollar rate loans based on LIBOR plus a margin of 3.00%. The Term Facility amortizes in equal quarterly amounts which in the aggregate equal 5% of the original principal amount of the Term Facility in each of years 1 and 2 of the loan and 10% of the original principal amount of the Term Facility in each of years 3 and year 4 of the loan, with the balance payable on January 31, 2016. The Credit Facilities are subject to mandatory prepayment in the event that the Company has excess cash flow during any fiscal year, subject to certain exceptions. The Credit Facilities also require the Company to comply with certain covenants, including a maximum consolidated leverage ratio and a minimum consolidated interest coverage ratio. Proceeds of the Term Facility and Revolving Facility are available for use by the Company and its subsidiaries for general corporate purposes. The full amount of the Term Facility was drawn by the Company on January 31, 2012 and no amounts have been drawn on the Revolving Facility as of such date. The Company may use the Revolving Facility in connection with the issuance of letters of credit up to the aggregate principal amount of the Revolving Facility.

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**GT Advanced Technologies Inc.**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(In thousands, except per share data)**

**19. Subsequent Event (Continued)**

The proceeds of the Term Facility and the U.S. Revolving Credit Facility are secured by a lien on substantially all of the tangible and intangible property of the Company and its wholly-owned domestic subsidiaries (including the U.S. Borrower), including but not limited to accounts receivable, inventory, equipment, general intangibles, certain investment property, certain deposit and securities accounts, certain owned real property and intellectual property, and a pledge of the capital stock of each of the Company's wholly-owned domestic subsidiaries (limited in the case of pledges of capital stock of any foreign subsidiaries, to 65% of the capital stock of any first-tier foreign subsidiary), subject to certain exceptions and thresholds, and the repayment of such proceeds is guaranteed by the Company and its wholly-owned domestic subsidiaries. The proceeds of the Hong Kong Revolving Credit Facility are secured by a lien on substantially all of the tangible and intangible property of the Hong Kong Borrower, including but not limited to accounts receivable, inventory, equipment, general intangibles, certain investment property, certain deposit and securities accounts, certain owned real property and intellectual property, and a pledge of the capital stock of the Hong Kong Borrower, subject to certain exceptions and thresholds, and the repayment of such proceeds is guaranteed by the Company and its wholly-owned domestic subsidiaries.

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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 contains "forward-looking statements" that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. The statements contained in this Quarterly Report on Form 10-Q that are not purely historical are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are identified by the use of words such as, but not limited to, "anticipate," "believe," "continue," "could," "estimate," "prospects," "forecasts," "expect," "intend," "may," "will," "plan," "target," and similar expressions or variations intended to identify forward-looking statements and include statements about our expectations of future periods with respect to, among other things, future changes to accounting policies and the impact of such changes on operating results, the acquisition of Confluence Solar, Inc. (or Confluence Solar) will expand the PV product portfolio, the future performance and output expected from technology acquired from Confluence Solar (including expectation that technology will decrease costs), expected synergies resulting from acquisitions and the expected benefits due to such synergies, expected reclassifications in the next 12 months (and the impact on financial statements), continued customer concentrations, future capital expenditures and the anticipated timing of such expenditures (including such purchases related to Confluence Solar), outcome of unresolved litigation and the impact of the securities derivative suit and other litigation on the financial statements, expected payment of amounts under indemnification provisions to which the Company is a party, the performance characteristics of the materials generated using DSS MonoCast growth technology and HiCz growth technology, the timing of commercialization of the MonoCast and HiCz growth technologies, future plans for monocrystalline production, future upgrades for DSS furnaces to allow such furnaces to generate MonoCast material, expectation that MonoCast growth technology will serve as a bridge to HiCz, plans for monocrystalline and sapphire material sales in the future into select markets, all of the information under the caption "Factors Affecting the Results of Our Operations", factors that may impact Company operations, impact of continued stringent lending environment and global economic crisis on the Company and its customers, ability of customer advances to cover certain costs of the Company, future requests from customers to re-negotiate contract terms and the impact of such re-negotiations on our results of operation and backlog, factors expected to allow polysilicon manufacturers to continue to operate, future focus on efficiency by polysilicon manufacturers, future pressure by customers to lower polysilicon equipment costs and the potential for order delays and cancellations if lower costs are not agreed to, polysilicon segment is positioned to capture future demand (and the reasons therefore), performance characteristics of the Company's polysilicon reactors, cyclicity expected in each business segment, decreased demand for Company's PV equipment, decreased future demand for multicrystalline PV equipment due to technical advances in PV technologies, anticipated increased market demand for multicrystalline solar products (and the timing of such future increased demand), future government assistance and incentives to the solar industry, anticipated decreasing costs in the solar value chain and impact on demand, future revenue attributable to ASF units will significantly exceed revenue from sapphire material, ability and timing of revenue recognition for ASF units, general illumination (and LED) expected to drive long term demand for sapphire material, expected short term demand for sapphire material and impact on our revenue and backlog, expected continued decreased prices for sapphire materials, potential tensions in trade relationship with U.S. and China and impact on the Company's operations, delivery time for products in each of our segments, backlog, backlog conversions (including amount of conversion and timing of such conversion), timing of revenue recognition for polysilicon and other products, expectation that most customers will substantially perform contractual obligations, the timing and amount of deferred revenue to be recognized as revenue ratably through calendar year 2012, expected improvement in sapphire business gross margins (and the expectation that more sapphire equipment will be recognized in revenue in the future), anticipated continued investment in new product development and future attempts to expand product base in each business segment, future potential use of cash, forecasts for revenue in certain jurisdictions in the future and the impact on the tax rate, expected total capital expenditures for fiscal year ending March 31, 2012 (and the expected use of these expenditures), future issuance of all letters of credit under a new credit agreement (and*

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*the expectation that there will no longer be restricted cash related to letters of credit), sufficiency of cash resources to satisfy requirements for the foreseeable future, potential use of cash on strategic opportunities (including use of \$25 million for further share repurchases), timing of the expiration of letters of credit, timing of payments required under purchase commitments, impact of future changes in interest rates on investments, impact of future changes in exchange rates on our operating results, ability to offer PV equipment that produces high-efficiency solar ingots (and will lower production costs), impact of greater demand for monocrystalline production equipment on existing PV equipment offerings, expanding operations in China, expanding workforce in our sapphire business and at Confluence Solar, expected future revenue from outside U.S., variability of gross margins and the reasons therefore, and the impact of European and global economic environment on money market funds (and the extent of our exposure to riskier investments). These statements are based on the beliefs and assumptions of our management based on information currently available to management. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to factors discussed in Part II, Item 1A "Risk Factors" and included elsewhere in this Quarterly Report on Form 10-Q.*

*Forward-looking statements speak only as of the date of this Quarterly Report on Form 10-Q or, as of the date given if provided in another filing with the SEC. We undertake no obligation to publicly update or review any forward-looking statements to reflect events or circumstances after the date of such statements.*

**Company Overview**

GT Advanced Technologies Inc., through its subsidiaries (referred to collectively as "we," "us" and "our"), is a global provider of polysilicon production technology and sapphire and silicon growth systems and materials for the solar, LED and other specialty markets.

We operate through three business segments: our polysilicon business, our photovoltaic, or PV, business and our sapphire business.

***Polysilicon Business***

Our polysilicon business manufactures and sells chemical vapor deposition, or CVD, reactors, used to react gases at high temperatures to produce polysilicon, the key raw material used in silicon-based solar wafers and cells, while also offering engineering services and related equipment.

***Photovoltaic Business***

Our PV business manufactures and sells directional solidification, or DSS, crystallization furnaces and ancillary equipment used to cast multicrystalline silicon ingots by melting and cooling polysilicon in a precisely controlled process. These ingots are used to make photovoltaic wafers which are, in turn, used to make solar cells. Our PV business provided services related to the production of photovoltaic wafers, cells and modules, referred to as our turnkey business. During 2010, we completed a review of our PV turnkey business and decided to no longer offer these services. This decision was based on our assessment of reduced market opportunities, as well as low gross margins compared to our other product lines.

Recently, we made two advances in our PV segment. First, our research and development efforts recently resulted in production testing of our new DSS MonoCast growth technology. This technology is expected to generate silicon ingots with greater efficiencies than the silicon ingots developed with multicrystalline growth equipment. We expect to commercialize our DSS MonoCast equipment solutions in the first calendar quarter of 2012. This equipment solution includes furnaces as well as upgrades to certain DSS furnaces currently used by our customers. Second, we acquired Confluence Solar, Inc., or Confluence Solar, in August 2011, which is a producer of monocrystalline silicon materials using Czochralski growth production methods. We are currently in the process of developing an equipment



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offering based on Confluence Solar's continuously-fed Czochralski (HiCz ) growth technology. We expect the MonoCast equipment offering will serve as a bridge to our HiCz efforts, and while both are targeted at improving the ingot performance compared to that of multicrystalline silicon materials, we expect that HiCz will ultimately supersede our MonoCast offerings once the HiCz equipment is commercially available and becomes accepted in the market. We have not yet commercialized the HiCz monocrystalline equipment, we do, however, expect to continue to sell monocrystalline material, manufactured at our pilot plant in Hazelwood, Missouri, into select markets.

***Sapphire Business***

Our sapphire business manufactures and sells sapphire material and equipment. Our sapphire material is manufactured using our advanced sapphire crystal growth systems that incorporate the Heat Exchanger Method, or HEM, technology. We have begun volume shipments of the ASF system and recently received acceptances from two customers in connection with their initial deliveries of the ASF system. We have, however, limited experience installing the ASF systems in customer facilities. Although certain of the first ASF units installed at a customer facility met the required performance standards and resulted in product acceptances, if the ASF system does not operate properly in our other customers' facilities, we will not be able to recognize revenue from the sale of those ASF systems in a timely manner, or at all. If we are unable to recognize revenue, or such recognition is delayed, under existing contracts to sell ASF systems, our sapphire business, and our overall business, would be materially and adversely impacted. In addition to selling ASF systems, we intend to continue production and sale of sapphire materials in selected specialty markets.

**Corporate Name Change**

Effective August 8, 2011, we changed our name from GT Solar International, Inc. to GT Advanced Technologies Inc. The name change was effected pursuant to Delaware law by the merger of a wholly-owned subsidiary into the Company.

**Factors Affecting the Results of Our Operations**

Demand for our polysilicon and PV products and services are driven by end-user demand for solar power. Key drivers of the demand for solar power include: volatile prices of conventional energy sources; the desire for energy independence to counter perceived geopolitical supply risks surrounding fossil fuels; environmental pollution from fossil fuels and the resulting tightening of emission controls; the competitive cost of energy from alternative renewable energy sources; government incentive programs that make solar energy more cost competitive; and changing consumer preferences towards renewable energy sources.

In addition, our results of operations are affected by a number of other factors including the availability and market price of polysilicon; alumina material and certain process consumables availability of raw materials, foreign exchange rates, interest rates, commodity prices (including molybdenum, steel and graphite prices) and macroeconomic factors, including the availability of capital that may be needed by our customers, as well as political, regulatory and legal conditions in the international markets in which we conduct business, including China.

Our results of operations are also affected by when we are able to recognize revenue under our PV, polysilicon and ASF system contracts. Our revenue recognition policies require us to defer revenue recognition in certain circumstances from shipped equipment and recognize revenue at a later date as more fully described under the caption "Note 2 Significant Accounting Policies Revenue Recognition" in the notes to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q. Other factors affecting operations include delays in customer acceptances of our products, delays of deliveries of ordered products and our rate of progress in the fulfillment of our obligations under our contracts. A delay in deliveries or cancellations of orders would cause us to have

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inventories in excess of our short-term needs, and may delay our ability to recognize, or prevent us from recognizing, revenue on contracts in our order backlog and result in losses for advancements or other payments made to vendors and suppliers that cannot be cancelled.

Changes in the global capital markets have resulted in a more stringent lending environment which in turn has caused decreased spending within the industries we serve. Our PV segment, for example, has reported decreased revenue for both the three and nine months ended December 31, 2011. We believe, that this decrease is due, in part, to tighter lending conditions in all markets, particularly China. We believe the negative impact of a more stringent lending environment has resulted in decreased demand for our other products as well, including ASF units. The international commercial lending environment has not stabilized and if the availability of capital or credit remains constrained (including in China) or if capital or credit were to become even more limited, we expect that the results of operations attributable to our PV business, and our other business segments, would continue to be negatively impacted.

In addition, the sovereign debt crisis in Europe has led to macroeconomic instability, depreciation of the euro, fiscal austerity and slowing growth in the entire region. While we generate only a small portion of our total revenue to sales to customers in Europe, a significant portion of the end-users of solar power and LED materials are located in Europe. We expect that customers for our equipment will be negatively impacted by the sovereign debt crisis and, as such, will have decreased demand for the silicon and sapphire materials generated using our equipment. We expect that this will have a corresponding decrease in demand for our polysilicon, sapphire and PV equipment offerings. Given the continued uncertainty in European markets, it is impossible to determine how long this period of instability will continue. In addition, there is increasing evidence that this economic instability is impacting other regions as well, including China (the European Union is China's largest trading partner) and will impact our equipment customers.

We are required to make a significant upfront investment in order to fill orders for our PV, polysilicon and sapphire production equipment. In the past we have had customers for our DSS furnaces and CVD reactors place orders and fail to make payments (and while we did not complete these orders, we incurred certain expenses in order to prepare to complete delivery under the contract terms, including non-refundable deposits we were required to make to certain vendors and suppliers). In an attempt to mitigate such risks, we generally require our customers to make non-refundable deposits and/or provide letters of credit on most polysilicon, PV and sapphire equipment orders. These advances, however, may not cover all of the expenses we incur in preparing to fill the applicable order. In addition, we have negotiated extensions of the delivery schedules and other modifications under some of our existing contracts and we expect similar negotiations to occur in the future. When customers fail to make a deposit when due under their contracts, we may terminate, and have terminated, certain of those contracts. When we renegotiate terms of existing contracts with our customers, such negotiations may result in a change in the timing of deliveries, reduction in the number of units to be delivered and other terms, which may have an impact on our results of operations as more fully described under the heading "Order Backlog."

During 2009 and 2010, market demand for polysilicon increased and, in response, worldwide manufacturing capacity of polysilicon grew, due principally to expansion by existing manufacturers. In 2011, there was an excess of polysilicon manufacturing capacity and the market price for polysilicon experienced significant declines. Notwithstanding the total excess in polysilicon capacity, those market participants without the ability to produce polysilicon efficiently will be unable to operate profitably in a lower polysilicon price environment. Accordingly, there will be an even greater focus on reducing production costs among polysilicon manufacturers. Since polysilicon production equipment is one of the principal factors that accounts for the costs of polysilicon production for manufacturers, we expect that for the immediate future there will be substantial pressure by our customers to lower the cost of equipment or they may delay or cancel their purchases of polysilicon production equipment. Even in the face of a consolidating market, we believe we are well positioned to capture a portion of the future demand for polysilicon equipment among the more limited number of manufacturers due to the higher throughput and

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lower power consumption, leading to greater efficiencies, generated by our reactor equipment. However, the timing of any future purchases is uncertain and it may be a significant amount of time before we see the benefits of any purchases of equipment, if it all.

Much like our other business segments, our PV business is subject to cyclical demand for our PV products, particularly our DSS furnace. Revenues from our PV segment grew in fiscal year 2011 as compared to the prior year in large part due to the increased demand among solar manufacturers for our DSS products. Solar manufacturers have decreased the rate at which they purchase PV furnaces, which accounts in part for the decreased revenue for our PV business segment in the three and nine months ended December 31, 2011 and, such decreased demand is expected to continue into the future for a longer period as solar manufacturers continue to have large inventories. We believe that, due to consolidation within the solar industry and increasing cost pressures, some of our PV customers have lowered capacity utilization rates and delayed or terminated expansion projects as they respond to weaker near term end market demand. Further, due to higher efficiencies offered by monocrystalline silicon and advances in monocrystalline silicon production technology, we may experience a longer contraction (or permanent reduction) in end user demand for multicrystalline silicon solar modules than in the past. This contraction has resulted in increased pressure on the margins for our PV products. It is not possible to determine when market demand for multicrystalline solar products will return with any certainty, or if it will return at all (particularly as a result of improvements in monocrystalline growth technologies), but initial indications are that the market may exhibit increased demand in fiscal year 2013 or the first half of fiscal year 2014 compared to the same period in fiscal year 2012. In an effort to respond to anticipated future demand for monocrystalline silicon, we have undertaken internal efforts to develop DSS MonoCast growth technology, which is expected to generate more refined silicon ingots with the potential to constitute to higher cell efficiencies. The DSS product is expected to be offered commercially during the first calendar quarter of 2012. In addition, in August 2011, we purchased Confluence Solar which is a manufacturer of monocrystalline silicon material using the continuously-fed Czochralski growth technology. We are developing an equipment offering based on this HiCz growth process. We expect the MonoCast equipment offering will serve as a bridge to our HiCz efforts, and while both are targeted at improving the ingot performance compared to that of multi-crystalline silicon materials, we expect that HiCz will ultimately supersede our MonoCast offerings once the HiCz equipment is commercially available and becomes accepted in the market. There are, however, no certainties that there will be any meaningful demand for monocrystalline silicon or that the prices charged to manufacture such silicon will make our MonoCast or HiCz products attractive to end-users.

Demand for PV on-grid applications, which in turn impacts the demand for PV manufacturing equipment, has historically been dependent in part on the availability and size of government subsidies and economic incentives. The ability of governments to provide economic incentives have been significantly impacted by the recent global economic downturn, particularly in Europe, where many of the end-users for solar wafers and cells are located. For example, Germany, which has among the world's largest PV installed base, has implemented reductions in solar feed-in tariff rates for certain solar systems and further reductions in solar feed-in tariff rates may be made in the future. Spain, which has also been a major market for PV products, reduced availability of subsidies in 2009 from 2,400 MW per year to 500 MW per year for solar projects. We believe that governments are moving more aggressively than they have in the past to reduce all forms of governmental assistance to the solar industry and we expect that governmental subsidies, feed-in tariffs and similar supports will be eliminated in their entirety in the near future. It is difficult to determine the impact that a changing incentive program has on solar module demand and our customers' ability to sell solar modules in a particular geographic market, particularly Europe. We believe decreasing costs within the solar value chain will reduce the effect of tariffs on the investment returns for solar projects. The changing environment for such government incentive programs, however, creates uncertainty for the solar industry.

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The results of our sapphire business will depend on the demand for sapphire-based materials and products and the market price for sapphire material. Prices for sapphire have experienced marked decreases recently. We have begun volume shipments of the ASF system and recently received acceptances from two customers in connection with their initial deliveries of the ASF system. As more of our ASF units are accepted by customers, we expect that revenues attributable to our sapphire equipment will be significantly larger than revenue from our sapphire material. However, we may not be able to recognize revenue pursuant to existing (or future) contracts to sell ASF systems in the expected time frame, or at all, in which case, a greater percentage of revenue from our sapphire business will be attributable to our materials business. While we have received customer acceptances for certain ASF units, we have limited experience installing the ASF systems in customer facilities and if the ASF system does not operate properly in our other customers' facilities, we will not be able to recognize revenue from the sale of systems in a timely manner, or at all, which would result in a material adverse impact on our sapphire business and our overall business. As noted above, the sapphire materials industry has recently experienced significant decrease in prices charged by manufacturers for sapphire wafers. We anticipate long-term demand for sapphire material will be driven, in large part, by general illumination manufacturers. However, in the short-term, the decreased demand for sapphire materials, including among illumination companies, will negatively impact demand for our materials and ASF systems and may delay the timing of which amounts attributable to materials and ASF systems roll-off of backlog and into revenue. We are unable to estimate when the price of sapphire materials will recover, but we do expect the current decreased prices to continue for the short-term.

The possibility of trade tensions between China and the U.S. has taken on a greater likelihood recently. Legislation was proposed to Congress targeting China's currency practices. Among other things, this proposed legislation would impose trade sanctions against Chinese companies that ship finished goods into the U.S. at artificially low prices caused by Chinese currency manipulation. In addition, a U.S. federal government agency has investigated claims about Chinese companies' sales into the U.S., including whether these Chinese companies received illegal subsidies and flooded the market with solar cells and panels. The Chinese government has indicated that passage of this legislation or similar actions could lead to retaliatory tariffs. In addition, U.S. solar manufacturers have requested that the U.S. place duties of 100% on imports from China, claiming that the Chinese imports were unfairly undercutting U.S. prices. Retaliatory tariffs and increased trade tensions with China would have a material adverse impact on our business since we sell into China and our equipment customers sell end products into the U.S. Our business and results of operations would be negatively affected if a trade war were to occur with China.

Our quarterly results have fluctuated significantly in the past due to, among other things, the factors cited above, and we expect that our quarterly results will continue to fluctuate significantly in the future for these and other reasons.

**Acquisition of Confluence Solar, Inc.**

On August 24, 2011, we acquired 100% of the outstanding shares of stock of privately-held Confluence Solar, Inc., the developer of HiCz , a continuously-fed Czochralski (HiCz ) growth technology that enables the production of high efficiency monocrystalline solar ingots. The purchase consideration consisted of \$60.6 million, net of a working capital adjustment of \$0.5 million, and a potential additional \$20.0 million of contingent consideration based on the attainment of a financial target, an operational target and certain technical targets.

The acquisition of Confluence Solar is intended to expand our PV product portfolio and expand our business into more advanced crystal growth technologies that are designed to increase cell efficiencies and enable our customers to produce high performance monocrystalline silicon at lower costs. We expect that the Confluence Solar technologies will ultimately replace our own DSS and DSS MonoCast equipment once it is commercially available and becomes accepted in the market. At this time, our efforts in the HiCz crystal growth area are focused on commercializing equipment technologies for monocrystalline

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silicon producers, although we are still in the development stage and no product is commercially available. We will, however, continue to sell limited volumes of HiCz material to customers, but it will be in selected markets.

We are obligated to make expenditures in the Confluence Solar business to fund capital purchases of at least \$25.0 million, which is expected to be substantially funded by the middle of the calendar year 2012.

The transaction has been accounted for as a business combination and is included in our results of operations beginning on August 24, 2011, the date of acquisition. The acquired business did not contribute material revenues for the period from August 24, 2011 to December 31, 2011. The results of the acquired business are included in our PV business segment.

**Order Backlog**

Our order backlog primarily consists of amounts due under written contractual commitments and signed purchase orders for PV, polysilicon and sapphire equipment not yet shipped to customers, deferred revenue (which represents equipment that has been shipped to customers but not yet recognized as revenue) and short-term contracts or sales orders for sapphire materials. Substantially all of the contracts in our order backlog for PV, polysilicon and sapphire equipment require the customer to either post a standby letter of credit in our favor and/or make advance payment prior to shipment of equipment.

From the date of a written commitment, we generally would expect to deliver PV and sapphire equipment products over a period ranging from three to nine months and polysilicon products over a period ranging from twelve to eighteen months, however, in certain cases revenue may be recognized over longer periods. Disregarding the effect of any contract terminations or modifications, we would expect to convert approximately 63% of our December 31, 2011 order backlog into revenue during the next twelve months and approximately 37% thereafter. Although most of our orders require substantial non-refundable deposits, our order backlog as of any particular date should not be relied upon as indicative of our revenues for any future period. We began tracking our backlog as a performance measure on a consistent basis during 2007.

If a customer fails to perform its outstanding contractual obligations on a timely basis, and such failure continues after notice of breach and a cure period, we may terminate the contract. Our contracts generally do not contain cancellation provisions and in the event of a customer breach, the customer may be liable for contractual damages. During the nine months ended December 31, 2011, we terminated or modified contracts resulting in a \$64.8 million reduction in our order backlog (77% of the reduction was attributable to four contracts). During the fiscal year ended April 2, 2011, we terminated or modified contracts resulting in a \$10.7 million reduction in our order backlog (82% of the reduction was from three contracts). During the nine months ended December 31, 2011, we recorded revenues of \$29.1 million from terminated contracts and during the fiscal year ended April 2, 2011, we recorded revenues of \$44.4 million from terminated contracts.

Although we have a reasonable expectation that most of our customers will substantially perform on their contractual obligations, we attempt to monitor those contracts that we believe to be at risk, which include contracts with customers to whom we have sent notices of breach for failure to provide letters of credit or to make payments when due. We conduct negotiations with certain customers who have requested that we extend their delivery schedules or make other contract modifications, or who have not provided letters of credit or made payments in accordance with the terms of their contracts. We engage in a certain level of these negotiations in the ordinary course. We monitor the effect, if any, that these negotiations may have on our future revenue recognition. If we cannot come to an agreement with these customers, our order backlog could be reduced. Other customers with contracts in our order backlog that are not currently under negotiation may approach us with similar requests in the future, or may fail to provide letters of credit or to make payments when due. If we cannot come to an agreement with these customers, our order backlog could be further reduced.

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The table below sets forth our order backlog as of December 31, 2011 and April 2, 2011 by business segment:

Product Category	December 31, 2011		April 2, 2011	
	Amount	% of Backlog	Amount	% of Backlog
(dollars in millions)				
Photovoltaic business	\$ 212	10%	\$ 468	39%
Polysilicon business	1,050	48%	537	45%
Sapphire business	908	42%	184	16%
Total	\$ 2,170	100%	\$ 1,189	100%

Our order backlog attributable to our PV, polysilicon and sapphire businesses as of December 31, 2011, included deferred revenue of \$431.1 million, of which \$7.2 million related to our PV business, \$316.0 million related to our polysilicon business and \$107.9 million related to our sapphire business. Cash received in deposits related to our order backlog where deliveries have not yet occurred was \$305.9 million as of December 31, 2011.

As of December 31, 2011, our order backlog consisted of contracts with 22 PV customers, contracts with 16 polysilicon customers, and contracts with several sapphire customers. Our PV, polysilicon and sapphire order backlog as of December 31, 2011, included \$476.0 million, \$460.8 million, and \$218.2 million attributed to three different customers, each of which individually represents 22%, 21%, and 10%, respectively, of our order backlog.

## Results of Operations

The following tables set forth the results of operations as a percentage of revenue for the three and nine months ended December 31, 2011 and January 1, 2011:

	Three Months Ended		Nine Months Ended	
	December 31, 2011	January 1, 2011	December 31, 2011	January 1, 2011
<b>Statements of Operations Data:*</b>				
Revenue	100%	100%	100%	100%
Cost of revenue	57	54	54	58
Gross profit	43	46	46	42
Research and development	9	3	6	3
Selling and marketing	2	2	3	2
General and administrative	9	5	9	6
Amortization of intangible assets	2	1	1	1
Income from operations	21	35	27	30
Interest income				
Interest expense	(4)		(2)	
Other income (expense), net	1			
Income before income taxes	18	35	25	30
Provision for income taxes	8	12	8	11
Net income	10%	23%	17%	19%

\*

Percentages subject to rounding.



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**Three and Nine Months Ended December 31, 2011 compared to Three and Nine Months Ended January 1, 2011**

*Revenue.* The following table sets forth total revenue for the three and nine months ended December 31, 2011 and January 1, 2011:

Business Category	Three Months Ended			% Change	Nine Months Ended			% Change
	December 31, 2011	January 1, 2011	Change		December 31, 2011	January 1, 2011	Change	
(dollars in thousands)								
Photovoltaic business	\$ 34,353	\$ 239,856	\$ (205,503)		\$ 344,171	\$ 554,071	\$ (209,900)	
Polysilicon business	87,440	17,332	70,108		209,334	64,342	144,992	
Sapphire business	31,235	5,710	25,525		48,310	8,944	39,366	
Total revenue	\$ 153,028	\$ 262,898	\$ (109,870)	-42%	\$ 601,815	\$ 627,357	\$ (25,542)	-4%

Revenue from our PV business decreased 86% to \$34.4 million for the three months ended December 31, 2011, as compared to \$239.9 million for the three months ended January 1, 2011. For the nine months ended December 31, 2011, revenue from our PV business decreased 38% to \$344.2 million, as compared to \$554.1 million for the nine months ended January 1, 2011. PV revenue is comprised of sales of our DSS furnaces, other equipment, services, as well as ancillary parts and spares. The decrease in revenue attributable to our PV business is related to fewer DSS units on which revenue was recognized when compared to the same periods in the prior year. The principal reason for the decrease was fewer DSS units shipped in the three and nine months ended December 31, 2011, which we believe was due to weaker demand as a result of excess capacity in the PV market. The impact of the reduction in shipments was offset in part by the recognition of revenue related to units that were shipped in prior periods. The acquisition of Confluence Solar, Inc. did not contribute significant revenues for the period from August 24, 2011 (the date of acquisition) to December 31, 2011.

Revenue from our polysilicon business increased 405% to \$87.4 million for the three months ended December 31, 2011, as compared to \$17.3 million for the three months ended January 1, 2011. For the nine months ended December 31, 2011, revenue from our polysilicon business increased 225% to \$209.3 million as compared to \$64.3 million for the nine months ended January 1, 2011. Polysilicon revenue for the three and nine months ended December 31, 2011 relates primarily to contracts that were in our order backlog as of April 2, 2011, for which the earnings process has been completed. Revenue from the polysilicon business for the nine months ended December 31, 2011 included \$14.1 million of non-refundable deposits in connection with the exercise of our contractual termination rights under a polysilicon contract, and \$12.9 million previously included in deferred revenue related to units delivered, recognized upon such contract termination. There was no revenue from polysilicon contract terminations for the same period in the prior year. Revenue in our polysilicon business is generally recognized upon acceptance of product unless acceptance is considered perfunctory. As a result, our polysilicon business tends to have a higher level of deferred revenue than our PV and Sapphire businesses. Approximately 73% and 71% of our deferred revenue balance at December 31, 2011 and January 1, 2011, respectively, relates to our polysilicon business.

Included in our backlog are polysilicon contracts that grant contractual rights which require revenue to be recognized ratably over the contract period. Revenue is recognized when all other elements have been delivered and other contract criteria have been met. During the three months ended December 31, 2011 and January 1, 2011 and the nine months ended December 31, 2011 and January 1, 2011, we recognized revenue on a ratable basis from such contracts of \$63.5 million, \$13.4 million, \$132.1 million and \$48.5 million, respectively. As of December 31, 2011 our deferred revenue balance included \$181.7 million related to these contracts which are expected to be recognized as revenue ratably through calendar year 2012.



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Our sapphire business revenue during these three and nine month periods is attributed to the sale of sapphire equipment and material used in sapphire-based LED applications, as well as in other specialty markets. Revenue from our sapphire business was \$31.2 million and \$48.3 million for the three and nine months ended December 31, 2011, respectively, as compared to \$5.7 million and \$8.9 million for the three and nine months ended January 1, 2011, respectively. The increase in revenue for our sapphire business is primarily related to the commercialization of our ASF systems during fiscal 2012. During the three months ended July 2, 2011 we began shipping these units and during the three months ended December 31, 2011, recorded revenue in connection with meeting all revenue recognition criteria on certain units. Sales of our ASF systems accounted for \$27.2 million for the three and nine months ended December 31, 2011 and the balance was attributable to the sale of sapphire materials. Our sapphire business was acquired on July 29, 2010 and revenue for the period from acquisition on July 29, 2010 to January 1, 2011 was \$8.9 million and this entire amount was attributable to the sale of sapphire material.

In both the three and nine months ended December 31, 2011 and January 1, 2011, a substantial percentage of our revenue resulted from sales to a small number of customers. Two of our customers accounted for 55% of our revenue for the three months ended December 31, 2011 and two of our customers accounted for 32% of our revenue for the three months ended January 1, 2011. Two of our customers accounted for 33% of our revenue for the nine months ended December 31, 2011 and one of our customers accounted for 27% of our revenue for the nine months ended January 1, 2011. No other customer accounted for more than 10% of our revenue during the respective periods.

*Gross Profit and Gross Margins.* The following tables set forth gross profit and gross margin for the three and nine months ended December 31, 2011 and January 1, 2011:

	Three Months Ended				Nine Months Ended			
	December 31, 2011	January 1, 2011	Change	% Change	December 31, 2011	January 1, 2011	Change	% Change
	(dollars in thousands)							
Gross profit								
Photovoltaic business	\$ 13,102	\$ 112,908	\$ (99,806)		\$ 166,875	\$ 230,187	\$ (63,312)	
Polysilicon business	39,881	6,852	33,029		91,938	27,622	64,316	
Sapphire business	13,015	2,323	10,692		15,659	3,322	12,337	
Total	\$ 65,998	\$ 122,083	\$ (56,085)	-46%	\$ 274,472	\$ 261,131	\$ 13,341	5%

	Three Months Ended		Nine Months Ended	
	December 31, 2011	January 1, 2011	December 31, 2011	January 1, 2011
Gross margins				
Photovoltaic business	38%	47%	48%	42%
Polysilicon business	46%	40%	44%	43%
Sapphire business	42%	41%	32%	37%
Overall	43%	46%	46%	42%

Overall gross profit as a percentage of revenue, or gross margin, decreased for the three months ended December 31, 2011 to 43% and increased to 46% for nine months ended December 31, 2011, from 46% and 42% for the three and nine months ended January 1, 2011, respectively. The changes in gross margins primarily relate to our PV business and are further discussed below.

Our gross margins in our PV, polysilicon and sapphire businesses tend to vary depending on the volume, pricing and timing of revenue recognition.

Our PV gross margins for the three and nine months ended December 31, 2011 were 38% and 48%, respectively, as compared to 47% and 42% for the three and nine months ended January 1, 2011,

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respectively. The decrease for the three months ended December 31, 2011 was due to lower product pricing to customers.

Additionally, gross margins in the PV business for the nine months ended December 31, 2011 increased as compared to the nine months ended January 1, 2011 primarily due to the timing of final acceptance on certain contracts and lower periodic costs, offset in part by a reduction in factory utilization and customer pricing. In addition, gross margins for the nine months ended January 1, 2011 included revenue from a terminated turnkey project that generated a gross margin of approximately 17%.

Our polysilicon gross margins for both the three and nine months ended December 31, 2011 were 46% and 44%, respectively, as compared to 40% and 43% for the three and nine months ended January 1, 2011, respectively. The increases were primarily related to the product mix and number of contracts for the three and nine months ended December 31, 2011, as compared to the three and nine months ended January 1, 2011. Revenue recognized in connection with contract terminations for our polysilicon business did not have a material impact on our margins for the three and nine months ended December 31, 2011.

Our sapphire business gross margins were 42% and 32% for the three and nine months ended December 31, 2011, respectively, as compared to 41% and 37% for the three and nine months ended January 1, 2011. The decrease in gross margin for the sapphire business during the nine months ended December 31, 2011 is primarily related to higher costs for materials required to generate our sapphire material, lower selling prices of sapphire material and higher overhead costs as compared to the same period in the prior year. In addition, during the three months ended December 31, 2011, we recorded a charge in an aggregate amount of \$0.6 million in connection with the write down of certain LED materials inventory. During the three months ended December 31, 2011, we recorded, for the first time, revenues in connection with the sale of our sapphire equipment. Margins on the sale of our sapphire equipment are higher than our historical sapphire margins (which are attributable solely to sapphire material production and sales), however, the increase was negatively impacted for the three months ended December 31, 2011 due to the sale of lower margin spares and consumables equipment. We expect gross margins in our sapphire business to improve as more equipment units are recognized in revenue.

**Operating Expenses.** The following table sets forth total operating expenses for the three and nine months ended December 31, 2011 and January 1, 2011:

	Three Months Ended December 31, January 1, 2011 2011				Nine Months Ended December 31, January 1, 2011 2011			
			Change	% Change			Change	% Change
	(dollars in thousands)							
Operating Expenses								
Research and development	\$ 13,344	\$ 6,739	\$ 6,605	98%	\$ 34,624	\$ 15,776	\$ 18,848	119%
Selling and marketing	3,789	4,479	(690)	-15%	17,056	13,518	3,538	26%
General and administrative	14,301	14,158	143	1%	52,878	37,745	15,133	40%
Amortization of intangible assets	2,822	1,865	957	51%	5,652	3,522	2,130	60%
Total	\$ 34,256	\$ 27,241	\$ 7,015	26%	\$ 110,210	\$ 70,561	\$ 39,649	56%

Operating expenses increased 26% to \$34.3 million for the three months ended December 31, 2011, as compared to \$27.2 million for the three months ended January 1, 2011, and increased 56% to \$110.2 million for the nine months ended December 31, 2011, as compared to \$70.6 million for the nine months ended January 1, 2011.

Research and development expenses consist primarily of payroll and related costs, including stock-based compensation expense, for research and development personnel who design, develop, test and

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deploy our PV, polysilicon and sapphire equipment, materials and services. We expect to continue to invest in new product development and attempt to expand our product base in each of our segments. Research and development expenses increased 98% to \$13.3 million for the three months ended December 31, 2011, as compared to \$6.7 million for the three months ended January 1, 2011, and increased 119% to \$34.6 million for the nine months ended December 31, 2011, as compared to \$15.8 million for the nine months ended January 1, 2011. The increases for the three and nine months ended December 31, 2011 primarily related to increases attributable to: non-production materials of \$2.8 million and \$8.9 million, payroll and payroll related costs of \$1.2 million and \$3.8 million, outside service related costs of \$0.3 million and \$0.6 million, costs associated with the disposal of fixed assets of \$0.6 million and \$0.9 million, and increases of \$0.9 million and \$2.6 million in other research and development expenses, respectively. In addition, during the three and nine months ended December 31, 2011, there was a reduction in the amount of research and development resources allocated to customer related projects of \$0.6 million and \$1.7 million, respectively. Included in research and development expenses for the three and nine months ended December 31, 2011 are \$1.4 million and \$2.1 million, respectively, of research and development costs related to Confluence Solar which was acquired on August 24, 2011.

Selling and marketing expenses consist primarily of payroll and related costs, stock-based compensation expense and commissions for personnel engaged in marketing, sales and support functions, as well as advertising and promotional expenses. The decrease in selling and marketing expenses of 15% to \$3.8 million for the three months ended December 31, 2011, as compared to \$4.5 million for the three months ended January 1, 2011, was primarily due to decreases of \$1.5 million in sales commissions offset in part by increases in payroll related costs of \$0.5 million and a decrease in other selling and marketing expenses of \$0.3 million. Sales commissions are accrued based on operational factors such as deposits, shipments and final acceptances received from customers rather than when revenue is recognized and thus may vary from quarter to quarter. Selling and marketing expenses related to Confluence Solar were not material for the three months ended December 31, 2011.

The increase in selling and marketing expenses of 26% to \$17.1 million for the nine months ended December 31, 2011, as compared to \$13.5 million for the nine months ended January 1, 2011 was primarily due to increases of \$0.4 million in sales commissions, \$1.3 million of payroll and related costs, \$0.8 million in outside services costs, \$0.3 million in trade show related expenses and \$0.8 million in other selling and marketing related costs. Selling and marketing expenses related to Confluence Solar were not material for the nine months ended December 31, 2011.

General and administrative expenses consist primarily of the following components: payroll, stock-based compensation expense and other related costs, including expenses for executive, finance, business applications, human resources and other administrative personnel; depreciation and amortization of property and equipment we use internally; fees for professional services; rent and other facility-related expenditures for leased properties; the provision for doubtful accounts; insurance costs; and non-income related taxes. The increase in general and administrative expenses of 1% to \$14.3 million in the three months ended December 31, 2011, as compared to \$14.2 million for the three months ended January 1, 2011, was primarily due to an increase in payroll and payroll-related costs of \$0.9 million and facilities costs of \$1.6 million. These increases were offset primarily by a decrease in other general and administrative expenses of \$0.5 million, a decrease in outside services of \$0.2 million and an increase in the amount of general and administrative costs allocated to manufacturing of \$1.5 million. Included in general and administrative expenses for the three months ended December 31, 2011 are \$1.0 million of expenses related to Confluence Solar which was acquired on August 24, 2011.

The increase in general and administrative expenses of 40% to \$52.9 million for the nine months ended December 31, 2011, as compared to \$37.7 million for the nine months ended January 1, 2011, was primarily due to an increase in payroll and payroll-related costs of \$7.7 million; an increase of \$1.4 million in facilities primarily driven by our new facility in Hong Kong; an increase of \$3.0 million in contingent consideration expense related to a change in the fair value of our contingent consideration obligations; an

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increase of \$2.6 million in transaction expenses related primarily to the acquisition of Confluence Solar; and an increase in office related expenses of \$0.5 million. These expenses were offset in part primarily by a decreases in tax consulting expense of \$0.5 million, a decrease in legal expenses of \$0.4 million, a decrease in depreciation expense of \$0.3 million and a decrease in other outside services of \$0.2 million. Included in general and administrative expenses for the nine months ended December 31, 2011 are \$1.3 million of expenses related to Confluence Solar which was acquired on August 24, 2011.

*Amortization Expense.* Amortization expense attributed to intangible assets increased 51% to \$2.8 million for the three months ended December 31, 2011, as compared to \$1.9 million for the three months ended January 1, 2011, and increased 60% to \$5.7 million for the nine months ended December 31, 2011, as compared to \$ 3.5 million for the nine months ended January 1, 2011. The increases were due to \$1.9 million and \$2.6 million related to the amortization of intangible assets related to the Confluence Solar acquisition, for the three and nine months ended December 31, 2011, respectively. These increases are offset in part by a decrease of \$0.4 million and \$1.3 million for the three and nine months ended December 31, 2011, respectively, in amortization expense attributed to the mix of intangibles being amortized, as certain intangibles related to our PV business became fully amortized during the three and nine months ended December 31, 2011.

*Interest Income.* Interest income increased to \$0.2 million for the three months ended December 31, 2011, as compared to \$0.1 million for the three months ended January 1, 2011, and remained flat at \$0.5 million for both nine month periods ended December 31, 2011 and January 1, 2011. The fluctuations for the periods are driven primarily by the returns earned on our invested cash and the changes in our cash balances during the three and nine months ended December 31, 2011. We typically invest our excess cash primarily in money market mutual funds. All of our available cash was deposited in cash accounts at our financial institutions as of the December 31, 2011.

*Interest Expense.* Interest expense increased to \$6.8 million for the three months ended December 31, 2011, as compared to \$0.4 million for the three months ended January 1, 2011, and increased to \$12.2 million for the nine months ended December 31, 2011, as compared to \$1.0 million for the nine months ended January 1, 2011. The increases were due primarily to interest expense and the amortization of deferred financing costs in connection with our credit facility entered into during fiscal 2011. This credit facility was terminated in November 2011. Included in interest expense for the three and nine months ended December 31, 2011 was \$6.4 million and \$9.4 million, respectively, of non-cash charges for the amortization of deferred financing costs in connection with our terminated credit facility.

*Other, net.* Other income, net, was \$2.0 million and \$2.1 million for the three and nine months ended December 31, 2011, respectively, as compared to other income, net of \$0.6 million for the three months ended January 1, 2011 and other expense, net of \$0.1 million for nine months ended January 1, 2011, respectively. During the three months ended December 31, 2011, we recorded other income of \$3.3 million to reflect an appreciation of the fair value of a share repurchase contract over the settlement period of our accelerated share repurchase. This increase was offset in part by a \$1.4 million charge to record foreign currency losses on the ineffective portion of our foreign currency exchange forward contracts during the three and nine months ended December 31, 2011 as a result of changes in the payments of certain of our outstanding purchase obligation.

*Provision for Income Taxes.* Our effective tax rate is based on our expectation of annual earnings from operations in the U.S. and other tax jurisdictions world-wide.

Our world-wide effective tax rate was 44% and 33% for the three months ended December 31, 2011 and January 1, 2011, respectively, and 32% and 35% for the nine months ended December 31, 2011 and January 1, 2011, respectively. The effective tax rate is lower in the nine months ended December 31, 2011 when compared to the same period in the prior fiscal year, principally due to proportionally higher expected levels of income in lower tax jurisdictions as a result of the Company's continued transition of its

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global operations center to Hong Kong. The effective tax rate is higher in the three months ended December 31, 2011 principally due to a change in forecast of the revenue mix by business line with proportionally higher levels of income expected in higher tax jurisdictions than was forecasted during our second fiscal quarter.

**Liquidity and Capital Resources***Overview*

We fund our operations generally through cash generated from operations, proceeds from credit facilities and proceeds from exercises of stock awards.

Our cash and cash equivalents balance decreased by \$155.9 million during the nine months ended December 31, 2011, from \$362.7 million as of April 2, 2011 to \$206.9 million as of December 31, 2011, the decrease was principally attributable to \$75.0 million paid in connection with the repurchase of shares of our common stock in an accelerated share repurchase and cash of approximately \$60.4 million paid to acquire Confluence Solar, offset in part from increases in cash flow from operating activities. In addition, in November 2011 we elected to terminate our credit facility with Credit Suisse. We made a principal and interest payment of \$91.3 million to settle the final amounts owed under the credit facility upon termination. As a result of the termination of the credit facility, the Company was required to cash collateralize the then outstanding letters of credit, representing performance guarantees issued against customer deposits. In connection with cash collateralizing the letters of credit, the Company has \$96.2 million of restricted cash on its condensed consolidated balance sheet as of December 31, 2011. Net cash provided by operating activities in the nine months ended December 31, 2011 allowed us to fund our working capital requirements during such period. We manage our cash inflows through the use of customer deposits and milestone billings intended to allow us in turn to meet our cash outflow requirements, which primarily consist of vendor payments and prepayments for contract related costs (raw material and components costs) as well as payroll and overhead costs as we perform on our customer contracts. The following discussion of the changes in our cash balance refers to the various sections of our Condensed Consolidated Statements of Cash Flows, which appears in Item 1 of this Quarterly Report on Form 10-Q.

Our principal uses of cash are for raw materials and components, wages, salaries and investment activities, such as the purchase of property, plant and equipment, business acquisitions, repurchases of our common stock and payments on outstanding debt. We outsource a significant portion of our equipment manufacturing and therefore we require minimal capital expenditures to meet our production demands.

The following table summarizes our primary cash flows in the periods presented:

	Nine Months Ended	
	December 31, 2011	January 1, 2011
	(dollars in thousands)	
<b>Cash provided by (used in):</b>		
Operating activities	\$ 131,322	\$ 184,852
Investing activities	(94,046)	(13,390)
Financing activities	(193,323)	(82,266)
Effect of foreign exchange rates on cash	176	415
Net (decrease) increase in cash and cash equivalents	\$ (155,871)	\$ 89,611

*Cash Flows from Operating Activities*

For the nine months ended December 31, 2011, our cash provided by operations was \$131.3 million. Our cash flow from operations was driven primarily by net income of \$104.3 million, an increase in customer deposits of \$161.4 million due to new orders in our polysilicon and sapphire equipment

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businesses and a decrease in accounts receivable of \$35.1 million. These items were partially offset by an increase in restricted cash of \$96.2 million related to cash collateralization of outstanding letters of credit, an increase in inventories of \$79.9 million, an increase in vendor advances of \$56.3 million, and a decrease in accounts payable and accrued expenses of \$9.1 million.

For the nine months ended January 1, 2011, our cash provided by operations was \$184.9 million. Our cash flow from operations was primarily driven by net income of \$122.9 million, an increase in customer deposits of \$45.7 million due to new orders in our PV and polysilicon businesses, an increase in deferred revenue less deferred costs of \$32.0 million, as well as an increase in accounts payable and accrued expenses of \$57.6 million. These items were partially offset by an increase in inventories and vendor advances of \$51.5 million and an increase in accounts receivable of \$46.2 million.

***Cash Flows from Investing Activities***

For the nine months ended December 31, 2011, our cash used in investing activities was \$94.0 million. The acquisition of Confluence Solar, net of cash acquired and purchase price adjustment, consumed approximately \$60.4 million of cash. Additionally, capital expenditures for the period were approximately \$34.0 million. These capital expenditures were primarily used for expanding our product offerings in the PV business (including developing our HiCz technology) and sapphire business and improving our business information systems.

Our total capital expenditures in our fiscal year ending March 31, 2012 are expected to range from approximately \$50 million to approximately \$55 million consisting primarily of improvements to our business information systems, manufacturing equipment, expansion of our facilities in New Hampshire, expected expansion of our facilities in Asia and anticipated capital investments in our Hazelwood, Missouri facility. We acquired the Hazelwood facility in connection with the Confluence Solar acquisition, in our efforts to commercialize our HiCz equipment product which is currently under development and as a pilot facility for high-performance monocrystalline silicon manufacturing. However, our capital expenditures may exceed such range if we were to accelerate plans for the implementation of our growth strategy.

For the nine months ended January 1, 2011, our cash used in investing activities was \$13.4 million. The acquisition of Crystal Systems, net of cash acquired, consumed approximately \$22.8 million of cash. Capital expenditures were approximately \$10.6 million and were primarily used for expanding our sapphire business and improving our business information systems. These items were partially offset by the proceeds from sale of \$20.0 million of short-term investments.

***Cash Flows from Financing Activities***

For the nine months ended December 31, 2011, cash used in financing activities was \$193.3 million, driven primarily by principal payments made under our credit facility of \$120.3 million. Of these principal payments, \$9.4 million related to scheduled principal payments under the credit facility. In addition, \$20.0 million represents an additional voluntary principal prepayment made by us on June 15, 2011. Finally, we terminated this credit facility with Credit Suisse in November 2011 and made a principal payment of \$90.9 million to settle the final amounts owed under the credit facility.

On November 18, 2011, we entered into an accelerated share repurchase program with UBS AG, under which we repurchase \$75.0 million worth of shares of our common stock. The effective per share purchase price will be based generally on the average of the daily volume weighted average prices per share of our common stock, less a discount, calculated during a period of up to four months following the entry into the share repurchase program. In connection with this agreement, we paid \$75.0 million to UBS AG during the three months ended December 31, 2011 and received approximately 7.8 million shares, which are estimated to be approximately 80% of the total shares to be repurchased under the accelerated share repurchase program. The total number of shares ultimately repurchased under the share repurchase

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program will be determined upon final settlement. The Company will either receive a settlement amount of additional shares of our common stock or, under certain circumstances, be required to remit a settlement amount, payable, at GT's option, in cash or common stock. The Company's effective per share repurchase price under the share repurchase program will be based generally on the volume-weighted average share price of its common stock, less a discount, during a period of up to four months.

These cash outflows were offset by proceeds and related tax benefits from the exercise of stock awards of \$9.5 million.

For the nine months ended January 1, 2011, cash used by financing activities was \$82.3 million, driven primarily by the repurchase of our common stock from GT Solar Holdings, LLC (a company controlled by investment funds that were, at that time, affiliated with the Company due to its stock ownership and through two directorships), which was offset in part by proceeds received from our credit facility with Credit Suisse. On November 12, 2010, we repurchased 26.5 million shares of our common stock from GT Solar Holdings, LLC at a per share price of \$7.66, or an aggregate of approximately \$203.5 million. The source of funds for the repurchase of these shares of common stock was our available cash.

As of December 31, 2011, we had \$93.6 million of outstanding standby letters of credit that were cash collateralized with Bank of America. The majority of these standby letters of credit are related to customer deposits. We previously collateralized standby letters of credit under of revolving loan portion of the credit facility with Credit Suisse, which was terminated in November 2011. In connection with entering into our new credit agreement on January 31, 2012, we will be required, on or before March 31, 2012, to issue all of our letters of credit under such new credit agreement (and we intend to use the revolving credit facility for this purpose), and as a result, we will no longer be required to cash collateralize these letters of credit and will therefore no longer record restricted cash on our condensed consolidated balance sheet for such letters of credit.

We believe that cash generated from operations together with our existing cash and customer deposits will be sufficient to satisfy working capital requirements, commitments for capital expenditures, and other cash requirements for the foreseeable future, including at least the next twelve months. We, however, consistently review strategic opportunities in an effort to find opportunities to improve our products, technologies, operations, overall business and increase shareholder value, these opportunities may include business acquisitions, technology licenses, dividends to shareholders, accelerated prepayments of outstanding indebtedness, share buybacks and joint ventures. For example, in November 2011, our board of directors authorized a \$100.0 million share repurchase program consisting of the purchase of \$75.0 million of our common stock to be financed with existing cash through an accelerated share repurchase program, and the purchase of an additional \$25.0 million of our common stock that may be made from time to time through open market repurchases or privately negotiated transactions, as determined by our management. If we were to engage in any additional strategic transactions, such as those described above, it could require that we utilize a significant amount of our available cash and, as a result, we may be required to increase our outstanding indebtedness or raise additional capital in through the sale of equity, which may not be available on favorable terms, or at all.

***Long Term Debt and Revolving Credit Facility***

On December 13, 2010, we entered into the Credit Agreement (the "Credit Agreement"), with Credit Suisse AG, Cayman Islands Branch, ("Credit Suisse") as administrative agent and collateral agent, and the lenders from time to time, party to the Credit Agreement. The Credit Agreement consisted of the term facility (the "Term Facility"), in an aggregate maximum principal amount of \$125.0 million with a final maturity date of December 13, 2013 and the revolving facility (the "Revolving Facility"), in an aggregate maximum principal amount of \$75.0 million with a final maturity date of December 13, 2013.

In November 2011, we terminated the Credit Agreement, as amended, and the Guarantee and Collateral Agreement, which was entered into at the time the Credit Agreement was executed in order to

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secure certain of the obligations under the Credit Agreement. On November 15, 2011, we paid \$91.3 million to settle amounts owed under the Term Facility, which included principal of \$90.9 million and accrued interest of \$0.4 million. In connection with the termination of the Credit Agreement, we recorded interest expense of \$6.1 million related to the unamortized portion of debt issuance costs.

On January 31, 2012, we, our U.S. operating subsidiary (the "U.S. Borrower") and our Hong Kong subsidiary (the "Hong Kong Borrower") entered into a credit agreement (the "2012 Credit Agreement"), with Bank of America, N.A., as administrative agent, Swing Line Lender and L/C Issuer ("Bank of America") and the lenders from time to time party thereto. The 2012 Credit Agreement consists of a term loan facility (the "2012 Term Facility") provided to the U.S. Borrower in an aggregate principal amount of \$75.0 million with a final maturity date of January 31, 2016, a revolving credit facility (the "U.S. Revolving Credit Facility") available to the U.S. Borrower in an aggregate principal amount of \$25.0 million with a final maturity date of January 31, 2016 and a revolving credit facility (the "Hong Kong Revolving Facility"; together with the U.S. Revolving Credit Facility, the "2012 Revolving Credit Facility"; together with the "Term Facility", the "2012 Credit Facilities") available to the Hong Kong Borrower in an aggregate principal amount of \$150.0 million with a final maturity date of January 31, 2016. The 2012 Credit Facilities are available in the form of base rate loans based on Bank of America's prime rate plus a margin of 2.00% or Eurodollar rate loans based on LIBOR plus a margin of 3.00%. The 2012 Term Facility amortizes in equal quarterly amounts which in the aggregate equal 5% of the original principal amount of the Term Facility in each of years 1 and 2 of the loan and 10% of the original principal amount of the Term Facility in each of years 3 and year 4 of the loan, with the balance payable on January 31, 2016. The 2012 Credit Facilities are subject to mandatory prepayment in the event that the Company has excess cash flow during any fiscal year, subject to certain exceptions. The 2012 Credit Facilities also require the Company to comply with certain covenants, including a maximum consolidated leverage ratio and a minimum consolidated interest coverage ratio. Proceeds of the 2012 Term Facility and 2012 Revolving Facility are available for use by us and our subsidiaries for general corporate purposes. The full amount of the 2012 Term Facility was drawn by us on January 31, 2012 and no amounts have been drawn on the 2012 Revolving Facility as of such date. We may use the 2012 Revolving Facility in connection with the issuance of letters of credit up to the aggregate principal amount of the Revolving Facility.

The proceeds of the 2012 Term Facility and the U.S. Revolving Credit Facility are secured by a lien on substantially all of the tangible and intangible property of us and our wholly-owned domestic subsidiaries (including the U.S. Borrower), including but not limited to accounts receivable, inventory, equipment, general intangibles, certain investment property, certain deposit and securities accounts, certain owned real property and intellectual property, and a pledge of the capital stock of each of our wholly-owned domestic subsidiaries (limited in the case of pledges of capital stock of any foreign subsidiaries, to 65% of the capital stock of any first-tier foreign subsidiary), subject to certain exceptions and thresholds, and the repayment of such proceeds is guaranteed by us and our wholly-owned domestic subsidiaries. The proceeds of the Hong Kong Revolving Credit Facility are secured by a lien on substantially all of the tangible and intangible property of the Hong Kong Borrower, including but not limited to accounts receivable, inventory, equipment, general intangibles, certain investment property, certain deposit and securities accounts, certain owned real property and intellectual property, and a pledge of the capital stock of the Hong Kong Borrower, subject to certain exceptions and thresholds, and the repayment of such proceeds is guaranteed by us and our wholly-owned domestic subsidiaries.

The 2012 Credit Agreement contains covenants and conditions that restrict our ability to undertake certain actions, including (but not limited to): incurring certain additional debt, paying dividends and making distributions, entering into specified transactions with affiliates, acquiring businesses, among others. These restrictions are in addition to the financial covenants noted above which require us to comply with a maximum consolidated leverage ratio and a minimum consolidated interest coverage ratio.



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**Off-Balance Sheet Arrangements**

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in such relationships.

*Standby Letters of Credit*

As of December 31, 2011, we had \$93.6 million of standby letters of credit outstanding that were cash collateralized with Bank of America and which represented performance guarantees issued against customer deposits. These standby letters of credit are scheduled to expire within the next twelve months and have not been included in the condensed consolidated financial statements included herein.

**Contractual Obligations and Commercial Commitments**

There have been no material changes to our "Contractual Obligations and Commercial Commitments" table in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Form 10-K for the year ended April 2, 2011, other than:

- i) As of December 31, 2011, purchase commitments under agreements totaled \$408.5 million, substantially all of which are due within twelve months. As of December 31, 2011, prepayments under certain of these purchase commitments amounted to \$76.3 million.
- ii) In connection with our acquisition of Confluence Solar, we have agreed to pay up to \$20.0 million of additional consideration subject to the attainment of a financial target, an operational target and certain technical targets. The contingent consideration is payable if and when these targets are met. The last such target will be measured as of March 31, 2011.
- iii) In connection with our acquisition of Confluence Solar, we have agreed to make capital expenditures of at least \$25.0 million, which is expected to be substantially funded in the next twelve months, to develop the business and, in part, to support the achievement of the financial, operational and technical targets associated with the contingent consideration.

**Recent Accounting Pronouncements**

*Recently Adopted Accounting Pronouncements*

On April 3, 2011, we prospectively adopted the provisions of Accounting Standards Update ("ASU") 2009-13, *Revenue Recognition (Topic 605) Multiple-Deliverable Revenue Arrangements*, or ASU 2009-13, for new and materially modified arrangements originating on or after April 3, 2011.

*Accounting Pronouncements Not Yet Adopted*

In June 2011, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update No. 2011-05, *Presentation of Comprehensive Income*. This standard eliminates the current option to report other comprehensive income and its components in the statement of changes in stockholders' equity. The amendment requires that all non-owner changes in stockholders' equity be presented either in a single statement of comprehensive income or in two separate but consecutive statements. The standard is intended to enhance comparability between entities that report under U.S. GAAP and those that report under International Financial Reporting Standards, and to provide a more consistent method of presenting non-owner transactions that affect an entity's equity. The amendments in this update are to be applied retrospectively. The amendments are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011, which for the Company would be the fiscal year beginning April 1, 2012. The Company has not yet determined which method it will elect to present comprehensive income under the new standard.



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In September 2011, the FASB issued Accounting Standards Update No. 2011-08, *Testing Goodwill for Impairment*, which amends the guidance on testing goodwill for impairment. Under the revised guidance, entities testing goodwill for impairment have the option of performing a qualitative assessment before calculating the fair value of the reporting unit. If entities determine, on the basis of qualitative factors, that the fair value of the reporting unit is more likely than not less than the carrying amount, the two-step impairment test would be required. This amendment does not change how goodwill is calculated or assigned to reporting units, nor does it revise the requirement to test goodwill annually for impairment. In addition, it does not amend the requirement to test goodwill for impairment between annual tests if events or circumstances warrant; however, it does revise the examples of events and circumstances that an entity should consider. This update is effective for fiscal years beginning after December 15, 2011, and early adoption is permitted. We plan to adopt this new standard for the fiscal year beginning on April 1, 2012.

**Critical Accounting Policies and Estimates**

For the nine months ended December 31, 2011, there were no significant changes to our critical accounting policies and estimates included in our Annual Report on Form 10-K for the fiscal year ended April 2, 2011, filed on May 25, 2011, with the exception of the changes to the Company's revenue recognition policy noted below.

***Revenue Recognition***

On April 3, 2011, we prospectively adopted the provisions of Accounting Standards Update, or ASU 2009-13, *Revenue Recognition (Topic 605) Multiple-Deliverable Revenue Arrangements*, or ASU 2009-13, for new and materially modified arrangements originating on or after April 3, 2011. ASU 2009-13 amended the accounting standards for multiple-deliverable revenue arrangements to require an entity to allocate revenue in an arrangement on the basis of the relative selling price of deliverables. When applying the relative selling price method, the selling price for each deliverable is determined using vendor-specific objective evidence of selling price, or VSOE, if it exists, or third-party evidence of selling price, or TPE. If neither VSOE nor TPE exists, then the vendor uses its best estimate of the selling price or ESP, for that deliverable. The use of the residual method was eliminated by ASU 2009-13.

The majority of our contracts involve the sale of equipment and services under multiple element arrangements. The multiple-deliverable revenue guidance requires that we evaluate each deliverable in an arrangement to determine whether such deliverable would represent a separate unit of accounting. The product or service constitutes a separate unit of accounting when it fulfills the following criteria: (a) the delivered item(s) has value to the customer on a standalone basis and (b) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probable and substantially in our control. Our sales arrangements do not include a general right of return.

For transactions entered into prior to the adoption of ASU 2009-13, we assess whether the deliverables specified in a multiple-element arrangement should be treated as separate units of accounting for revenue recognition purposes described above and whether objective and reliable evidence of fair value exists for these separate units of accounting. We apply the residual method when objective and reliable evidence of fair value exists for all of the undelivered elements in a multiple-element arrangement. If objective evidence does not exist for the undelivered elements of the arrangement, all revenue is deferred until such evidence does exist, or until all elements for which we do not have objective evidence of fair value are delivered, whichever is earlier assuming all other revenue recognition criteria are met.

In certain circumstances we enter into contracts that grant contractual rights which are considered a separate element and require revenue to be recognized ratably over the period commencing when all other elements have been delivered and other contract criteria have been met and through the period when such rights expire. Upon the adoption of ASU 2009-13, management allocates arrangement consideration based on the ESP of the contractual rights, which are recognized ratably through the period when such rights expire.

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Should we materially modify certain arrangements the amount of previously recorded deferred revenue could be materially impacted based on the application of ASU 2009-13 to the modified arrangement. The anticipated timing of revenue recognition for multiple element arrangements will generally not be significantly affected under ASU 2009-13 since we maintained objective evidence of fair value for the majority of the undelivered elements in its arrangements. For those arrangements where we have not historically had VSOE for the undelivered elements, such as certain contractual rights or ancillary products, revenue may be recognized earlier under ASU 2009-13.

During the three months ended December 31, 2011, we materially modified one existing customer contract that was previously accounted for under the revenue guidance in effect prior to the adoption of *ASU 2009-13*. As a result of this modification, we recorded revenue of \$19.5 million in the three and nine month period ended December 31, 2011. Under guidance in effect prior to the adoption of ASU 2009-13, we did not have reliable evidence of fair value for certain deliverables, and accordingly, only \$6.5 million would have been recognized as revenue in the three and nine month periods ended December 31, 2011.

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

**Investment Risks**

We maintain an investment portfolio which, at December 31, 2011, consisted of \$96.2 million of bank deposits in restricted cash, which is entirely related to the cash collateralization of outstanding standby letters of credit which represented performance guarantees issued against customer deposits. At any time a rise in market interest rates could have an adverse impact on the fair value of our investment portfolio. Conversely, declines in market interest rates could have a material impact on the interest earnings of our investment portfolio. We do not currently hedge these interest rate exposures. We place our investments with high quality issuers and have investment policies limiting, among other things, the amount of credit exposure to any one issuer. We seek to limit default risk by purchasing only investment grade securities. Based on investment positions as of December 31, 2011, hypothetical movement of plus or minus 50 basis points based on current market interest rates would not have a material impact to the value of our investment portfolio or the income earned in an annual period. We also have the ability to hold our investments until maturity, and therefore do not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our investment portfolio.

We may elect to invest a significant amount of our cash in money market funds. As with most money market funds, the ones that we have invested in from time to time include government securities, certificates of deposit, commercial paper of companies and other highly-liquid securities that are believed to be low-risk. The money market funds in which we have invested, however, also hold positions in securities issued by both sovereign states and banks located in jurisdictions experiencing macroeconomic instability, some of which may not currently be considered low-risk. Certain sovereign states and banks located in these jurisdictions, have experienced severe disruptions lately, in part, from the belief that they may be unable to repay their debt, and the value of the securities issued by these institutions have experienced volatility. While we do not believe that we have any direct exposure to the riskiest securities, for example, we do not directly hold any securities issued by the governments of Greece, Spain, Portugal, France and Ireland, the funds that we may invest in may hold these securities. In addition, these money market funds could hold Euros or Euro-based securities. To the extent that volatility was to have a significant impact on the Euro, a portion of any cash held in money market accounts could lose its value. Further, if the financial upheavals were to spread to other sovereign states, such as the United Kingdom, our cash could also be at risk due to the fact that the funds in which we have placed our cash do invest directly in the securities issued by the sovereign states, corporations and banks in these jurisdictions. As of December 31, 2011, none of our cash was held in money market funds.

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**Foreign Currency Risk**

Although our reporting currency is the U.S. dollar and substantially all of our existing sales contracts are denominated in U.S. dollars, we incur costs denominated in other currencies. In addition, although we maintain our cash balances primarily in the U.S. dollar, from time to time, we maintain cash balances in currencies other than the U.S. dollar. As a result, we are subject to currency translation risk.

Our primary foreign currency exposure relates to fluctuations in foreign currency exchange rates, primarily the euro for inventory purchases from vendors located in Europe. Fluctuations in exchange rates could affect our gross and net profit margins and could result in foreign exchange and operating losses or gains due to such volatility. Changes in the customer's delivery schedules can affect related payments to our vendors which could cause fluctuations in the cash flows and when we expect to make payments when these cash flows are realized or settled.

Exchange rates between a number of currencies and U.S. dollars have fluctuated significantly over the last few years and future exchange rate fluctuations may occur.

We enter into forward foreign currency exchange contracts that qualify as cash flow hedges to hedge portions of certain of our anticipated foreign currency denominated inventory purchases. These contracts typically expire within 12 months. Consistent with the nature of the economic hedges provided by these forward foreign exchange contracts, increases or decreases in their fair values would be effectively offset by corresponding decreases or increases in the U.S. dollar value of our future foreign currency denominated inventory purchases (i.e., "hedged items"). The information provided below relates only to the hedging instruments and does not represent the corresponding changes in the underlying hedged items.

As of December 31, 2011, we had forward foreign currency exchange contracts with notional amounts of €29.0 million, all of which expire within twelve months. As of December 31, 2011, the fair value and carrying amount of our forward foreign currency exchange contracts was a net liability of \$2.4 million. During the three and nine months ended December 31, 2011, we recorded a \$1.4 million charge for foreign currency losses on the ineffective portion of our foreign exchange forward contracts as a result of changes in payments of our outstanding purchase obligations. Relative to our foreign currency exposures existing at December 31, 2011, a 10% appreciation (depreciation) of the Euro against the U.S. dollar would result in an increase (decrease) in the fair value of these derivative instruments of approximately \$3.7 million.

**Item 4. Controls and Procedures**

**Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2011. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2011, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

**Changes in Internal Control Over Financial Reporting**

There have been no significant changes in our internal controls over financial reporting during the three months ended December 31, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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**PART II. OTHER INFORMATION**

**Item 1. Legal Proceedings**

None.

**Item 1A. Risk Factors**

Our business, operating results and cash flows can be impacted by a number of factors, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results. You should carefully consider the risks described below and the other information in this Quarterly Report on Form 10-Q. These are the risks and uncertainties we believe are most important for our business as of the date of this Quarterly Report on Form 10-Q. Additional risks and uncertainties not presently known to us, which we currently deem immaterial or which are similar to those faced by other companies in our industry or business in general, may also impair our business operations. If any of the following risks or uncertainties actually occurs, our business, financial condition and operating results would likely suffer. In that event, the market price of our common stock could decline and an investor in our common stock could lose all or part of their investment.

**Risks Related to Our Business Generally**

*General economic conditions may have an adverse impact on demand for our products.*

Demand for products requiring significant capital expenditures, such as our DSS units, CVD reactors and ASF systems, is affected by general economic conditions. A downturn in the global construction market reduces demand for solar panels in new residential and commercial buildings, which in turn reduces demand for our products that are used in the manufacture of PV wafers, cells and modules and polysilicon for the solar power industry (including our DSS units and CVD reactors). In addition, a downturn in the sapphire material market, and the sapphire-based LED and general illumination markets in particular (or if these markets do not experience any growth) would result in reduced demand for our sapphire material and our ASF systems. Uncertainties about economic conditions, negative financial news, potential defaults by or rating downgrades of debt issued by governmental entities and corporate entities, tighter credit markets and declines in asset values have, in the recent past, caused our customers to postpone or cancel making purchases of capital equipment and materials. We believe that increasing budgetary pressures will likely result in reduced, or the elimination of, government subsidies and economic incentives for on-grid solar electricity applications. A prolonged downturn in the global economy could have a material adverse effect on our business in a number of ways, including decreased demand for our products, which would result in lower sales, reduced backlog and contract terminations.

Uncertainty about future economic conditions makes it challenging for us to: forecast demand for our products and our operating results, make business decisions and identify the risks that may affect our business. For example, our inventory balances have increased substantially recently and, if such inventory becomes obsolete, we could be required to take a write down and the amount of such write down may be material. If we are not able to timely and appropriately adapt to changes resulting from the difficult macroeconomic environment, our business, results of operations and financial condition may be materially and adversely affected.

*Current or future credit and financial market conditions could materially and adversely affect our business and results of operations in several ways.*

Financial markets in the United States, Europe and Asia experienced extreme disruption in recent years, including, among other things, extreme volatility in security prices, tightened liquidity and credit availability, rating downgrades of certain investments and declining valuations of others and increased bankruptcy filings by companies in a number of industries (including the solar industry). There can be no

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assurance that there will not be further tightening in credit markets, deterioration in the financial markets and reduced confidence in economic conditions, as well as further bankruptcies. These economic developments adversely affect businesses such as ours in a number of ways. The tightening of credit in financial markets has resulted in reduced funding worldwide, including China (where many of our customers are located) and a higher level of uncertainty for solar module and sapphire equipment manufacturers. As a result, some of our customers have been delayed in securing, or prevented from securing, funding adequate to honor their existing contracts with us or to enter into new contracts to purchase our products. We believe a reduction in the availability of funding for new manufacturing facilities and facility expansions in the solar and sapphire industries, or reduction in demand for solar equipment panels or sapphire material, could cause a decrease in orders for certain of our products. We currently require most of our equipment customers to prepay a portion of the purchase price of their orders. We use these customer deposits to prepay our suppliers to reduce the need to borrow to cover our cash needs for working capital. This practice may not be sustainable if the recent market disruptions continue or grow worse. Some of our customers who have become financially distressed have failed to provide letters of credit or make payments in accordance with the terms of their existing contracts. If customers fail to post letters of credit or make payments, and we do not agree to revised terms, it could have a significant impact on our business, results of operations and financial condition. The impact of these disruptions are increasingly being felt in China, and by certain of our customers which are located in China, and accounts in part for the decline in our total revenue for the three and nine months ended December 31, 2011.

In the past, some of our PV and polysilicon customers failed to make deposits or other payments when due under their contracts, and we terminated some of those contracts. In addition, certain of these customers requested extensions of delivery dates and other modifications. The resulting contract modifications included lower pricing and reductions in the number of units deliverable under the contracts, thereby reducing our order backlog. As a result of these terminations and other contract modifications, for example, our PV and polysilicon order backlog was reduced by \$105.0 million during the fiscal year ended April 3, 2010. During the nine months ended December 31, 2011, our order backlog was reduced by \$64.8 million. We may experience further backlog reductions in the future similar to or greater than those reductions we experienced in 2010 or the just completed nine month period.

As a result of PV and polysilicon customer delays or contract terminations, we reschedule or cancel, from time to time, purchase orders with our vendors to procure materials and, in certain cases, we are required to reimburse the vendor for costs incurred to the date of termination plus predetermined profits. In addition, in the past, certain of the vendors from whom we purchased materials were unable to deliver the ordered components because economic conditions had an adverse impact on their ability to operate their businesses and we were unable to recover advances paid to those vendors for components that were not delivered. For example, during the fiscal year ended March 28, 2009, we rescheduled and/or cancelled commitments to our vendors as a result of customer delays, contract modifications and terminations and we recorded losses of \$11.3 million relating to expected forfeitures of vendor advances and reserves against advances on inventory purchases with vendors that had become financially distressed. In cases where we are not able to cancel or modify vendor purchase orders due to customer delays or terminations, our purchase commitments may exceed our order backlog requirements and we may be unable to redeploy the undelivered equipment. In addition, we expect that we may be required to pay advances to vendors in the future without being able to recover that advance if the vendor is placed in bankruptcy, becomes insolvent or otherwise experiences financial distress.

We are new to the sapphire material and equipment industry and have only recently received acceptances from two customers in connection with their initial deliveries of the ASF system (and have limited experience operating these systems in the customers' facilities), but expect that the adverse impact of changes in the credit and financial markets on our sapphire business segment would be similar to that in our PV and polysilicon business segments.

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Delays in deliveries for products of all of our segments could cause us to have inventories in excess of our short-term needs and may delay our ability to recognize revenue on contracts in our order backlog. We have recently experienced significant increases in the amount of inventory that we hold. Contract breaches or cancellation of orders would prevent us from recognizing revenue on contracts in our order backlog, may require us to reschedule and/or cancel additional commitments to vendors in the future and require that we write-down any inventory purchased that we are unable to deploy.

Credit and financial market conditions may similarly affect our suppliers. We may lose advances we make to our suppliers in the event they become insolvent because our advances are not secured or backed by letters of credit. The inability of our suppliers to obtain credit to finance development or manufacture our products could result in delivery delays or prevent us from delivering our products to our customers.

***Amounts included in our order backlog may not result in actual revenue or translate into profits.***

Our order backlog is primarily based on signed purchase orders or other written contractual commitments. While our backlog increased significantly in the nine months ended December 31, 2011 (such increase was greater than \$1.0 billion) we cannot guarantee that our order backlog will result in actual revenue in the originally anticipated period, or at all. In addition, the contracts included in our order backlog may not generate margins equal to our historical operating margins. We began to track our order backlog on a consistent basis as a performance measure in 2007, and as a result, we do not have significant experience in determining the level of realization that we will actually achieve on our backlog. Our customers may experience project delays or default on the terms of their contracts with us as a result of external market factors and economic or other factors beyond our or their control. If a customer fails to perform its contractual obligations and we do not reasonably expect such customer to perform its obligations, we may terminate the contract, which would result in a decrease in our backlog. In addition, our backlog is at risk to varying degrees to the extent customers request that we extend the delivery schedules and make other modifications under their contracts in our order backlog. Any contract modifications that we negotiate could likely include an extension of delivery dates, and could result in lower pricing or in a reduction in the number of units deliverable under the contract, thereby reducing our order backlog and not resulting in any revenue recognized. Our order backlog includes contracts with customers to whom we have sent notices of breach for failure to provide letters of credit or to make payments when due. If we cannot come to an agreement with these customers, it could result in a further reduction of our order backlog. Other customers with contracts in our order backlog that are not currently under negotiation may approach us with requests for delays in the future, or may fail to make payments when due, which could further reduce our order backlog. In the past, terminations and other contract revisions have caused significant reductions in backlog, for example, during the fiscal year ended April 3, 2010 our backlog was reduced by \$105.0 million and during the nine months ended December 31, 2011, our order backlog was reduced by \$64.8 million. If our order backlog fails to result in revenue in a timely manner, or at all, we could experience a reduction in revenue, profitability and liquidity.



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***We currently depend on a small number of customers in any given fiscal year for a substantial part of our sales and revenue.***

In each fiscal year, we depend on a small number of customers for a substantial part of our sales and revenue. For example, in the nine months ended December 31, 2011, two customers accounted for 34% of our revenue, in the fiscal year ended April 2, 2011 one customer accounted for 19% of our revenue, and in the fiscal year ended April 3, 2010, one customer accounted for 34% of our revenue. In addition, as of December 31, 2011, we had a \$2.18 billion order backlog of which \$0.9 billion was attributable to two customers. As a result, the default in payment by any of our major customers, the loss of existing orders or lack of new orders in the future, or a change in the product acceptance schedule by such customers could significantly reduce our revenues and have a material adverse effect on our financial condition, results of operations, business and/or prospects. While we have sought to diversify our business and customer base, we anticipate that our dependence on a limited number of customers in any given fiscal year will continue for the foreseeable future. There is a risk that existing customers will elect not to do business with us in the future, particularly as we face increased competition in each of our business segments, and/or that these customers will experience financial difficulties, including as a result of the recent volatility in the global economy that is having a negative impact on demand in the solar and LED industries. Furthermore, many of our customers are at an early stage and many are dependent on the equity capital markets and debt markets to finance their purchase of our products. As a result, these customers could experience financial difficulties and become unable to fulfill their contracts with us. There is also a risk that our customers will attempt to impose new or additional requirements on us that reduce the gross margins that we are able to generate through sales to such customers. If we do not develop relationships with new customers, we may not be able to increase, or even maintain, our revenue, and our financial condition, results of operations, business and/or prospects may be materially adversely affected.

***Our success depends on the sale of a limited number of products.***

A significant portion of our operating profits has historically been derived from sales of DSS units, CVD reactors and STC converters, which sales accounted for 95% of our revenue for the nine months ended December 31, 2011, 89% of our revenue for the fiscal year ended April 2, 2011 and 91% of our revenue for the fiscal year ended April 3, 2010. We have begun volume shipments of the ASF system and recently received acceptances from two customers in connection with their initial deliveries of the ASF system. We have, however, limited experience installing and operating the ASF systems in customer facilities. There can be no assurance that DSS units, ASF units and CVD reactors sales will increase beyond, or be maintained at, past levels or that any sales of sapphire materials or HiCz materials (or any other future product offering, such as our DSS MonoCast technology) will offset any decrease in sales of DSS units, ASF units or CVD reactors (or result in any revenue). For example, while we did have increased revenue from our polysilicon and sapphire segments during the nine months ended December 31, 2011, it was not nearly enough to offset decreased revenue from our PV segment. In addition, sales of our STC converters are substantially lower than in prior periods due to changes in technology. Factors affecting the level of future sales of our products include factors beyond our control, including, but not limited to, demand for solar products and sapphire material (including sapphire-based LED material and sapphire use in general illumination), development and/or use of alternatives to sapphire in LED applications (particularly in general illumination) and competing product offerings by other equipment manufacturers. Even following the acquisitions of Crystal Systems and Confluence Solar, there can be no assurance that we will be able to successfully diversify our product offerings and thereby increase our revenue and/or maintain our profits in the event of a decline in DSS units, ASF systems and CVD reactors sales. If sales of our PV, polysilicon or sapphire products decline for any reason, our financial condition, results of operations, business and/or prospects could be materially adversely affected.

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***We depend on a limited number of third party suppliers.***

We use certain component parts supplied by a small number of third party suppliers in our polysilicon, PV and sapphire equipment products and ancillary equipment, and certain of these components are critical to the manufacture and operation of certain of our products. For example, we use specialist manufacturers to provide vessels and power supplies which are essential to the manufacture and operation of our polysilicon products. In addition, certain of our products consist entirely of parts and components supplied by third party suppliers, and in these instances filling orders depends entirely upon parties over which we exercise little or no control, and if these contractors were unable to supply, or refused to supply, the parts and components, we would be unable to complete orders which would have a negative impact on our reputation and our business.

Further, our agreements with suppliers are typically short term in nature, which leaves us vulnerable to the risk that our suppliers may change the terms on which they have previously supplied products to us or cease supplying products to us at any time and for any reason.

In addition, our sapphire business depends on a small number of suppliers for certain raw materials, components, services and equipment used in manufacturing our products and our ASF systems. In particular, (i) the supply of qualified meltstock we use to grow sapphire materials is limited and there may be an insufficient amount to grow our sapphire materials business as currently planned or available for the purchasers of our crystal growth systems and (ii) the supply of crucibles used in our ASF system, which require specialized manufacturing processes, may not be adequate to support the expected increase in the use of the ASF system by us or by customers of our ASF systems (both of which would be significant limiting factors on our attempts to grow our ASF business). We generally purchase these items with purchase orders, and we have no guaranteed supply arrangements with such suppliers. This risk is exacerbated as our sapphire equipment customers begin to purchase these raw materials and equipment for their own production.

There is no guarantee that we will maintain relationships with our existing suppliers or develop new relationships with other suppliers. In addition, certain of our suppliers are small companies that may cease operations for any reason, including financial viability reasons, and/or may be unable to meet any increases in our demand for component parts and equipment. We are also dependent on our suppliers to maintain the quality of the components and equipment we use and the increased demands placed on these suppliers as we expect to continue to grow may result in quality control problems. We may be unable to identify replacement or additional suppliers or qualify their products in a timely manner and on commercially reasonable terms, or at all. Component parts supplied by new suppliers may also be less suited to our products than the component parts supplied by our existing suppliers. Certain of the component parts used in our products have been developed, made or adapted specifically for us. Such parts are not generally available from other vendors and could be difficult or impossible to obtain elsewhere. As a result, there may be a significant time lag in securing an alternative source of supply. In addition, the inability of our suppliers to support our demand could be indicative of a marketwide scarcity of the materials, which could result in even longer interruptions in our ability to supply our products.

In the ordinary course of business, we are also exposed to market risk from fluctuations in the price of raw materials and commodities necessary in the manufacture of our products, such as graphite, steel, copper, helium and molybdenum. We experience similar commodity risks in connection with the consumable materials utilized in our products, and in certain cases, there is very limited access to these commodities. The increase in the price of these commodities, due to further limitations of availability or to greater demand, will make our products less attractive and will harm our material and equipment business. If we bring more entrants into these markets, these commodity risks increase. Any significant increase in these prices would increase our expenses, decrease demand for our products and hurt our profitability. In addition, demand for our products will be negatively impacted if the raw materials that are used to create polysilicon, PV materials and sapphire were to increase.

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Our failure to obtain sufficient raw materials, commodities, component parts and/or third party equipment that meet our requirements in a timely manner and on commercially reasonable terms could interrupt or impair our ability to assemble our products, and may adversely impact our plans to expand and grow our business, as well as result in a loss of market share. Further, such failure may prevent us from delivering our products as required by the terms of our contracts with our customers, and may harm our reputation and result in breach of contract and other claims being brought against us by our customers. Any changes to our current supply arrangements, whether to the terms of supply from existing suppliers or a change in our suppliers, may also increase our costs in a material amount.

As a result of any of the foregoing factors, our financial condition, results of operations, business and/or prospects could be materially adversely affected.

***We face competition in each of our business segments, and if our competitors are able to manufacture products that employ newer technologies or are otherwise more widely used than our products, and if we are unable to modify our products to adapt to such future changes, we may be unable to attract or retain customers.***

The solar energy industry and the sapphire industry are both highly competitive and continually evolving as participants strive to increase their market share and new entrants strive to capture market share in each of these industries. In addition, the solar energy industry also has to compete with the larger conventional electric power industry. Many of our competitors have, and future competitors may also have, substantially greater financial, technical, manufacturing and other resources than we do. These resources may provide our competitors with an advantage because they can realize economies of scale, synergies and purchase certain raw materials, commodities and key components at lower prices. Current and potential competitors of ours may also have greater brand name recognition, more established distribution networks and larger customer bases, and may be able to devote more resources to the research, development, promotion and sale of their products or to respond more quickly to evolving industry standards and changes in market conditions. In addition, given the ability of other parties to access equipment technology in each of our segments, we also face low-cost competitors who may be able to offer similar products at very competitive prices. We may not be able to maintain our current share of the market in our respective business segments as competitive intensity increases and particularly as our customers are targeted by local competitors in China and other countries. This trend is increasingly evident as we believe that certain customers have already begun purchasing our competitors' equipment and installing them in their facilities. Our efforts to capitalize on technological developments in the markets in which we operate, such as the continuously-fed Czochralski (HiCz ) growth technology obtained by virtue of the Confluence Solar acquisition, may not result in increased market share and may require that we make substantial capital investments without any corresponding increase in revenues. In addition, customers may place orders to supply equipment for new facilities or future expansions with our competitors, and we believe the likelihood that our customers and others will go to competitors has increased over time. Our failure to adapt to changing market conditions and to compete successfully with existing or new competitors and/or new technological developments may have a material adverse effect on our financial condition, results of operations, business and/or prospects.

In relation to our polysilicon business, we are not the only provider of polysilicon production equipment to the market and the technology underlying our CVD reactor product is not the only known technology for producing polysilicon. Our CVD reactor is based on a method known as the Siemens process, whereby silicon depositions from silane or TCS gas are grown on heated rods inside a cooled bell jar. An alternative polysilicon production method is the fluidized bed reactor, or FBR, process, in which polysilicon is grown from hot polysilicon granules suspended in an upward flow of silane or TCS gas inside a specially designed chamber. A large scale FBR process has certain advantages over the Siemens process, including allowing for the continuous production and extraction of polysilicon, consuming less energy and being less labor intensive. There can be no assurance that the FBR process or other polysilicon growth technologies will not supersede the Siemens process as the most commonly used method of polysilicon

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production. If other technologies for producing polysilicon become more widely used or more widely available, demand for our CVD reactor product may be adversely affected. Existing direct competitors of our polysilicon business include various companies that we believe deliver CVD reactors based upon what we believe is a Siemens process reactor design. Although we believe our CVD reactor to be distinct from the competing products offered by our competitors, there can be no assurance that our CVD reactor will compete successfully with their products which would have a material adverse effect on our financial condition, results of operations, business and/or prospects. In addition, companies that produce polysilicon for their own purposes currently compete indirectly with our polysilicon business, as any increase in the supply of polysilicon may have an adverse effect of the demand for our CVD reactor.

The PV and sapphire industries are also rapidly evolving and are highly competitive. Technological advances may result in lower manufacturing costs for these products and/or such product manufacturing equipment or result in greater efficiencies for these products, and may render existing products and/or product manufacturing equipment of our PV and sapphire businesses obsolete. We will therefore need to keep pace with technological advances in these industries, including committing resources to ongoing research and development, acquiring new technologies, continually improving our existing products and continually expanding and/or updating our product offering, in order to compete effectively in the future. Our failure to further refine our technologies and/or develop and introduce new solar power and sapphire products could cause our products to become uncompetitive or obsolete, which could adversely affect demand for our products, and our financial condition, results of operations, business and/or prospects.

Additionally, there are certain competitive factors that are particular to the sapphire material market including sapphire-based LED, and the sapphire equipment market. Our ability to expand into new applications in the sapphire material market and sapphire equipment market depends on continued advancement in the design and manufacture of sapphire and LEDs (including sapphire and non-sapphire-based LEDs) and lighting technology by others. This industry has been characterized by a rapid rate of development of new technologies and manufacturing processes, rapid changes in customer requirements, frequent product introductions and ongoing demands for greater functionality. The future success of our sapphire business will depend on our ability to timely develop new products for use in sapphire, sapphire-based LED and general illumination applications and to adjust our product specifications in response to these developments in a timely manner. In addition, although sapphire is currently the preferred substrate material for certain LED applications, which is the market focused on by our equipment customers, we cannot be assured that the LED market demand for sapphire will continue. Recently, sapphire wafer prices have experienced a significant drop as a result of lower demand, and these lower prices are forecasted to continue for the near future. Research is also ongoing for the use of silicon substrates and substrates incorporating other materials in LED applications. Moreover, if effective new sources of light other than sapphire-based LED devices are developed, our sapphire business' current products and technologies could become less competitive or obsolete. If sapphire is displaced as the substrate of choice for certain LED and general illumination applications, or if sapphire-based LED is no longer a preferred technology among our customers, the financial condition and results of operations of our business could be adversely affected.

***The prices for polysilicon and sapphire material, as well as silicon ingots, have, in the past, dropped as a result of either increased supply or decreased demand, and, at the same time, the prices for the inputs to create this output has either remained consistent or increased, which has resulted in decreased margins for polysilicon and sapphire and PV manufacturers, and if these circumstances were to continue or dampen the demand for our PV, polysilicon and sapphire equipment would negatively impacted.***

The prices for polysilicon, sapphire and PV materials have decreased recently due, in part, to either excess supply or decreasing demand for these materials. Concurrently with these price drops, the costs for the consumable materials that are used in our equipment to make polysilicon, sapphire boules and PV ingots and wafers have either remained steady or, in some cases, increased. These two factors, operating in

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tandem, result in decreased margins for the manufacturers selling polysilicon, sapphire boules and PV ingots and wafers, and, depending on circumstances, could result in negative margins. If this situation were to persist, we would expect that the demand for our polysilicon reactors, ASF units and DSS furnaces would drop and may hamper the adoption of any new technologies we introduce (including our proposed MonoCast and HiCz equipment offerings). The on-going global economic uncertainty and tightened credit markets may exacerbate these circumstances.

***We may face product liability claims and/or claims in relation to third party equipment.***

It is possible that our products could result in property damage and/or personal injury, whether by product malfunctions, defects, improper use or installation or other causes. We cannot predict whether or not product liability claims will be brought against us or the effect of any resulting negative publicity on our business, which may include loss of existing customers, failure to attract new customers and a decline in sales. The successful assertion of product liability claims against us could result in potentially significant monetary damages being payable by us, and we may not have adequate resources to satisfy any judgment against us. Furthermore, it may be difficult or impossible to determine whether any damage or injury was due to product malfunction, operator error, failure of the product to be operated and maintained in accordance with our specifications or the failure of the facility in which our products are used to comply with the facility specifications provided to our customers or other factors beyond our control. For example, one of our significant customers experienced chamber leakage involving a number of DSS units in its facilities which we believe was the result of their facility failing to conform to specifications. We nonetheless agreed to replace certain chambers at our cost. Other customers may experience similar issues in the future as a result of product defects, facilities not complying with specifications or other reasons. To date, we have not received any product liability or other claims with respect to these or any other accidents.

In addition, we have provided third party equipment in connection with our product sales. There can be no guarantee that such third party equipment will function in accordance with our intended or specified purpose or that the customer's personnel, in particular those who are inexperienced in the use of the specialized equipment sold by us, will be able to correctly install and operate it, which may result in the return of products and/or claims by the customer against us. In the event of a claim against us, there is no guarantee that we will be able to recover all or any of our loss from the third party equipment provider. The bringing of any product liability claims against us, whether ultimately successful or not, could have a material adverse effect on our financial condition, results of operations, business and/or prospects.

***Our future success depends on our management team and on our ability to attract and retain key employees and to integrate new employees into our management team successfully.***

We are dependent on the services of our management team. Although certain of these individuals are subject to agreements with us, any and all of them may choose to terminate their employment with us on thirty or fewer days' notice. The loss of any member of the management team could have a material adverse effect on our financial condition, results of operations, business and/or prospects. There is a risk that we will not be able to retain or replace these or other key employees. Integrating new employees into our management team could prove disruptive to our daily operations, require a disproportionate amount of resources and management attention and ultimately prove unsuccessful. This may have a material adverse effect on our financial condition, results of operations, business and/or prospects. In addition, we are implementing our succession planning measures for our management and key staff or skilled employees. However, if we fail to successfully implement these succession plans for management and key staff when necessary, our operating results would likely be harmed.

***We may be unable to attract, train and retain technical personnel.***

Our future success depends, to a significant extent, on our ability to continue to develop and improve our technology and to attract, train and retain experienced and knowledgeable technical personnel.

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Recruiting and retaining capable personnel, particularly those with expertise in the polysilicon, PV and the sapphire industry, is vital to our success. There is substantial competition for qualified technical personnel, and qualified personnel are currently, and for the foreseeable future are likely to remain, a limited resource. Locating candidates with the appropriate qualifications can be costly, time-consuming and difficult. There can be no assurance that we will be able to attract new, or retain existing, technical personnel. We may need to provide higher compensation or increased training to our personnel. If we are unable to attract and retain qualified personnel, or are required to change the terms on which our personnel are employed, our financial condition, results of operations, business and/or prospects may be materially adversely affected.

***The new technologies in which we invest, by means of internal development and/or acquisitions from third parties through license or acquisition, may not gain market acceptance which could result in decreased cash resources and harm our results of operations.***

We have expended significant financial resources and technical expertise in developing new products and services that we expect will improve our product portfolio and result in increased revenues. These investments, however, may not result in increased revenues and may require that we incur expenses that result in decreasing our cash balances. For example, we have already spent approximately \$60 million (and may spend up to an additional \$20 million in contingent payments and additional significant capital spending) in connection with our acquisition of Confluence Solar. This acquisition was made with the expectation that we will be able to offer our customers PV equipment that produces high efficiency monocrystalline solar ingots, which is expected to lower PV production costs. In addition, we have invested significant amounts in our internal research and development efforts on our DSS MonoCast growth technology. We intend the DSS MonoCast equipment offering will serve as a bridge to our HiCz equipment offering, which will be based on the technology utilized by Confluence Solar, and we expect that HiCz equipment will ultimately supersede our MonoCast offerings once the HiCz equipment is commercially available and becomes accepted in the market. Both our MonoCast and HiCz offerings will be targeted at improving the ingot performance compared to that of multicrystalline silicon materials. We have just announced the commercialization of our DSS MonoCast product offering and are still developing our HiCz equipment offering. If we are successful in commercializing these monocrystalline product lines, we expect that it will result in decreased sales of our multicrystalline products, including the DSS 650, which are currently less expensive but do not generate solar cells offering comparable efficiencies. If we are not successful in commercializing these product lines, we would lose the significant investments we made in our internal development efforts and in the Confluence Solar acquisition. We anticipate that there will be greater demand for monocrystalline production equipment in the future and, as a result, we believe that would make our DSS 450 and 650 furnaces less competitive and demand would drop for such equipment and cause us to have significant less revenue from those products.

We also have no experience in manufacturing and selling HiCz equipment, and we may be unable to commercialize the product or ensure it gains wide-spread market acceptance. We also have very limited experience in installing and operating MonoCast equipment, which is critical to recognizing any revenue on the sales of this product. If we are unable to bring either of these products to market and generate substantial sales, we may be unable to recover any or all of the investments we have made in them.

Given the pace of technological advancements in the PV equipment industry, it is possible that monocrystalline production may not gain meaningful market share as other companies develop products that generate solar cells offering even higher efficiency. Alternatively, there are competing monocrystalline production techniques that may result in a more efficient solar wafer and/or equipment that can make comparable quality silicon at equipment prices below what we charge or at which our equipment makes ingots. Further, as we move toward releasing a MonoCast equipment product, we may not be able to offer it at a competitive price or, as we have very little experience with this technology, the product may not perform as we expect. Any of the foregoing would have a significant and negative impact on our business and results of operation.

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***We may be unable to protect our intellectual property adequately and may face litigation to enforce our intellectual property rights.***

Our ability to compete effectively against our competitors in the PV, polysilicon and sapphire markets will depend, in part, on our ability to protect our current and future proprietary technologies, product designs, product uses and manufacturing processes under relevant intellectual property laws including, but not limited, to laws relating to patents and trade secrets.

We own various patents and patent applications in the United States and other countries relating to our products, product uses and manufacturing processes. To the extent that we rely on patent protection, our patents may provide only limited protection for our technology and may not be sufficient to provide competitive advantages to us. For example, competitors could develop similar or more advantageous technologies or design around our patents or otherwise employ alternative products, equipment or processes that may successfully compete with our products and technology. In addition, patents are of limited duration. Any issued patents may also be challenged, invalidated or declared unenforceable. If our patents are challenged, invalidated or declared unenforceable, other companies will be better able to develop products that compete with ours, which could adversely affect our competitive business position, business prospects and financial condition. Further, we may not have, or be able to obtain, effective patent protection in all of our key sales territories. Our patent applications may not result in issued patents and, even if they do result in issued patents, the patents may not include rights of the scope that we seek. The patent position of technology-oriented companies, including ours, is uncertain and involves complex legal and factual considerations. Accordingly, we do not know what degree of protection we will obtain from our proprietary rights or the breadth of the claims allowed in patents issued to us or to others. Further, given the costs of obtaining patent protection, we may choose not to protect certain innovations that later turn out to be important to our business.

Third parties may infringe, misappropriate or otherwise violate our proprietary technologies, product designs, manufacturing processes and our intellectual property rights therein, which could have a material adverse effect on our financial condition, results of operations, business and/or prospects. For example, we have filed a lawsuit in the Hillsborough County Superior Court (Southern District) in New Hampshire against Advanced Renewable Energy Company, LLC ("ARC"), Kedar Gupta, its Chief Executive Officer and Chandra Khattak, an ARC employee, for the misappropriation of trade secrets relating to sapphire crystallization processes and equipment. Because the laws and enforcement mechanisms of various countries that we seek protection in may not allow us to adequately protect our intellectual property rights, the strength of our intellectual property rights will vary from country to country. Litigation to prevent, or seek compensation for such infringement, misappropriation or other violation, such as the ARC lawsuit described above, may be costly and may divert management attention and other resources away from our business without any guarantee of success.

We also rely upon proprietary manufacturing expertise, continuing technological innovation and other know-how or trade secrets to develop and maintain our competitive position. While we generally enter into confidentiality and non-disclosure agreements with our employees and third parties to protect our intellectual property, such confidentiality and non-disclosure agreements could be breached and are limited, in some instances, in duration and may not provide meaningful protection for the trade secrets or proprietary manufacturing expertise that we hold. We have had in the past and may continue to have certain of our employees terminate their employment with us to work for one of our customers or competitors. Adequate or timely remedies may not be available in the event of misappropriation, unauthorized use or disclosure of our manufacturing expertise, technological innovations and trade secrets. In addition, others may obtain knowledge of our manufacturing expertise, technological innovations and trade secrets through independent development or other legal means and, in such cases, we may not be able to assert any trade secret rights against such a party.

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***We may face claims in relation to the infringement or misappropriation of third-party intellectual property rights.***

Notwithstanding our intellectual property rights, we may be subject to claims that our products, processes or product uses infringe the intellectual property rights of others. These claims, even if meritless, could be expensive and time consuming to defend. In addition, if we are not successful in our defense of such claims, we could be subject to injunctions and/or damages, or be required to enter into licensing arrangements requiring royalty payments and/or use restrictions. In some instances, licensing arrangements may not be available to us or, if available, may not be available on acceptable terms.

Due to the competitive nature of the industries in which we participate, we may face potential claims by third parties of infringement, misappropriation or other violation of such third parties' intellectual property rights. From time to time we have received and may in the future receive notices or inquiries from other companies suggesting that we may be infringing their patents or misappropriating their intellectual property rights. Such notices or inquiries may, among other things, threaten litigation against us. Furthermore, the issuance of a patent to us does not guarantee that we have the right to practice the patented invention. Third parties may have blocking patents that could be used to prevent us from marketing our own patented product and practicing our own patented technology. In addition, third parties could allege that our products and processes make use of their unpatented proprietary manufacturing expertise and/or trade secrets, whether in breach of confidentiality and non-disclosure agreements or otherwise. If an action for infringement, misappropriation, or other violation of third party rights were successfully brought against us, we may be required to cease our activities on an interim or permanent basis and could be ordered to pay compensation, which could have a material adverse effect on our financial condition, results of operations, business and/or prospects. Additionally, if we are found to have willfully infringed certain intellectual property rights of another party, we may be subject to treble damages and/or be required to pay the other party's attorney's fees. Alternatively, we may need to seek to obtain a license of the third party's intellectual property rights or trade secrets, which may not be available, whether on reasonable terms or at all, and such technology may be licensed to other parties thereby limiting any competitive advantage to us. In addition, any litigation required to defend such claims brought by third parties may be costly and may divert management attention and other resources away from our business, without any guarantee of success. Moreover, we may also not have adequate resources to devote to our business in the event of a successful claim against us.

From time to time, we hire personnel who have obligations to preserve the secrecy of confidential information and/or trade secrets of their former employers. Some former employers monitor compliance with these obligations. While we have policies and procedures in place to guard against the risk of breach by our employees of confidentiality obligations to their former employers, there can be no assurance that a former employer of one or more of our employees will not allege a breach and seek compensation for alleged damages. If such a former employer were to successfully bring such a claim, our know-how and/or skills base could be restricted and our ability to produce certain products and/or to continue certain business activities could be affected, to the detriment of our financial condition, results of operations, business and/or prospects.

***The international nature of our business subjects us to a number of risks, including unfavorable political, regulatory, labor and tax conditions in foreign countries.***

A substantial majority of our marketing and distribution takes place outside the United States, primarily in China, and substantially all of our sales are to customers outside the United States. We also have contracts with customers in Europe and expect to recognize revenue from sales to customers in Asia and Europe in the future. In addition, we have transitioned our global operations center to Hong Kong, further increasing our exposure to the risks of operating in Asia. As a result, we are subject to the legal, political, social and regulatory requirements and economic conditions of many jurisdictions other than the



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United States. Risks inherent to maintaining international operations, include, but are not limited to, the following:

trade disputes between countries, particularly China, in which our customers sell end-products, including their sales of solar wafers, cells and modules, and sapphire materials produced with our furnaces or reactors, which could result in government or trade organization actions that have the effect of increasing the price for our and our customers' products which would have a corresponding decrease in the demand for our products;

withholding taxes or other taxes on our foreign income, tariffs or other restrictions on foreign trade and investment, including currency exchange controls imposed by or in other countries;

the inability to obtain, maintain or enforce intellectual property rights in other jurisdictions, at a reasonable cost or at all;

difficulty with staffing and managing widespread and growing international operations;

complying with regulatory and legal requirements in the jurisdictions in which we operate and sell products (particularly as we have a limited legal and compliance staff to oversee these compliance efforts;

trade barriers such as export requirements, tariffs, taxes and other restrictions and expenses, which could increase the prices of our products and make our product offering less competitive in some countries; and

establishing ourselves and becoming tax resident in foreign jurisdictions.

Among the foregoing risks, the possibility of trade tensions between China and the U.S. has taken on a greater likelihood recently. Proposed legislation was submitted to the United States Congress targeting China's currency practices. Among other things, this proposed legislation would impose trade sanctions against Chinese companies that ship finished goods into the U.S. at artificially low prices caused by Chinese currency manipulation. The Chinese government has indicated that passage of this legislation or similar actions could lead to retaliatory tariffs. In addition, U.S. solar manufacturers have requested that the U.S. place duties of 100% on imports from China, claiming that the Chinese imports were unfairly undercutting U.S. prices. Retaliatory tariffs and trade tensions with China would have a material adverse impact on our business since we sell into China and our equipment customers sell end products into the U.S. In addition, if the U.S. government administration were to impose a duty on solar cells from China, it would have a direct and negative effect on several of our PV customers who purchase our PV equipment. Our business and results of operations would be negatively affected if a trade war were to occur with China.

Our business in foreign markets requires us to respond to rapid changes in market conditions in these countries. Our overall success as a global business depends, in part, on our ability to succeed under differing legal, regulatory, economic, social and political conditions. There can be no assurance that we will be able to develop, implement and maintain policies and strategies that will be effective in each location where we do business. As a result of any of the foregoing factors, our financial condition, results of operations, business and/or prospects could be materially adversely affected.

***We are a global corporation with significant operations in Asia, and challenges by various tax authorities to our global operations could, if successful, increase our effective tax rate and adversely affect our earnings.***

We are a Delaware corporation that operates through various affiliates and subsidiaries in a number of countries throughout the world, including in Asia. In October 2010, we established our global operations center in Hong Kong and our operations in Asia have grown significantly in the past two years. Our income taxes are based upon the applicable tax laws, treaties, and regulations in the many countries in which we operate and earn income as well as upon our operating structures in these countries. While we believe that

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we carefully analyze and account for the tax risks and uncertainties under the applicable rules, multiple tax authorities could contend that a greater portion of our and our affiliates' income should be subject to income or other tax in their respective jurisdictions. If successful, these challenges could result in an increase to our effective tax rate.

We continue to monitor the impact of various international tax proposals and interpretations of the tax laws and treaties in the countries where we operate, including those in the United States, China, Hong Kong, and other countries. If enacted, certain changes in tax laws, treaties, regulations, or their interpretation could result in a higher tax rate on our earnings, which could result in a significant negative impact on our earnings and cash flow from operations.

***Compliance with the legal systems of the countries in which we offer and sell our products could increase our cost of doing business.***

We offer and sell our products internationally, including in some emerging markets. As a result, we are and/or may become subject to the laws, regulations and legal systems of the various jurisdictions in which we carry on business and/or in which our customers or suppliers are located. Among the laws and regulations applicable to our business are health and safety and environmental regulations, which vary from country to country and from time to time. We must therefore design our products and ensure their manufacture so as to comply with all applicable standards. Compliance with legal and regulatory requirements, including any change in existing legal and regulatory requirements, may cause us to incur costs and may be difficult, impractical or impossible. Accordingly, foreign laws and regulations which are applicable to us may have a material adverse effect on our financial condition, results of operations, business and/or prospects.

As a result of the procedural requirements or laws of the foreign jurisdictions in which we carry on business and/or in which our customers or suppliers are located, we may experience difficulty in enforcing supplier or customer agreements or certain provisions thereof, including, for example, the limitations on the product warranty we typically include in our customer contracts. In some jurisdictions, enforcement of our rights may not be commercially practical in light of the duration, cost and unpredictability of such jurisdiction's legal system. Any inability by us to enforce, or any difficulties experienced by us in enforcing, our contractual rights in foreign jurisdictions may have a material adverse effect on our financial condition, results of operations, business and/or prospects.

***We are subject to export restrictions and laws affecting trade and investments, and the future sale of our products, including our sapphire materials and ASF systems, may be further limited or prohibited in the future by a government agency or authority.***

As a global company headquartered in the United States, our products and services are subject to U.S. laws and regulations that may limit and/or restrict the export of some of our products, services and related product and technical information, as well as laws of those foreign jurisdictions to which we sell or re-export our products. Compliance with these laws and regulations could significantly limit our operations and our sales in the future and failure to comply could result in a range of penalties, including restrictions on exports of all of our products for a specified time period, or forever, and severe monetary penalties. In certain circumstances, these restrictions may affect our ability to interact with our foreign subsidiaries and otherwise limit our trade and investments with third parties (including customers) operating outside the U.S. In addition, as we introduce new products, we may need to obtain licenses or approvals from the US and other governments to ship or import them into foreign countries. Failure to receive the appropriate approvals may mean that our development efforts (and expenses related to such development) may not result in any revenue, particularly as most of our customers are located in foreign jurisdictions. This would have a material and adverse impact on our business and our development efforts.

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In addition, certain customers of our sapphire materials business operate in the defense sector or are subcontractors of companies in the defense industry, and our products are incorporated in, among other things, missiles, military aircraft and aerospace systems. In addition, Crystal Systems has received funding from the U.S. government in connection with certain research work for certain U.S. government agencies. Certain work performed pursuant to certain of these contracts is not commercially available, but we may make it available commercially in the future. The State Department, the Commerce Department or other government agencies may, however, determine that our sapphire material or other products, including our ASF systems, PV furnaces and/or polysilicon reactors, are important to the military potential of the U.S. If so, we may be subject to more stringent export licensing requirements or prohibited from selling certain of our sapphire materials for certain applications (or end uses), ASF systems, PV furnaces and/or polysilicon reactors to any customer outside the U.S. or to customers in certain jurisdictions. The government has, and will likely continue to, vigorously enforce these laws in light of continuing security concerns. If the export or sale of any of our current or future products outside the U.S. are limited or restricted by the U.S. government or any foreign government, our operations and results of operations would be negatively impacted.

***We face particular market, commercial, jurisdictional and legal risks associated with our business in China.***

We have had significant sales in China, accounting for 46% of our revenue in the nine months ended December 31, 2011, 71% of our revenue in the fiscal year ended April 2, 2011 and 63% of our revenue in the fiscal year ended April 3, 2010. Further, we have significant facilities and operations in China. Accordingly, our financial condition, results of operations, business and/or prospects could be materially adversely affected by economic, political and legal conditions or developments in China.

Examples of economic and political developments that could adversely affect us include government control over capital investments or changes in tax regulations that are applicable to us. In addition, a substantial portion of the productive assets in China remain government owned. The Chinese government also exercises significant control over Chinese economic growth through the allocation of resources, controlling payment of foreign currency denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies. Efforts by the Chinese government to slow the pace of growth of the Chinese economy could result in decreased capital expenditures by solar and sapphire product manufacturers, which in turn could reduce demand for our products. Additionally, China has historically adopted laws, regulations and policies which impose additional restrictions on the ability of foreign companies to conduct business in China or otherwise place them at a competitive disadvantage in relation to domestic companies. Any adverse change in economic conditions or government policies in China could have a material adverse effect on our overall economic growth and therefore have an adverse effect on our financial condition, results of operations, business or prospects.

We also face risks associated with Chinese laws and the Chinese legal system. China's legal system is rapidly evolving and, as a result, the interpretation and enforcement of many laws, regulations and rules are not always uniform and legal proceedings in China often involve uncertainties. The legal protections available to us may therefore be uncertain and may be limited. Enforcement of Chinese intellectual property related laws has historically been weak, primarily because of ambiguities in Chinese laws and difficulties in enforcement. Accordingly, the intellectual property rights and confidentiality protections available to us in China may not be as effective as in the United States or other countries. In addition, any litigation brought by or against us in China may be protracted and may result in substantial costs and diversion of resources and management attention and the anticipated outcome would be highly uncertain. As a result of the foregoing factors, our financial condition, results of operations, business and/or prospects may be materially adversely affected.

We have expanded, and expect that we will continue to expand, our presence in China, including in the areas of customer service, certain manufacturing services, administrative functions, sales and research

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and development. As we adopt a greater presence in China, we are increasingly exposed to the economic, political and legal conditions and developments in China, which could further exacerbate these risks.

***We have entered into and may enter into or seek to enter into business combinations and acquisitions that may be difficult to integrate, disrupt our business, expose us to litigation or unknown liabilities, dilute stockholder value and divert management attention.***

If acquisition opportunities arise in the future, we may seek to enter into business combinations or purchases. For example, we acquired Confluence Solar in 2011 and Crystal Systems in 2010. Acquisitions and combinations, including the acquisitions of Confluence Solar and Crystal Systems, are accompanied by a number of risks, including the difficulty of integrating the operations and personnel of the acquired companies, the potential disruption of our ongoing business, the potential distraction of management, expenses related to the acquisition and potential unknown liabilities and claims associated with acquired businesses. We may be subject to (i) liability for activities of the acquired company prior to the acquisition, including violations of laws, commercial disputes, environmental and tax and other known and unknown liabilities and (ii) litigation or other claims in connection with the acquired company, including claims brought by terminated employees, customers, former stockholders or other third parties. In addition, there may, in particular, be risks and uncertainties in connection with the intellectual property rights and ownership of technology of an acquired company, including (i) the nature, extent and value of the intellectual property and technology assets of an acquired company, (ii) the rights that an acquired company has to utilize intellectual property and technology that it claims to have developed or to have licensed, (iii) the validity of intellectual property and technology transfers to or from third parties, (iv) the enforceability of registered and other intellectual property rights, and (v) actions by third parties against the acquired company for intellectual property and technology infringement and the extent of the potential loss relating thereto. Third parties may also be more likely to assert claims against the acquired company, including claims for breach of intellectual property rights, once the company has been acquired by us.

Any inability to integrate completed acquisitions or combinations in an efficient and timely manner or the inability to properly assess and utilize the intellectual property and technology portfolio without infringing the rights of a third party could have an adverse impact on our results of operations. In addition, we may not be able to recognize any expected synergies or benefits in connection with a future acquisition or combination or we may be unable to effectively implement the business plan for the acquired company, which would prevent us from achieving our financial and business goals for the business. If we are not successful in completing acquisitions or combinations that we may pursue in the future, we may incur substantial expenses and devote significant management time and resources without a successful result. In addition, we expanded the workforce at both Confluence Solar and Crystal Systems following the acquisition. If we are unable to hire the technical and administrative personnel to meet our goals for expanding our business, our acquisitions may not generate the positive results we anticipated when we considered acquiring the business.

In addition, future acquisitions could require use of substantial portions of our available cash or result in the incurrence of debt or dilutive issuances of securities. If we were to incur additional debt in the future in connection with an acquisition, or otherwise, it may contain covenants restricting our future activities, may incur significant interest rates or penalties for breach and we may be unable to generate sufficient cash to pay the principal or interest. Also, any issuance of equity securities may be dilutive.

Acquisitions and combinations also frequently require the acquiring company to recognize significant amounts of intangible assets, such as goodwill, patents and trademarks and customer lists, in an acquisition, which amounts may be subject to a future impairment if we are unable to successfully implement the operating strategy for the acquired company.

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***Our ability to supply a sufficient number of products to meet demand could be severely hampered by natural disasters or other catastrophes.***

Currently, a portion of our operations are located in Asia and we have increased our presence in Asia by opening our global operations center in Hong Kong. Additionally, a significant portion of our revenue is generated from customers that install our equipment in Asia. These areas are subject to natural disasters such as earthquakes and floods. A significant catastrophic event such as war, acts of terrorism or global threats, including, but not limited to, the outbreak of epidemic disease, could disrupt our operations and impair distribution of our products, damage inventory, interrupt critical functions, cause our suppliers to be unable to meet our demand for parts and equipment, reduce demand for our products, prevent our customers from honoring their contractual obligations to us or otherwise affect our business negatively. To the extent that such disruptions or uncertainties result in delays or our inability to fill orders, causes cancellations of customer orders, or the manufacture or shipment of our products, our business, operating results and financial condition could be materially and adversely affected.

***We may be subject to concentration of credit risk related to our cash equivalents and short-term investments.***

We may be exposed to losses in the event of nonperformance by the financial counterparties to our cash equivalent investments and short term investments. This risk may be heightened as a result of the financial crisis and volatility in the markets. We manage the concentration risk by making investments that comply with our investment policy. Currently, our cash equivalents are invested in cash deposit accounts at our financial institutions. Although we do not currently believe the principal amounts of these investments are subject to any material risk of loss, the recent volatility in the financial markets is likely to significantly impact the investment income we receive from these investments. In general, increases of credit risk related to our cash equivalents and short-term investments could have a material adverse effect on our financial condition, results of operations, business and/or prospects.

***Our credit facilities contain covenants that impose significant restrictions on us.***

On January 31, 2012, we entered into a credit agreement, or Credit Agreement, which consists of a term loan facility and a revolving credit facility with Bank of America, N.A. , as administrative agent, Swing Line Lender and L/C Issuer ("Bank of America") and the lenders from time to time party thereto. The Credit Agreement contains covenants and conditions that restrict our ability to incur certain additional debt, pay dividends and make distributions, enter into specified transactions with affiliates, acquire businesses, among others, and resulted in liens being placed on certain of our properties and assets. The terms of the Credit Agreement also imposes financial covenants on us and our subsidiaries relating to our leverage ratio and interest coverage ratio.

The foregoing restrictions may limit our ability to operate our business and our failure to comply with any of these covenants could result in the acceleration of our outstanding indebtedness under the Credit Agreement. If such acceleration occurs, we would be required to repay our indebtedness, and we may not have the ability to do so or the ability to refinance our indebtedness, which would prevent us from investing in our business in an effort to grow our operations. Even if new financing is made available to us, it may not be available on acceptable or reasonable terms. An acceleration of our indebtedness could impair our ability to operate as a going concern.

***We may face significant warranty claims.***

Our DSS products and ASF system are generally sold with a standard warranty for technical defects for a period equal to the shorter of: (i) twelve months from the date of acceptance by the customer; or (ii) fifteen months from the date of shipment. We provide longer warranty coverage in our polysilicon business, typically covering a period not exceeding twenty-four months from delivery. The warranty is typically provided on a repair or replace basis, and is not limited to products or parts manufactured by us.

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Our sapphire materials are sold with a standard warranty for a period not greater than thirty days, but the warranty period may be longer in certain cases. As a result, we bear the risk of warranty claims on all products we supply, including equipment and component parts manufactured by third parties. There can be no assurance that we will be successful in claiming under any warranty or indemnity provided to us by our suppliers in the event of a successful warranty claim against us by a customer or that any recovery from such supplier would be adequate. There is a risk that warranty claims made against us will exceed our warranty reserve and could have a material adverse effect on our financial condition, results of operations, business and/or prospects.

***Exchange rate fluctuations may make our products less attractive to non-U.S. customers and otherwise have a negative impact on our operating results.***

Our reporting currency is the U.S. dollar and almost all of our contracts are denominated in U.S. dollars. However, greater than 98% of our revenue was generated from sales to customers located outside the United States in each of the nine months ended December 31, 2011 and fiscal years ended April 2, 2011 and April 3, 2010, and we expect that a large percentage of our future revenue will continue to be derived from sales to customers located outside the United States. Changes in exchange rates between foreign currencies and the U.S. dollar could make our products less attractive to non-U.S. customers and therefore decrease our sales and gross margins. In addition, we incur costs in the local currency of the countries outside the United States in which we operate and as a result are subject to currency translation risk. Exchange rates between a number of foreign currencies and the U.S. dollar have fluctuated significantly over the last few years and future exchange rate fluctuations may occur. Our largest foreign currency exposure is the euro. In an attempt to mitigate foreign currency fluctuations, we have entered into, from time to time, forward foreign exchange contracts to hedge portions of equipment purchases from vendors located primarily in Europe. Our hedging activities may not be successful in reducing our exposure to foreign exchange rate fluctuations, for example, in fiscal 2010 we were required to take a charge of \$2.1 million as a result of certain forward foreign exchange contracts no longer qualifying as cash flow hedges, which may occur again if we delay, cancel or otherwise modify the terms of the equipment purchases that affect the forecasted cash flow transaction being hedged. More recently, we were required to take a charge of \$1.4 million in connection with foreign currency losses on the ineffective portion of our foreign exchange forward contracts during the three and nine months ended December 31, 2011. Future exchange rate fluctuations may have a material adverse effect on our financial condition, results of operations, business and/or prospects.

***We have been subject to securities class action lawsuits. Potential similar or related litigation could result in substantial damages and may divert management's time and attention from our business.***

In 2008, the Company, its directors and certain affiliates were defendants in a class action suits that alleged certain violations under various sections of the Securities Act of 1933, in connection with our initial public offering.

In September 2011, these class actions were settled and we were required to pay \$10.5 million into a settlement fund. Of this amount, the Company contributed \$1.0 million and the Company's liability insurers contributed the remaining \$9.5 million. The Company's contribution represented its contractual indemnification obligation to its underwriters.

As a publicly traded company, we may be subject to additional lawsuits relating to violations of the securities laws. Any such litigation would be expensive, time consuming to defend and, if we were unsuccessful in defending such claims, could result in the payments of significant sums. We do maintain insurance, but the coverage may not be sufficient and may not be available in all instances.

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***New interpretations of existing accounting standards or the application of new standards could affect our revenue recognition and other accounting policies, which could have an adverse effect on the way we report our operating results.***

Generally accepted accounting principles in the United States are subject to interpretations by the Financial Accounting Standards Board ("FASB"), the American Institute of Certified Public Accountants, the SEC and various other organizations formed to promulgate and interpret accounting principles. A change in these accounting principles or their interpretations could affect the reporting of transactions that were completed before the announcement of a change in principles or interpretations.

In October 2009, the FASB issued authoritative guidance that provides amendments to the revenue recognition criteria for separating consideration in multiple-deliverable revenue arrangements.

This guidance prescribes a methodology for determining the fair value, or best estimated selling price, of deliverables on an individual element basis, including elements for which objective reliable evidence of fair value previously did not exist.

As noted in Note 2 to our financial statements included in our Annual Report on Form 10-K, as filed with the SEC on May 25, 2011, under the current revenue guidance, for arrangements containing products considered to be "established", the majority of our revenue is recognized upon delivery of the product. For arrangements containing products considered to be "new", or containing customer acceptance provisions that are deemed more than perfunctory, revenue is recorded upon customer acceptance. Revenue on our ASF units is recorded upon customer acceptance since it is deemed a new product.

If we make incorrect estimates or judgments in applying our revenue recognition policies, for example, if we incorrectly classify a product as "established" when it should have been "new", it may impact the timing of recognizing that revenue and may further result in failing to meet guidance provided by us or require that we restate our prior financial statements. Additional errors in applying estimates or judgments in accounting policies may also adversely impact our operating results and may, in certain cases, require us to restate prior financial statements.

***If we are unable to adopt and implement adequate data security procedures, we could lose valuable proprietary information, third parties may be able to access information about the operations of our equipment at customer sites and employee data, any of the foregoing may harm our reputation and our results of operations.***

While we have implemented data security measures, a third party may still gain unauthorized access to our servers, laptops or mobile devices. We store our important proprietary information on our servers, including equipment specifications, and our employees may access this data remotely. This information is also shared via e-mail and we rely on industry standard encryption tools for transmitting data (which has been attacked in the past). If a competitor were able to access this information, we would lose the competitive advantages we believe we have and we could also lose the benefits that are or could be realized from our research and development efforts. Access to this information may be the result of a third-party by-passing our security measures, third party encryption tools not providing adequate protection or inadvertent error by an employee that results in this information being accessed by unauthorized users. Some of our servers containing our proprietary and confidential product and customer information are located in foreign jurisdictions, such as China and Hong Kong, and the governments in these jurisdictions may be able to access, review, retain and use this information without any legal recourse on our part or the right to compensation.

In a very limited number of cases, we are able to monitor the operations of our equipment in our customers' facilities. If a third party were able to access this information, they would be able to view important data about the operations of our equipment and use this customer information to their benefit. In addition, it is very likely that our reputation would be harmed among our customers and they could prevent our remote access in the future or even cease purchasing equipment from us.

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Finally, we also store financial reporting information and employee data on our computer systems. If our financial information were tampered with, investors and could lose confidence in our reported financial results. If our employee information were accessed, our employees may lose confidence in our operations, we may confront challenges attracting new employees and may face government penalties if we were found to have taken inadequate measures to protect employee information.

**Risks Relating to Our Polysilicon Business**

*The market for polysilicon has been cyclical, resulting in periods of insufficient or excess production capacity and could result in variation in demand for our products.*

The market for polysilicon has been cyclical. In the recent past, polysilicon supply had increased due principally to expansion by existing manufacturers. This factor, among others, resulted in declining prices in polysilicon. An excess in production capacity for polysilicon has, and in the future may, adversely affect demand for our CVD reactors. There can be no certainty that the increased demand during the periods of expansion in polysilicon manufacturing capacity will persist for an extended period of time, or at all. A lack of demand for our CVD reactors could have a material adverse effect on our financial condition, results of operations, business and/or prospects. Conversely, if there are shortages of polysilicon in the future, the PV industry may be unable to continue to grow and/or may decline, and, as a result, demand for our PV products may decrease or may be eliminated.

*We license and do not own certain components of the technology underlying our CVD reactor and STC converter products.*

Certain components of the technology underlying our CVD reactor and STC converter products is not owned by us, but is licensed under a ninety-nine year license agreement that could be terminated in the event of a material breach by us of such agreement that remains uncured for more than thirty days, or upon our bankruptcy or insolvency. To the extent such components are deemed to be incorporated into our current or future products, any termination of our rights to use such technology could have a material adverse effect on our ability to offer our polysilicon products and therefore on our financial condition, results of operations, business and/or prospects if our company was unable to secure these rights in a different manner or from an alternative arrangement.

*Revenue recognition on sales of our CVD reactor and STC converter products may be affected by a number of factors, some of which are outside our control.*

Revenue from sales of our CVD reactors and STC converters is recognized by us only upon customer acceptance in accordance with our revenue recognition policy. The timing of customer acceptance depends on many factors, some of which are outside our control. Acceptance of our polysilicon products does not occur until after they have been received by the customer, are operational and have performed satisfactorily in agreed upon tests. Due to the complexity of integrating the reactors into the customers' plants, it is possible that there may be significant delays between our shipping the reactors and the reactors becoming operational and capable of being tested. There is therefore a risk that we may be unable to recognize revenue on our existing orders in our backlog for polysilicon products in a timely manner or at all, even if we fully perform our obligations in respect of such orders in a timely manner. Delays in customer acceptance of such orders could adversely affect further demand for our reactors and STC converters, and may adversely affect our financial condition, results of operations, business and/or prospects.

Additionally, due to the nature of our CVD contracts, there continues to be a risk that if we fail to perform our obligations in respect of an order, such order may be terminated and/or we may be required to pay damages or refund all or a portion of the purchase price.



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Our quarterly operating results may fluctuate significantly in the future as a result of our revenue recognition policy relating to our polysilicon products and the significant size of our individual contracts for polysilicon products.

**Risks Relating to Our Photovoltaic Business**

***Government subsidies and economic incentives for on-grid solar electricity applications could be reduced or eliminated.***

Demand for PV equipment, including on-grid applications, has historically been dependent in part on the availability and size of government subsidies and economic incentives. Currently, the cost of solar electricity exceeds the retail price of electricity in most major markets in the world. As a result, federal, state and local governmental bodies in many countries, most notably Germany, Italy, Spain, South Korea, Japan, China and the United States, have provided subsidies in the form of feed-in tariffs, rebates, tax write-offs and other incentives to end-users, distributors, systems integrators and/or manufacturers of PV products to promote the use of solar energy in on-grid applications and to reduce dependency on other forms of energy. Many of these government incentives have expired or are due to expire in time, phase out over time, cease upon exhaustion of the allocated funding and/or are subject to cancellation or non-renewal by the applicable authority. For example, Germany continues to reduce their solar feed-in tariff rate for roof-top solar systems and the elimination of subsidies of ground-based solar systems on agricultural land. Spain, which has also been a major market for PV products, reduced subsidies in 2009 from 2,400 MW per year to 500 MW of solar projects. The reduction, expiration or elimination of relevant government subsidies or other economic incentives may result in the diminished competitiveness of solar energy relative to conventional and other renewable sources of energy, and adversely affect demand for PV equipment or result in increased price competition, all of which could cause our sales and revenue to decline and have a material adverse effect on our financial condition, results of operations, business and/or prospects.

Further, any government subsidies and economic incentives could be reduced or eliminated altogether at any time and for any reason. We believe that government subsidies and incentives will be eliminated in the near future. Also, relevant statutes or regulations may be found to be anti-competitive, unconstitutional or may be amended or discontinued for other reasons. Some government subsidies and incentives have been subject to challenge in courts in certain foreign jurisdictions. New proceedings challenging minimum price regulations or other government incentives in other countries in which we conduct our business may be initiated, and if successful, could cause a decrease in demand for our products.

The reduction, expiration or elimination of relevant government subsidies or other economic incentives may result in the diminished competitiveness of solar energy relative to conventional and other renewable sources of energy, and adversely affect demand for PV equipment or result in increased price competition, all of which could cause our sales and revenue to decline and have a material adverse effect on our financial condition, results of operations, business and/or prospects.

***Existing regulations and policies and changes to these regulations and policies may present technical, regulatory and economic barriers to the purchase and use of photovoltaic products.***

The market for electricity generation products is heavily influenced by government regulations and policies concerning the electric utility industry, as well as policies promulgated by electric utilities. These regulations and policies often relate to electricity pricing and technical interconnection of user-owned electricity generation. In the United States and in a number of other countries, these regulations and policies are currently being modified and may be modified again in the future. These regulations and policies could deter end-user purchases of PV products and investment in the research and development of PV technology. For example, without a mandated regulatory exception for PV systems, utility customers

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are often charged interconnection or standby fees for putting distributed power generation on the electric utility grid. These fees could increase the cost to end-users of PV systems and make such systems less attractive to potential customers, which may have a material adverse effect on demand for our products and our financial condition, results of operations, business and/or prospects.

***The photovoltaic industry may not be able to compete successfully with conventional power generation or other sources of renewable energy.***

Although the PV industry has experienced advances in recent years, it still comprises a relatively small component of the total power generation market and competes with other sources of renewable energy, as well as conventional power generation. Many factors may affect the viability of widespread adoption of PV technology and thus demand for solar wafer manufacturing equipment, including the following:

cost-effectiveness of solar energy compared to conventional power generation and other renewable energy sources;

performance and reliability of solar modules compared to conventional power generation and other renewable energy sources and products;

availability and size of government subsidies and incentives to support the development of the solar energy industry;

success of other renewable energy generation technologies such as hydroelectric, wind, geothermal and biomass; and

fluctuations in economic and market conditions that affect the viability of conventional power generation and other renewable energy sources, such as increases or decreases in the prices of oil and other fossil fuels.

As a result of any of the foregoing factors, our financial condition, results of operations, business and/or prospects could be materially adversely affected.

***Technological changes in the photovoltaic industry could render existing products and technologies uncompetitive or obsolete.***

The PV industry is rapidly evolving and is highly competitive. Technological advances may result in lower manufacturing costs for PV products and/or PV product manufacturing equipment, such as monocrystalline technology, and may render existing PV products and/or PV product manufacturing equipment obsolete. We will therefore need to keep pace with technological advances in the industry, including committing resources to ongoing research and development, acquiring new technologies, continually improving our existing products and continually expanding and/or updating our product offering, in order to compete effectively in the future. We have acquired Confluence Solar in order to be able to offer an efficient monocrystalline equipment solution using a continuous feeding technology. Our failure to further refine our technology and/or develop and introduce new solar power products could cause our PV products, including our projected monocrystalline technology, to become uncompetitive or obsolete, which could adversely affect demand for our products, and our financial condition, results of operations, business and/or prospects. As monocrystalline and other technologies advance and gain market acceptance, we expect that our DSS multicrystalline furnaces will be less attractive to our customers.

**Risks Relating to Our Sapphire Business**

***If our sapphire equipment and material do not achieve market acceptance, prospects for our sapphire business would be limited.***

As a result of our acquisition of Crystal Systems, a portion of our business will consist of the manufacture and sale of sapphire equipment and materials. We expect that, over time, the sale of sapphire

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equipment will account for a significant amount of our sapphire business revenue, but we will continue to sell sapphire material into specialty markets. The customers to which we sell the ASF systems are, we believe, largely manufacturing for the LED industry and, in more limited cases, other industrial markets. Potential customers for sapphire equipment and sapphire-based LED materials manufactured with the ASF system may be reluctant to adopt these offerings as an alternative to existing sapphire materials or existing lighting technology. In addition, the customers who purchase our equipment, we believe, will utilize the material for LED lighting. However, LED lighting is currently more expensive than traditional lighting and if the price does not decrease in the near future, our customers may not have a market for the material they produce with our ASF units, which would reduce the demand for our ASF units.

In addition, our potential customers may have substantial investments and know-how related to their existing sapphire, LED and lighting technologies, and may perceive risks relating to the complexity, reliability, quality, usefulness and cost-effectiveness of our sapphire equipment and sapphire material products compared to alternative products and technologies available in the market or that are currently under development. For example, companies are developing general lighting technologies that utilize silicon-based material (in lieu of sapphire) and assert that the production costs are significantly lower than the costs to produce sapphire-based lighting materials. If acceptance of sapphire material and sapphire-based LEDs, particularly in general illumination, do not increase significantly, opportunities to increase the sapphire equipment portion of our business and revenues would be limited.

In addition, the price of sapphire-based LED material has recently experienced a marked drop due, in part, to the readily available supply of such material. If the price of LED material, which is driven, in large part due to the supply that is generally available, drops, we would expect that our materials and equipment business would be negatively impacted.

Any of the foregoing factors could have an adverse impact on the growth of the sapphire portion of our business and the recoverability of our investment in Crystal Systems. Historically, the sapphire industry has experienced volatility in product demand and pricing. Changes in average selling prices of the sapphire material as a result of competitive pricing pressures, availability of material, increased sales discounts and new product introductions by competitors could have an adverse impact on our results of operations.

In addition, the sapphire materials industry is characterized by rapid technological innovations, with improvements being made using several different crystal growth processes. If we are unable to improve our technology and equipment adequately, we will lose customers and our business would be adversely impacted.

***The commercialization of our ASF systems may not be successful.***

We have begun volume shipments of the ASF system and recently received acceptances from two customers in connection with their initial deliveries of the ASF system. We have, however, limited experience installing and operating the ASF systems in customer facilities. Although certain of the first ASF units installed at a customer facility met the required performance standards and resulted in product acceptances, if the ASF system does not operate properly in our other customers' facilities, we will not be able to recognize revenue from the sale of those ASF systems in a timely manner, or at all. If we are unable to recognize revenue, or such recognition is delayed, under existing contracts to sell ASF systems, our sapphire business, and our overall business, would be materially and adversely impacted and would likely result in claims against us for the return of deposits and would harm our reputation. Since we are new to this business, we may not be able to execute on our strategy to ship and install such systems on an on-going basis for various reasons, including if we are unable to obtain the necessary components from third parties.

In addition, we may not be able to enter into additional agreements to sell such ASF systems in a timely manner, or at all. Among the factors that may delay or prevent the realization of our business plan include: limited resources that we can utilize to manufacture such systems; developments by competitors and others in the sapphire market that make the ASF systems inefficient or obsolete; or power demands of

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these systems that limit broad market acceptance. We may not be able to execute on our strategy to sell ASF systems for reasons within or outside of our control, and even if we are able to sell these systems, we may be unable to recognize revenue on these systems in a timely manner, or at all.

In addition, if the demand for sapphire-based material declines, due to excess capacity currently in the market, the demand for our ASF systems may also decrease.

While we believe that the ASF system provides advantages in sapphire growth there are other competitors in the market that also utilize similar and other processes for sapphire growing that could compete with our technology and they may be able to more cost-effectively produce high quality, large diameter boules. These competitors include existing sapphire growing companies and new entrants to the industry attracted by the prospects of the LED and general illumination markets. In addition, other companies may also begin to offer systems to sapphire growers. If any current or potential competitor develops or purchases comparable or superior technology that enables the growing of higher quality, larger diameter sapphire material or that offers for sale a system that grows sapphire material more cost effectively than ours, our business, financial condition and results of operations could be materially adversely affected.

***Crystal growth using the ASF system requires a consistent supply of power and any interruption in the supply of power may result in sapphire material that has reduced or no sales value.***

The process for growing sapphire boules using the ASF system technology requires that the system be supplied with a consistent supply of power during the cycle required to grow a boule. If there are certain types of power interruptions, which we have experienced at our Salem and Merrimack facilities, even for a brief period of time, the sapphire boule being generated by that system will be of inferior quality and we would likely be unable to sell that sapphire material to a customer. Such power interruptions at our facilities also delay and impair our research and development efforts with respect to sapphire material and ASF systems. In addition, if potential customers of our ASF system do not have consistent power supplies, our system would not gain market acceptance because it will not create boules of the quality that may be expected by our customers and we would likely not meet the required contractual acceptance criteria necessary to receive the final installment payment and we would not be able to recognize any revenue on that ASF system if such acceptance criteria is not met.

***Production and sale of sapphire growth systems for producing LED materials is a new industry and we have limited operating history, which makes it difficult to evaluate the business prospects for this business segment.***

Because of our limited operating history it is difficult to evaluate our business and prospects. We have begun volume shipments of the ASF system and recently received acceptances from two customers in connection with their initial deliveries of the ASF system. Our sapphire equipment business, however, presents the difficulties frequently encountered by those that are in the early stage of development, coupled with the risks and uncertainties encountered in new and evolving markets such as the market for sapphire growth technology. We may not be able to successfully address these challenges. If we fail to do so, we may incur losses and our business would be negatively impacted.

**Risks Relating to Our Common Stock**

***Future sales of our common stock, or the perception in the public markets that these sales may occur, could depress our stock price.***

Future sales of substantial amounts of our common stock in the public market or the perception that these sales could occur, could adversely affect the price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. In addition, future equity financings could also result in dilution to our stockholders and new securities could have rights, preferences and privileges that are senior to those of our common shares.

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Our certificate of incorporation currently authorizes us to issue up to 500 million shares of common stock, and as of December 31, 2011, we had approximately 120 million shares of common stock outstanding. All of these shares are freely tradable, in the public market under a registration statement or an exemption under the securities laws. Moreover, as of December 31, 2011, 7.8 million shares of our common stock were issuable upon the exercise of outstanding vested and unvested options and upon vesting of restricted stock units.

***Our certificate of incorporation and by-laws contain provisions that could discourage another company from acquiring us and may prevent attempts by our stockholders to replace or remove our current management.***

Some provisions of our certificate of incorporation and by-laws may have the effect of delaying, discouraging or preventing a merger or acquisition that our stockholders may consider favorable, including transactions in which stockholders may receive a premium for their shares. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace or remove our board of directors. These provisions include:

the removal of directors only by the affirmative vote of the holders of two-thirds of the shares of our capital stock entitled to vote;

any vacancy on our board of directors, however occurring, including a vacancy resulting from an enlargement of the board, may only be filled by vote of the directors then in office;

inability of stockholders to call special meetings of stockholders or take action by written consent;

advance notice requirements for board nominations and proposing matters to be acted on by stockholders at stockholder meetings; and

authorization of the issuance of "blank check" preferred stock without the need for action by stockholders.

***Our common stock has only been publicly traded since July 24, 2008, and we expect that the price of our common stock may fluctuate substantially.***

There has been a public market for our common stock only since July 24, 2008. Broad market, industry and economic factors may adversely affect the market price of our common stock, regardless of our actual operating performance. Factors that could cause fluctuations in our stock price may include, among other things:

actual or anticipated variations in quarterly operating results;

changes in market prices for our products or for our raw materials;

changes in our financial guidance or estimates made by us or by any securities analysts who may cover our stock or our failure to meet the estimates made by securities analysts;

changes in the market valuations of other companies operating in our industry;

announcements by us or our competitors of significant acquisitions, strategic partnerships, divestitures or significant contracts;

changes in governmental policies with respect to energy;

additions or departures of key personnel; and

sales of our common stock, including sales of our common stock by our directors and officers or by our larger stockholders.

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***Announcements of contract awards or bankruptcies of solar-related companies could have a significant impact on our stock price.***

It is common for equipment manufacturers in the business segments in which we operate to enter into contracts for the sale and delivery of substantial amounts of equipment, involving highly competitive bidding situations. Public announcements of contract awards often cause a reaction in the stock market and affect, sometimes significantly, the trading price of the stock of the manufacturer that received a contract award. It could also have a negative effect on the trading price of stock of competitors that did not receive such contract. This reaction may be unrelated to the historical results of operations or financial condition of the affected companies or, in the case of unsuccessful competitors, any guidance they may have provided with respect to their future financial results. An announcement that a competitor of ours was awarded a significant customer contract could have a material adverse effect on the trading price of our stock.

In addition, there have been several recent announcements that companies offering solar power related services and materials have filed or will file for bankruptcy. For example, Solyndra filed for bankruptcy in August 2011. Such announcements, and future similar announcements, will likely have a negative effect on the trading price of our stock. This will likely be the case even if such companies do not utilize the output for the equipment we sell.

***Our quarterly operating results have fluctuated significantly in the past and we expect that our quarterly results will continue to fluctuate significantly in the future.***

Our quarterly operating results have fluctuated significantly in the past and we expect that our quarterly results will continue to fluctuate significantly in the future. Future quarterly fluctuations may result from a number of factors, including:

the size of new contracts and when we are able to recognize the related revenue, especially with respect to our polysilicon products;

requests for delays in deliveries by our customers;

delays in customer acceptances of our products;

delays in deliveries from our vendors;

our rate of progress in the fulfillment of our obligations under our contracts;

the degree of market acceptance of our products and service offerings;

the mix of products and services sold;

budgeting cycles of our customers;

product lifecycles;

changes in demand for our products and services;

the level and timing of expenses for product development and sales, general and administrative expenses;

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competition by existing and emerging competitors, including in the PV, polysilicon and sapphire industry;

announcements by our competitors or customers of the awarding of a significant contract;

termination of contracts in our backlog;

our success in developing and selling new products and services, controlling costs, attracting and retaining qualified personnel and expanding our sales force;



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changes in government subsidies and economic incentives for on-grid solar electricity applications;

announcements regarding litigation or claims against us;

changes in export licensing or export restrictions with respect to our products;

changes in our strategy;

negative announcements regarding solar and sapphire industry participants, such as the bankruptcies of Evergreen Solar and Solyndra, as well as government investigations of Solyndra operations;

foreign exchange fluctuations; and

general economic conditions.

Based on these factors, we believe our future operating results will vary significantly from quarter-to-quarter and year-to-year. As a result, quarter-to-quarter and year-to-year comparisons of operating results are not necessarily meaningful nor do they indicate what our future performance will be.

***Hedging activity and sales of our common stock related to the Mandatorily Exchangeable Notes issued by UBS AG and/or the expectation of distribution of our common stock at maturity of the exchangeable notes could depress our stock price.***

During September 2010, UBS AG sold its Mandatorily Exchangeable Notes due 2013, or the exchangeable notes, pursuant to which UBS AG will deliver to holders of the exchangeable notes at maturity up to 17,500,000 shares of our common stock or the value of such shares in cash, or a combination of cash and shares, based on a formula linked to the price of our common stock. In connection with the issuance by UBS AG of its exchangeable notes, GT Solar Holdings, LLC (a former significant shareholder) sold an aggregate of 14,000,000 shares of our common stock to UBS Securities LLC, an affiliate of UBS AG. We understand that UBS AG and one or more of its affiliates have entered into and/or are expected to enter into hedging arrangements related to UBS AG's obligations under the exchangeable notes. This hedging activity will likely involve trading in our common stock or in other instruments, such as options or swaps, based upon our common stock, and may include sales of common stock acquired by an affiliate of UBS AG upon early exchange of exchangeable notes. This hedging activity could affect our stock price, including by depressing it. Also, the price of our common stock could be depressed by possible sales of our common stock by investors who view the exchangeable notes as a more attractive means of equity participation in us and by hedging or arbitrage trading activity that we expect to occur involving our common stock by investors in the exchangeable notes. Our stock price could become more volatile and could be depressed by investors' anticipation of the potential distribution into the market of substantial additional amounts of our common stock at the maturity of the exchangeable notes.

***We currently do not intend to pay dividends on our common stock and as a result, the only opportunity to achieve a return on an investment in our common stock is if the price appreciates.***

On August 1, 2008, we paid a dividend in the aggregate amount of \$90.0 million to our then existing stockholders, including GT Solar Holdings, LLC. We currently do not expect to declare or pay dividends on our common stock in the foreseeable future. In addition, our credit agreement with Bank of America, N.A., which we entered into in January 2012, restricts our right to declare or make any dividends, subject to certain exceptions. As a result, the only opportunity to achieve a return on an investment in our common stock will be if the market price of our common stock appreciates and the shares are sold at a profit. We cannot assure our investors that the market price for our common stock will ever exceed the price that was paid.

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***Our actual operating results may differ significantly from our guidance.***

From time to time, we release guidance in our quarterly earnings releases, quarterly earnings conference call or otherwise, regarding our future performance that represent our management's estimates as of the date of release. This guidance, which includes forward-looking statements, is based on projections prepared by our management. These projections are not prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and neither our registered public accountants nor any other independent expert or outside party compiles or examines the projections and, accordingly, no such person expresses any opinion or any other form of assurance with respect thereto.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. We generally state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed but are not intended to represent that actual results could not fall outside of the suggested ranges. The principal reason that we release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such persons. Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results will vary from our guidance and the variations may be material. In light of the foregoing, investors are urged not to rely upon, or otherwise consider, our guidance in making an investment decision in respect of our common stock.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in our "Risk Factors" in this Quarterly Report on Form 10-Q could result in the actual operating results being different from our guidance, and such differences may be adverse and material.

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

Items 2(a) and 2(b) are not applicable

(c)  
Stock Repurchases.

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The following table sets forth information in connection with purchases made by, or on behalf of, us or any affiliated purchaser, of shares of our common stock during the nine months ended December 31, 2011:

	(a) Total Number of Shares Purchased	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs
Month #1 (April 3, 2011 through May 7, 2011)	1,746	\$ 10.39		
Month #2 (May 8, 2011 through June 4, 2011)	42,716	\$ 11.99		
Month #3 (June 5, 2011 through July 2, 2011)	36,891	\$ 16.12		
Month #4 (July 3, 2011 through August 6, 2011)	1,102	\$ 14.90		
Month #5 (August 7, 2011 through September 3, 2011)	42,504	\$ 11.84		
Month #6 (September 4, 2011 through October 1, 2011)	1,103	\$ 9.71		
Month #7 (October 2, 2011 through November 5, 2011)	29,088	\$ 8.91		
Month #8 (November 6, 2011 through December 3, 2011)	7,895,814	\$ 7.67	7,822,686	\$ 25,000,000(1)
Month #9 (December 4, 2011 through December 31, 2011)	37,970	\$ 7.71		

(1)

On November 16, 2011, our board of directors authorized a \$100 million share repurchase plan consisting of the near-term purchase of \$75 million of our common stock and the purchase of an additional \$25 million of our common stock. In November 2011, we entered into an agreement with UBS AG under which we repurchased \$75 million worth of our common stock. Our effective per share purchase price will be based generally on the average of the daily volume weighted average prices per share of our common stock, less a discount, calculated during a period of up to four months. In connection with this agreement, we paid \$75 million to UBS AG and received 7.8 million shares of our common stock. The total number of shares ultimately repurchased will not be known until the calculation period ends and a final settlement occurs. Upon final settlement, we will either receive a settlement amount of additional shares of our common stock or be required to remit a settlement amount, payable, at our option, in cash or common stock. Shares purchased under this agreement will be deemed authorized shares that are no longer outstanding.

We repurchased 7.8 million shares of our common stock as part of a stock repurchase program during the nine months ended December 31, 2011; additionally, our employees surrendered, and we subsequently retired 266,248 shares of our common stock to satisfy the tax withholding obligations on the vesting of restricted stock unit awards issued under our equity incentive plans.

Our credit facility that we entered into on January 31, 2012 imposes restrictions on our ability, and the ability of our subsidiaries, to pay cash dividends and make other distributions, subject to certain limited exceptions, and limitations on the amount of indebtedness we may incur.

### 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

Exhibits are incorporated by reference or are filed with this report as indicated below (numbered in accordance with Item 601 of Regulation S-K).

Exhibit Number	Description of Document	Incorporated by Reference			Filed Herewith
		Form	Date Filed	Exhibit #	
10.1	Confirmation Agreement between GT Advanced Technologies, Inc. and UBS, AG, London Branch dated November 18, 2011				X
10.2	Form of Restricted Stock Unit Agreement for directors				X
31.1	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, Rule 13a-14(a)/15d-14(a), by Chief Executive Officer.				X
31.2	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, Rule 13a-14(a)/15d-14(a), by Chief Financial Officer.				X
32	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Chief Executive Officer and Chief Financial Officer.				X
101.INS	XBRL Instance Document*				X
101.SCH	XBRL Taxonomy Extension Schema Document*				X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document*				X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document*				X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document*				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document*				X

\*

Pursuant to applicable securities laws and regulations, we are deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and are not subject to liability under any anti-fraud provisions of the federal securities laws as long as we have made a good faith attempt to comply with the submission requirements and promptly amend the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. Users of this data are advised pursuant to Rule 406T of Regulation S-T that this interactive data file is deemed not filed or 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 otherwise is 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.

GT ADVANCED TECHNOLOGIES INC.

By: /s/ THOMAS GUTIERREZ

\_\_\_\_\_  
Thomas Gutierrez  
*President and Chief Executive Officer*

Date: February 7, 2012

By: /s/ RICHARD J. GAYNOR

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Richard J. Gaynor  
*Vice President and Chief Financial Officer*

Date: February 7, 2012

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