UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [X]

For the quarterly period ended: March 31, 2012

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [] For the transition period from to

Commission File Number: 0-11412

AMTECH SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Arizona	86-0411215
(State or other jurisdiction of	(I.R.S. Employer
incorporation or organization)	Identification No.)
131 South Clark Drive, Tempe, Arizona	85281
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: 480-967-5146

Indicate by a 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. [X] Yes [] No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). [X] Yes [] No

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

Large accelerated filer []

Non-accelerated filer [] (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 [X] Shares of Common Stock outstanding as of May 2, 2012: 9,479,007

Accelerated filer [x]

Smaller Reporting Company []

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PART I FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

AMTECH SYSTEMS, INC. AND SUBSIDIARIES Condensed Consolidated Balance Sheets

(in thousands except share data)

	March 31, 2012 (Unaudited)		Sep	tember 30, 2011
Assets				
Assets Current Assets				
Cash and cash equivalents	\$	48,769	\$	67,382
Restricted cash		3,647		6,571
Accounts receivable				
Trade (less allowance for doubtful accounts of \$372 and \$246 at March 31, 2012 and September 30, 2011, respectively)		11,290		14,447
Unbilled and other		20,958		30,822
Inventories		36,866		37,162
Deferred income taxes		9,550		9,560
Prepaid income taxes		3,580		4,260
Other		4,383		4,647
Total current assets		139,043		174,851
Property, Plant and Equipment - Net		12,998		12,680
Intangible Assets - Net		4,316		5,021
Goodwill		13,236		13,313
Total Assets	\$	169,593	\$	205,865

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

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES Condensed Consolidated Balance Sheets (in thousands except share data)

	N	March 31, 2012	Sej	otember 30, 2011
	(Unaudited)		
Liabilities and Stockholders' Equity Current Liabilities				
Accounts payable	\$	6,733	\$	8,928
	\$	6,733	Э	8,928 10.686
Accrued compensation and related taxes Accrued warranty expense		,		2,265
Ψ 1.		2,686 19,013		2,263
Deferred profit Customer deposits		<i>,</i>		7,862
Other accrued liabilities		3,412 2,136		6,775
Income taxes payable		12,090		16.670
				- ,
Total current liabilities		52,575		80,794
Income Taxes Payable Long-term		2,390		2,630
Deferred Income Taxes Long-term		90	-	110
Total liabilities		55,055		83,534
Commitments and Contingencies				
Stockholders' Equity				
Preferred stock; 100,000,000 shares authorized; none issued		_		_
Common stock; \$0.01 par value; 100,000,000 shares authorized; shares issued and outstanding: 9,479,007 and 9,431,393 at March 31, 2012 and September 30, 2011, respectively		95		94
Additional paid-in capital		84,112		83,207
Accumulated other comprehensive (loss)		(3,607)		(2,078
Retained Earnings		29,143		35,096
Total Amtech Systems Inc. stockholders' equity		109,743		116,319
Noncontrolling interest		4,795		6,012
Total Equity	-	114,538		122,331
Fotal Liabilities and Stockholders' Equity	\$	169,593	\$	205,865

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

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES Condensed Consolidated Statements of Operations (Unaudited) (in thousands, except per share data)

	Three Months Ended March 3			March 31, Six Months End			rch 31,
	 2012		2011		2012		2011
Revenues, net of returns and allowances	\$ 21,566	\$	61,253	\$	46,294	\$	114,965
Cost of sales	17,518		36,550		35,045		70,666
Gross profit	4,048		24,703		11,249		44,299
Selling, general and administrative	6,046		11,249		12,338		21,646
Impairment charges	688		_		688		_
Research and development	3,299		934		6,052		1,782
Operating income (loss)	 (5,985)		12,520		(7,829)		20,871
Interest and other income (expense), net	39		75		126		46
Income (loss) before income taxes	(5,946)		12,595		(7,703)		20,917
	(220)		5 100		(540)		0.420
Income tax provision (benefit)	 (220)		5,100		(540)		8,430
Net income (loss)	(5,726)		7,495		(7,163)		12,487
	 ())		,		() /		
Add: Net Loss Attributable to noncontrolling interest	647		22		1,208		22
Net income (loss) attributable to Amtech Systems, Inc.	\$ (5,079)	\$	7,517	\$	(5,955)	\$	12,509

Earnings (Loss) Per Share:

Basic income (loss) per share attributable to Amtech shareholders	\$ (0.54) \$	0.79 \$	(0.63) \$	1.33
Weighted average shares outstanding	9,479	9,487	9,462	9,381
Diluted income (loss) per share attributable to Amtech shareholders	\$ (0.54) \$	0.77 \$	(0.63) \$	1.29
Weighted average shares outstanding	9,479	9,781	9,462	9,702

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES Condensed Consolidated Statements Of Cash Flows (Unaudited) (in thousands)

	Six Months Ended March		
	 2012		2011
Operating Activities			
Net income (loss)	\$ (7,163)	\$	12,487
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	1,528		1,222
Write-down of inventory	1,330		564
Impairment of long-lived assets	688		
Deferred income taxes	—		(2,010
Non-cash stock based compensation expense	903		743
Provision for allowance for doubtful accounts	133		47
Changes in operating assets and liabilities:			
Restricted cash	2,878		(4,702
Accounts receivable	12,009		(20,263
Inventories	(2,487)		(9,882
Accrued income taxes	(4,105)		3,725
Prepaid expenses and other assets	198		(2,140
Accounts payable	(2,073)		6,479
Accrued liabilities and customer deposits	(8,379)		16,149
Deferred profit	(8,115)		8,814
Net cash provided by (used in) operating activities	(12,655)		11,233
Investing Activities			
Purchases of property, plant and equipment	(1,062)		(2,866
Investments in acquisitions, net of cash	_		(1,055
Net cash used in investing activities	 (1,062)		(3,921
Financing Activities	 , <u> </u>		
Proceeds from issuance of common stock	_		1,316
Repurchase of common stock			,
,	(4,080)		
Payments on long-term obligations	(22)		(62
Payment for license fee	(44)		_
Excess tax benefit of stock options	—		728
Net cash provided by (used in) financing activities	(4,146)		1,982
Effect of Exchange Rate Changes on Cash	 (750)		1,470
Net Increase (Decrease) in Cash and Cash Equivalents	(18,613)		10,764
Cash and Cash Equivalents, Beginning of Period	67,382		56,764
Cash and Cash Equivalents, End of Period	\$ 48,769	\$	67,528
Supplemental Cash Flow Information:	 		
Income tax payments	\$ 3,596	\$	6,265
Supplemental Non-cash Financing Activities:			
Transfer inventory to capital equipment	\$ 838	\$	
Issuance of common stock for acquisition of interest in Kingstone	\$ 	\$	3,835

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS THREE AND SIX MONTHS ENDED MARCH 31, 2012 AND 2011 (UNAUDITED)

1. Basis of Presentation

Nature of Operations and Basis of Presentation – Amtech Systems, Inc. (the "Company") designs, assembles, sells and installs capital equipment and related consumables used in the manufacture of solar cells, semiconductors and wafers of various materials, primarily for the solar and semiconductor industries. We are developing an ion implanter to provide our customers with a more complete solution for their next-generation high-efficiency solar cell production. The Company sells these products worldwide, primarily in Asia, the United States and Europe. The Company serves markets in industries that are experiencing rapid technological advances, and which historically have been cyclical. Therefore, future profitability and growth depend on the Company's ability to develop or acquire and market profitable new products, and on its ability to adapt to cyclical trends.

The accompanying unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"), and consequently do not include all disclosures normally required by U.S. generally accepted accounting principles. In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments necessary, all of which are of a normal and recurring nature, to present fairly our financial position, results of operations and cash flows. Certain information and note disclosures normally included in financial statements have been condensed or omitted pursuant to the rules and regulations of the SEC. These condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended September 30, 2011.

The consolidated results of operations for the three and six months ended March 31, 2012, are not necessarily indicative of the results to be expected for the full fiscal year.

Principles of Consolidation – The consolidated financial statements include the accounts of the Company and its consolidated subsidiaries. All material intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue Recognition – Revenue is recognized upon shipment of the Company's proven technology equal to the sales price less the greater of (i) the fair value of undelivered services or (ii) the contingent portion of the sales price, which is generally 10-20% of the total contract price. The entire cost of the equipment relating to proven technology is recorded upon shipment. The remaining contractual revenue, deferred costs and installation costs are recorded upon the completion of installation at the customers' premises and acceptance of the product by the customer.

For purposes of revenue recognition, proven technology means the Company has a history of at least two successful installations. New technology systems are those systems with respect to which the Company cannot demonstrate that it can meet the provisions of customer acceptance at the time of shipment. The full amount of revenue and costs of new technology shipments is recognized upon the completion of installation at the customers' premises and acceptance of the product by the customer.

Revenue from services is recognized as the services are performed. Revenue from prepaid service contracts is recognized ratably over the life of the contract. Revenue from spare parts is recorded upon shipment.

Deferred Profit – Revenue deferred pursuant to the Company's revenue recognition policy, net of the related deferred costs, if any, is recorded as deferred profit in current liabilities. The components of deferred profit are as follows:

	September 30, 2011		
(dollars in thousands)			
23 \$	29,666		
10	2,058		
13 \$	27,608		
19,01	19,013 \$		

Concentrations of Credit Risk – Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of trade accounts receivable and cash. The Company's customers, located throughout the world, consist of manufacturers of solar cells, semiconductors, semiconductor wafers, LEDs and MEMS. Credit risk is managed by performing ongoing credit evaluations of the customers' financial condition, by requiring significant deposits where appropriate, and by actively monitoring collections. Letters of credit are required of certain customers depending on the size of the order, type of customer or its creditworthiness, and its country of domicile. Reserves for potentially uncollectible receivables are maintained based on an assessment of collectability.

The Company maintains its cash, cash equivalents and restricted cash in multiple financial institutions. Balances in the United States (approximately 40% of total cash balances) are primarily invested in US Treasuries or are in financial institutions insured by the Federal Deposit Insurance Corporation (FDIC). The remainder of the Company's cash is maintained in banks in The Netherlands, France and China that are uninsured.

As of March 31, 2012, four customers accounted for 17%, 15%, 11% and 11% of accounts receivable.

Restricted Cash – Restricted cash of \$3.6 million and \$6.6 million as of March 31, 2012 and September 30, 2011, respectively, includes collateral for bank guarantees required by certain customers from whom deposits have been received in advance of shipment. Restricted cash as of March 31, 2012 and September 30, 2011 also includes \$1.0 million and \$4.3 million, respectively, in an escrow account related to the acquisition of Kingstone Technology Hong Kong Limited (Kingstone).

Accounts Receivable - Unbilled and Other – Unbilled and other accounts receivable consist mainly of the contingent portion of the sales price that is not collectible until successful installation of the product. These amounts are generally billed upon final customer acceptance. The majority of these amounts are offset by balances included in deferred profit. As of March 31, 2012, the unbilled and other includes \$1.3 million of Value Added Tax (VAT) receivables at our Netherlands operations and taxes that the Company has paid to its vendors that will be refunded to the Company by the government.

Inventories – Inventories are stated at the lower of cost or net realizable value. Approximately 85% of inventory is valued on an average cost basis with the remainder determined on a first-in, first-out (FIFO) basis. The components of inventories are as follows:

	N	larch 31, 2012	Sept	tember 30, 2011	
		(dollars in thousands)			
Purchased parts and raw materials	\$	28,039	\$	24,925	
Work-in-process		4,620		8,257	
Finished goods		4,207		3,980	
	\$	36,866	\$	37,162	

Property, Plant and Equipment – Property, plant and equipment are recorded at cost. Maintenance and repairs are charged to expense as incurred. The cost of property retired or sold and the related accumulated depreciation are removed from the applicable accounts when disposition occurs and any gain or loss is recognized. Depreciation is computed using the straight-line method. Useful lives for equipment, machinery and leasehold improvements range from three to seven years; for furniture and fixtures from five to ten years; and for buildings twenty years.

The following is a summary of property, plant and equipment:

		N	March 31, 2012		tember 30, 2011
		(dollars in t			s)
Land, building and leasehold improvements		\$	11,034	\$	10,636
Equipment and machinery			6,603		6,003
Furniture and fixtures			5,485		5,434
			23,122		22,073
Accumulated depreciation and amortization			(10,124)		(9,393)
		\$	12,998	\$	12,680
	8				

Goodwill - Goodwill is not subject to amortization and is reviewed for impairment on an annual basis, typically at the end of the fiscal year, or more frequently if circumstances dictate.

The following is a summary of activity in goodwill:

	Six M	lonths Ended
	Mai	rch 31, 2012
	(dollars	s in thousands)
Beginning balance	\$	13,313
Goodwill recognized due to acquisition		—
Net exchange differences		(77)
Ending balance	\$	13,236

Intangibles - Intangible assets are capitalized and amortized over their useful life if the life is determinable. If the life is not determinable, amortization is not recorded.

The following is a summary of intangibles:

	Useful Life	Ma	March 31, 2012		March 31, 2012 Septer		ıber 30, 2011
			(dollars in thousands)				
Non-compete agreements	4-8 years	\$	1,063	\$	1,066		
Customer lists	10 years		859		876		
Technology	5-10 years		2,403		2,436		
Licenses	5-10 years		43		500		
In-process research and development	(1)		1,600		1,600		
Other	2-10 years		94		97		
			6,062		6,575		
Accumulated amortization			(1,746)		(1,554)		
		\$	4,316	\$	5,021		

(1) The in-process research and development will be amortized over its useful life when it has reached technological feasibility.

Long-lived assets - Long-lived assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. In the second quarter of fiscal 2012, management determined our license agreement with one of our technology partners and the related assets were impaired. See Note 7, "Impairment Charge" for a description of the impairment charges recorded in fiscal 2012.

Warranty – A limited warranty is provided free of charge, generally for periods of 12 to 24 months, for all purchases of the Company's new products and systems. Accruals are recorded for estimated warranty costs at the time the system is accepted by the customer.

The following is a summary of activity in accrued warranty expense:

	Six Months Ended March 31,						
	2012	20	11				
	 (dollars in thousands)						
Beginning balance	\$ 2,265	\$	1,843				
Warranty expenditures	(658)		(496)				
Warranty expense	1,079		1,048				
Ending balance	\$ 2,686	\$	2,395				

Stock-Based Compensation - The Company measures compensation costs relating to share-based payment transactions based upon the grant-date fair value of the award. Those costs are recognized as expense over the requisite service period, which is generally the vesting period. The benefits of tax deductions in excess of recognized compensation cost are credited to additional paid-in capital and reported as cash flow from financing activities rather than as cash flow from operating activities.

Share-based compensation expense reduced the Company's results of operations by the following amounts:

	Т	Three Months Ended March 31,				Six Months Ended March 31,			
	2	2012 2011			2012			2011	
	(dollars	(dollars in thousands, except per share amounts)				(dollars in thousands, except per share amounts)			
Effect on income before income taxes (1)	\$	(437)	\$	(369)	\$	(903)	\$	(743)	
Effect on income taxes		63		108		138		278	
Effect on net income	\$	(374)	\$	(261)	\$	(765)	\$	(465)	

(1) Stock-based compensation expense is included in selling, general and administrative expenses.

Stock options issued under the terms of the plans have, or will have, an exercise price equal to or greater than the fair market value of the common stock at the date of the option grant and expire no later than 10 years from the date of grant, with the most recent grant expiring in 2022. Options issued by the Company vest over 2 to 5 years.

Stock option transactions and the options outstanding are summarized as follows:

	Six Months Ended March 31,								
	 20)12			2011				
	Options		Weighted Average Exercise Price		Options		Weighted Average Exercise Price		
Outstanding at beginning of period	611,384	\$	10.02		636,283	\$	7.59		
Granted	285,400		7.98		139,233		17.12		
Exercised	(600)		5.33		(175,220)		7.42		
Forfeited	_				(1,000)		6.93		
Outstanding at end of period	 896,184	\$	9.38		599,296	\$	9.85		
Exercisable at end of period	370,664	\$	9.10		207,703	\$	7.98		
Weighted average fair value of options granted during the period	\$ 4.95			\$	10.77				

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The fair value of options was estimated at the grant date using the Black-Scholes option pricing model with the following assumptions:

	Six Months En	ded March 31,
	2012	2011
Risk free interest rate	1.12%	1.67%
Expected life	6 years	6 years
Dividend rate	0%	0%
Volatility	70%	70%
Forfeiture rate	3%	4%

To estimate expected lives for this valuation, it was assumed that options will be exercised at varying schedules after becoming fully vested. Forfeitures have been estimated at the time of grant and will be revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based upon historical experience. Fair value computations are highly sensitive to the volatility factor assumed; the greater the volatility, the higher the computed fair value of the options granted. The Company uses historical stock prices to determine the volatility factor.

The Company awards restricted shares under the existing share-based compensation plans. Our restricted share-awards vest in equal annual installments over a two to four-year period. The total value of these awards is expensed on a ratable basis over the service period of the employees receiving the grants. The "service period" is the time during which the employees receiving grants must remain employees for the shares granted to fully vest.

Restricted stock transactions and awards outstanding are summarized as follows:

	Six Months Ended March 31,								
	20	012		2011					
	Awards		Weighted Average Grant Date Fair Value	Awards		Weighted Average Grant Date Fair Value			
Beginning Outstanding	120,970	\$	9.42	128,751	\$	6.34			
Awarded	60,600		7.98	35,517		17.28			
Released	(47,014)		8.53	(37,376)		6.27			
Forfeited	—		—	—		_			
Ending Outstanding	134,556	\$	9.09	126,892	\$	9.43			

Fair Value of Financial Instruments – Cash, Cash Equivalents and Restricted Cash - The carrying amount of these assets on the Company's Consolidated Balance Sheets approximates their fair value because of the short maturities of these instruments.

Receivables, Payables and Accruals—The recorded amounts of financial instruments, including accounts receivable, accounts payable, and accrued liabilities, approximate their fair value because of the short maturities of these instruments.

Pensions—The Company has retirement plans covering substantially all employees. The principal plans are defined contribution plans, except for the plans of the Company's operations in the Netherlands and France and the plan for hourly union employees in Pennsylvania. The Company's employees in the Netherlands, France and hourly union employees in Pennsylvania participate in multi-employer plans. Payments to the plans are recognized as an expense in the Consolidated Statement of Operations as they become due.

Shipping expense – Shipping expenses of \$0.4 million and \$1.5 million for the three months ended March 31, 2012 and 2011, respectively, are included in selling, general and administrative expenses. Shipping expenses of \$1.0 million and \$2.7 million



for the six months ended March 31, 2012 and 2011, respectively, are included in selling, general and administrative expenses.

Research and development expense – Research and development expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes; materials and supplies used in those activities; and product prototyping. The Company receives reimbursements through governmental research and development grants which are netted against these expenses. The table below shows gross research and development expenses and grants earned:

	Three Months Ended				Six Months Ended			
	 March 31, 2012		March 31, 2011		March 31, 2012		March 31, 2011	
	 (dollars in thousands)			(dollars in thousands)			ands)	
Research and development	\$ 3,408	\$	1,047	\$	6,246	\$	1,994	
Grants earned	(109)		(113)		(194)		(212)	
Net research and development	\$ 3,299	\$	934	\$	6,052	\$	1,782	

Impact of Recently Issued Accounting Pronouncements

In September 2011, the FASB issued ASU No. 2011-09, "Compensation - Retirement Benefits - Multiemployer Plans: Disclosures about an Employer's Participation in a Multiemployer Plan." The amendments in this Update require that employers provide additional separate disclosures for multiemployer pension plans and multiemployer other postretirement benefit plans. The amendment is effective for annual periods for fiscal years ending after December 15, 2011. Upon adoption, the Company expects to provide the additional disclosures required by this amendment.

In June 2011, the FASB issued ASU No. 2011-05, "Comprehensive Income: Presentation of Comprehensive Income." The amendments require that all non-owner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In the two-statement approach, the first statement should present total net income and its components followed consecutively by a second statement that should present total other comprehensive income, and the total of comprehensive income. The amendment is effective for fiscal years and interim periods within those years, beginning after December 15, 2011. The Company expects to adopt the two-statement approach.

2. Income

Taxes

The quarterly income tax provision is calculated using an estimated annual effective tax rate, based upon expected annual income, permanent items, statutory rates and planned tax strategies in the various jurisdictions in which the Company operates. However, losses in certain jurisdictions and discrete items, such as the resolution of uncertain tax positions, are treated separately.

Deferred tax assets and liabilities reflect the tax effects of temporary differences between the carrying value of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company records a valuation allowance if, based on the weight of available evidence, it is more likely than not that some portion or all of a deferred tax asset will not be realized. Our expectations regarding realization of our deferred tax assets is based upon the weight of all available evidence, including such factors as our recent earnings history and expected future taxable income. The Company maintains a valuation allowance with respect to certain state and foreign net operating losses that may not be recovered. Each quarter the valuation allowance is re-evaluated. The only significant change in the valuation allowance during the six months ended March 31, 2012, was increasing a valuation allowance on the deferred tax assets in China for the current period net operating loss.

The Company classifies uncertain tax positions as non-current income taxes payable unless expected to be paid within one year. During the quarter ended December 31, 2011 a \$0.2 million uncertain tax position was resolved favorably. At March 31, 2012 and September 30, 2011, the total amount of unrecognized tax benefits was approximately \$1.8 million and \$2.0 million, respectively. If recognized, these amounts would favorably impact the effective tax rate.

The Company classifies interest and penalties related to unrecognized tax benefits in income tax expense. As of March 31, 2012, and September 20, 2011, the Company has an accrual for potential interest and penalties of approximately \$0.5 million and \$0.4 million, respectively.

The Company and one or more of its subsidiaries file income tax returns in The Netherlands, Germany, France, China and Hong Kong, as well as the U.S. and various states in the U.S. The Company and its subsidiaries have a number of open tax years dictated



by statute in each of the respective taxing jurisdictions, which are generally from 3 to 5 years. These open years contain certain matters that could be subject to differing interpretations of applicable tax laws and regulations as they relate to the amount, timing, or inclusion of revenues and expenses, or the sustainability of income tax positions of the Company and its subsidiaries. The IRS examination for fiscal year ending September 30, 2009 was completed in the first quarter of fiscal 2011 without adjustment.

3. Earnings Per Share

Basic earnings per share (EPS) is computed by dividing net income by the weighted average number of common shares outstanding for the period. Diluted EPS is computed similarly to basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding if potentially dilutive common shares had been issued. In the case of a net loss, diluted earnings per share is calculated in the same manner as basic EPS.

For the three months ended March 31, 2012, options for 896,000 shares and 135,000 restricted stock awards are excluded from the diluted EPS calculations because they are anti-dilutive. For the three months ended March 31, 2011, options for 136,000 shares and no restricted stock award shares were excluded from the diluted EPS calculations because they were anti-dilutive. For the six months ended March 31, 2012, options for 896,000 shares and 135,000 shares and 135,000 restricted stock awards are excluded from the diluted EPS calculations because they are anti-dilutive. For the six months ended March 31, 2012, options for 139,000 shares and no restricted stock award shares were excluded from the diluted EPS calculations because they are anti-dilutive. For the six months ended March 31, 2011, options for 139,000 shares and no restricted stock award shares were excluded from the diluted EPS calculations because they were anti-dilutive.

	Three Months Ended March 31,					Six Months Ended March 31,			
	2012 2011			2011	2012			2011	
	(in thousands, except	t per	r share amounts)		(in thousands, excep	t per	share amounts)	
Basic Earnings (Loss) Per Share Computation									
Net income (loss) attributable to Amtech Systems, Inc.	\$	(5,079)	\$	7,517	\$	(5,955)	\$	12,509	
Weighted Average Shares Outstanding:									
Common stock		9,479		9,487		9,462		9,381	
Basic earnings (loss) per share attributable to Amtech shareholders	\$	(0.54)	\$	0.79	\$	(0.63)	\$	1.33	
Diluted Earnings (Loss) Per Share Computation									
Net income (loss) attributable to Amtech Systems, Inc.	\$	(5,079)	\$	7,517	\$	(5,955)	\$	12,509	
Weighted Average Shares Outstanding:									
Common stock		9,479		9,487		9,462		9,381	
Common stock equivalents (1)		—		294		—		321	
Diluted shares		9,479		9,781		9,462		9,702	
Diluted earnings (loss) per share attributable to Amtech shareholders	\$	(0.54)	\$	0.77	\$	(0.63)	\$	1.29	

(1) The number of common stock equivalents is calculated using the treasury stock method and the average market price during the period.

4. Comprehensive Income

⁽Loss)

				Six Months Ended March 31,				
2012		2011		2012		2011		
(dollars in	thousa	nds)		(dollars in thousands)				
\$ (5,726)	\$	7,495	\$	(7,163)	\$	12,487		
2,202		3,913		(1,529)		2,460		
(3,524)		11,408		(8,692)		14,947		
647		22		1,208		22		
\$ (2,877)	\$	11,430	\$	(7,484)	\$	14,969		
\$ \$	\$ (5,726) 2,202 (3,524) 647	\$ (5,726) \$ 2,202 (3,524) 647	2,202 3,913 (3,524) 11,408 647 22	\$ (5,726) \$ 7,495 \$ 2,202 3,913 (3,524) 11,408 647 22	\$ (5,726) \$ 7,495 \$ (7,163) 2,202 3,913 (1,529) (3,524) 11,408 647 22 1,208	\$ (5,726) \$ 7,495 \$ (7,163) \$ 2,202 3,913 (3,524) 11,408 647 22 1,208		

5. Major Customers and Foreign Sales

During the three months ended March 31, 2012, two customers represented 17% and 11% of net revenues. During the three months ended March 31, 2011, four customers, individually, represented 20%, 17%, 15% and 13% of net revenues.

Our net revenues were to customers in the following geographic regions:

Six Months Ended March 3		
2012	2011	
7 %	6%	
44%	61%	
7 %	21%	
19%	4%	
70%	86%	
23%	8%	
100 %	100 %	
	7% 44% 7% 19% 70% 23%	

6. Commitments and Contingencies

Purchase Obligations – As of March 31, 2012 we had purchase obligations in the amount of \$22.9 million compared to \$47.2 million as of September 30, 2011. These purchase obligations consist of outstanding purchase orders for goods and services. While the amount represents purchase agreements, the actual amounts to be paid may be less if any agreements are renegotiated, canceled or terminated.

Litigation – The Company is a party to various claims arising in the normal course of business. Management believes the resolution of these matters will not have a material impact on the Company's results of operations or financial condition.

7. Impairment Charges

Long-lived assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. In fiscal 2009, the Company entered into a license agreement with one of our technology partners to market existing and future proprietary PSG dry etch systems for the manufacture of photovoltaic cells. Under the terms of this agreement the Company paid \$0.5 million to the technology partner. The license agreement expires in July of 2019. The payment was being amortized over the life of the agreement. As a result of our technology partner's financial difficulties, their possible inability to service the product and insufficient sales, management determined it was necessary to assess the recoverability of the related assets. Management used estimates of the present value of future cash flows (Level 3) based upon the anticipated future use of the license to determine that the carrying value of the license is not recoverable. The Company recorded an impairment charge of \$0.4 million in the second quarter of fiscal 2012, reducing the book value of the intangible asset to zero. Other related assets were determined to be impaired as well. An additional impairment charge of \$0.3 million was recorded in the second quarter of fiscal 2012, reducing the book value of the second quarter of the assets to zero.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the related notes included in Item 1, "Condensed Consolidated Financial Statements" in this quarterly report on Form 10-Q and our consolidated financial statements and related notes included in Item 8, "Financial Statements and Supplementary Data" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2011.

Cautionary Statement Regarding Forward-Looking Statements

Certain information contained or incorporated by reference in this Quarterly Report on Form 10-Q is forward-looking in nature. All statements included or incorporated by reference in this Quarterly Report on Form 10-Q, or made by management of Amtech Systems, Inc. and its subsidiaries ("the Company" or "Amtech"), other than statements of historical fact, are hereby identified as "forward-looking statements" (as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended). In some cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "would," "expects," "plans," "anticipates," "intends," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology. Examples of forward-looking statements regarding Amtech's future financial results, operating results, business strategies, projected costs, products under development, competitive positions and plans and objectives of the Company and its management for future operations.

We cannot guarantee that any forward-looking statement will be realized, although we believe that the expectations reflected in the forward-looking statements are reasonable. Achievement of future results is subject to risks, uncertainties and potentially inaccurate assumptions. The Form 10-K that we filed with the Securities and Exchange Commission for the year-ended September 30, 2011 listed various important factors that could affect Amtech's future operating results and financial condition and could cause actual results to differ materially from historical results and expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf. These factors can be found under the heading "Risk Factors" in the Form 10-K and investors should refer to them. Because it is not possible to predict or identify all such factors, any such list cannot be considered a complete set of all potential risks or uncertainties. Except as required by law, we undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events, or otherwise.

Introduction

Management's Discussion and Analysis ("MD&A") is intended to facilitate an understanding of our business and results of operations. MD&A consists of the following sections:

- Overview
- Results of Operations
- Liquidity and Capital Resources
- Off Balance Sheet Arrangements
- Contractual
 Obligations
- Critical Accounting
 Policies
- Impact of Recently Issued Accounting
 Pronouncements

Overview

We design, assemble, sell and install capital equipment and related consumables used in the manufacture of solar cells, semiconductors and wafers of various materials, primarily for the solar and semiconductor industries. We are developing a solar ion implanter to provide our customers with a more complete solution for their next-generation high-efficiency solar cell production. The Company sells these products worldwide, primarily in Asia, the United States and Europe. The Company serves markets in industries that are experiencing rapid technological advances, and which historically have been cyclical. Therefore, future profitability and growth depend on the Company's ability to develop or acquire and market profitable new products, and on its ability to explicit tends.

Results of Operations

The following table sets forth certain operational data as a percentage of net revenue for the periods indicated:

	Three Mon	ths Ended	Six Months Ended		
	March 31, 2012	March 31, 2011	March 31, 2012	March 31, 2011	
Net revenue	100 %	100%	100 %	100%	
Cost of goods sold	81 %	60%	76 %	61%	
Gross margin	19 %	40%	24 %	39%	
Operating expenses:					
Selling, general and administrative	28 %	18%	27 %	19%	
Impairment charges	3 %	0%	1 %	0%	
Research and Development	16 %	2%	13 %	1 %	
Total operating expenses	47 %	20%	41 %	20%	
Income (loss) from operations	(28)%	20%	(17)%	19%	
Interest income (expense), net	0 %	0%	0 %	0%	
Income (loss) before income taxes	(28)%	20%	(17)%	19%	
Income taxes provision (benefit)	(1)%	8%	(1)%	7%	
Net Income (loss)	(27)%	12%	(16)%	12%	
Add: net loss attributable to noncontrolling interest	3 %	0%	3 %	0%	
Net income (loss) attributable to Amtech Systems, Inc.	(24)%	12%	(13)%	12%	

Net Revenue

Net revenue consists of revenue recognized upon shipment or installation of products using proven technology and upon acceptance of products using new technology. In addition, spare parts sales are recognized upon shipment. Service revenue is recognized upon completion of the service activity or ratably over the term of the service contract. Since the majority of our revenue is generated from large furnace system sales, revenue and operating income can be significantly impacted by the timing of system shipments, the impact of revenue deferral on those shipments and recognition of revenue based on customer acceptances.

Net revenue for the quarters ended March 31, 2012 and 2011 was\$21.6 million and \$61.3 million, respectively, a decrease of \$39.7 million or 65%. Revenue decreased primarily due to significantly lower shipments of our equipment to the solar industry, partially offset by higher shipments to the semiconductor industry and increased recognition of previously-deferred revenue. Net revenue from the solar market was \$10.6 million and \$53.4 million for the three months ended March 31, 2012 and 2011, respectively; a \$42.8 million or 80% decrease. The current supply / demand imbalance and global economic conditions have negatively impacted the growth of the solar equipment market and have caused our customers to significantly slow or push out their capacity expansion plans. While the duration of this down cycle in the solar industry is difficult to predict, we continue to have a long-term positive outlook.

Net revenue for the six months ended March 31, 2012 and 2011 was\$46.3 million and \$115.0 million, respectively, a decrease of \$68.7 million or 60%. Revenue decreased primarily due to significantly lower shipments of our equipment to the solar industry, partially offset by higher shipments to the semiconductor industry and increased recognition of previously-deferred revenue. Net revenue from the solar market was \$26.2 million and \$99.3 million for the six months ended March 31, 2012 and 2011, respectively; a \$73.1 million or 74% decrease. The year-to-date results were negatively impacted by the supply / demand imbalance and global economic conditions discussed above.

Backlog and Orders

Our order backlog as of March 31, 2012 and 2011 was\$67.4 million and \$195.1 million, respectively. Our backlog as of March 31, 2012 includes approximately\$54.1 million of orders and deferred revenue from our solar industry customers, compared to \$180.0 million at March 31, 2011. New orders booked in the quarter ended March 31, 2012 increased to \$18.0 million sequentially



from \$11.1 million in the quarter ended December 31, 2011 and decreased compared to \$72.5 million in the quarter ended March 31, 2011. New orders booked in the six months ended March 31, 2012 decreased to \$29.1 million compared to \$209.6 million in the six months ended March 31, 2011. As the majority of the backlog is denominated in Euros, the strengthening of the dollar during the first six months of fiscal 2012 resulted in a decrease in backlog of approximately \$1.3 million. As of March 31, 2012, one customer accounted for 26% of our order backlog. Our order pipeline has slowed significantly, due mainly to the worldwide, overcapacity of solar cell production. The pipeline is also negatively influenced by slower growth in demand for solar modules caused by the frequently-fluctuating government subsidies for solar energy installations.

The orders included in our backlog are generally credit approved customer purchase orders expected to ship within the next twelve months. Because our orders are typically subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor is backlog any assurance that we will realize profit from completing these orders. Our backlog also includes revenue deferred pursuant to our revenue recognition policy, derived from orders that have already been shipped, but which have not met the criteria for revenue recognition.

Gross Profit and Gross Margin

Gross profit is the difference between net revenue and cost of goods sold. Cost of goods sold consists of purchased material, labor and overhead to manufacture equipment and spare parts and the cost of service and support to customers for installation, warranty and paid service calls. Gross margin is gross profit as a percent of net revenue.

Gross profit for the three months ended March 31, 2012 and 2011 was\$4.0 million and \$24.7 million, respectively; a decrease of \$20.7 million or 84%. Gross margins decreased to 19% in the quarter ended March 31, 2012 from40% in the quarter ended March 31, 2011. Lower gross margins were caused primarily by lower sales volumes, resulting in less efficient capacity utilization, partially offset by increases in recognition of previously-deferred profit. Margins were negatively impacted in the second quarter of fiscal 2012 by a \$1.3 million charge for excess and obsolete inventory. In the quarter ended March 31, 2012, we had net profit recognition of \$3.1 million compared to net profit deferral of \$3.7 million in the quarter ended March 31, 2011.

Gross profit for the six months ended March 31, 2012 and 2011 was\$11.2 million and \$44.3 million, respectively; a decrease of \$33.1 million or 75%. Gross margins decreased to 24% in the six months ended March 31, 2012 from39% in the six months ended March 31, 2011. Gross margins were negatively impacted primarily by lower sales volumes, resulting in less efficient capacity utilization, partially offset by increases in recognition of previously-deferred profit. In the six months ended March 31, 2012, we had net profit recognition of \$8.0 million compared to net profit deferral of \$8.8 million in the six months ended March 31, 2011. Margins were negatively impacted by charges for excess and obsolete inventory of \$1.3 million and \$0.6 million in the first half of fiscal 2012 and 2011, respectively.

Selling, General and Administrative

Selling, general and administrative expenses consist of the cost of employees, consultants and contractors, facility costs, sales commissions, shipping costs, promotional marketing expenses, legal and accounting expenses.

Selling, general and administrative (SG&A) expenses for the three months ended March 31, 2012 were\$6.0 million or 28% of revenue. For the three months ended March 31, 2011, SG&A expenses were \$11.2 million or 18% of revenue. SG&A expenses include \$0.4 million of stock-based compensation expense for each of the quarters ended March 31, 2012 and 2011. The decrease in SG&A expenses was due primarily to lower commissions and shipping expenses related to lower revenues.

Selling, general and administrative (SG&A) expenses for the six months ended March 31, 2012 were\$12.3 million or 27% of revenue. For the six months ended March 31, 2011, SG&A expenses were \$21.6 million or 19% of revenue. SG&A expenses include\$0.9 million and \$0.7 million of stock-based compensation expense, respectively, for the six months ended March 31, 2012 and 2011. The decrease in SG&A expenses was due primarily to lower commissions and shipping expenses related to lower revenues.

Impairment charges

Impairment charges for the three and six months ended March 31, 2012 were \$0.7 million. In fiscal 2009, we entered into a license agreement with one of our technology partners to market existing and future proprietary PSG dry etch systems for the manufacture of photovoltaic cells. In fiscal 2012, due to our technology partner's financial difficulties and insufficient sales, we determined that the carrying value of the license is not fully recoverable. Therefore an impairment charge of \$0.4 million was recorded in the second quarter of fiscal 2012. Other related assets were determined to be impaired as well; therefore an additional impairment



charge of \$0.3 million was recorded in the second quarter of fiscal 2012, reducing the book value of the assets to zero.

Research and Development

Research and development expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes as well as materials and supplies used in producing prototypes. Reimbursement of research and development costs in the form of governmental research and development grants are netted against these expenses.

Three Months Ended						Six Months Ended								
	ľ	March 31, 2012]	March 31, 2011		Incr. (Decr.)	% change	I	March 31, 2012	ľ	March 31, 2011		Incr. (Decr.)	% change
		(dollars in	thou	isands)					(dollars in	thou	sands)			
Research and development	\$	3,408	\$	1,047	\$	2,361	226 %	\$	6,246	\$	1,994	\$	4,252	213 %
Grants earned		(109)		(113)		(4)	(4)%		(194)		(212)		(18)	(8)%
Net research and development	\$	3,299	\$	934	\$	2,365	253 %	\$	6,052	\$	1,782	\$	4,270	240 %

Research and development costs for the three and six months ending March 31, 2012 increased \$2.4 million and \$4.3 million, respectively, compared to the same periods in 2011. Increased research and development spending relates, in part, to investments in the development of a solar ion implanter. Additional investments were made in the development of other technologies and processes for solar (photovoltaic) cell manufacturing to increase throughput and cell efficiency. We receive reimbursements through governmental research and development grants which are netted against these expenses. We expect the continued development of an ion implanter and other technologies for the solar market to result in higher research and development expenses over the next several quarters.

Income Taxes

For the three months ended March 31, 2012 and 2011, we recorded income tax expense (benefit) of \$(0.2) million and \$5.1 million for effective tax rates of 4% and 40%, respectively. For the six months ended March 31, 2012 and 2011, we recorded income tax expense (benefit) of \$(0.5) million and \$8.4 million for effective tax rates of 7% and 40%, respectively. The effective tax rate is the ratio of total income tax expense (benefit) to pre-tax income (loss). The tax benefit for the first quarter of fiscal 2012 includes the benefit realized from a favorable resolution of an uncertain tax position. The income tax provision for the three and six months ended March 31, 2012 and 2011 are based upon estimates of annual income, annual permanent differences and statutory tax rates in the various jurisdictions in which we operate, except that certain loss jurisdictions and discrete items, such as the resolution of uncertain tax positions, are treated separately. No tax benefit has been recognized for losses related to Kingstone's ion implant development project, because it does not have a sufficient history of earnings to support a determination that realization of the tax benefit is more likely than not. Most of the tax benefit from losses in other jurisdictions was offset by taxes related to the restructure of our Netherlands operations.

Our future effective income tax rate depends on various factors, such as the geographic composition of worldwide earnings, tax regulations governing each region, non-tax deductible expenses incurred as a percent of pre-tax income and the effectiveness of our tax planning strategies. At the end of 2011, we restructured our European operations to lower the tax rate on the Netherlands operations from 35% to a marginal rate of 25%, as we intend to permanently reinvest future Dutch earnings in our foreign operations. The amount of benefit derived from that tax planning will depend on the amount of income earned in the Netherlands and the other factors mentioned above.

However, we expect our overall worldwide average effective tax to be adversely affected in 2012 as compared to 2011. This is principally due to valuation allowances related to the net operating losses at Kingstone associated with increases in solar ion implanter development costs. Our effective tax rate is expected to decline when: (1) we enter the next upturn in the solar industry; (2) we realize expected earnings from our investments in the ion implant technology; and (3) we resolve our uncertain tax positions.



Liquidity and Capital Resources

At March 31, 2012 and September 30, 2011, cash and cash equivalents were\$48.8 million and \$67.4 million, respectively. At March 31, 2012 and September 30, 2011, restricted cash was \$3.6 million and \$6.6 million, respectively. Restricted cash as of March 31, 2012, includes \$1.0 million in an escrow account for future funding of research and development expenses for ion implant technology at Kingstone Semiconductor Company Ltd. Our working capital was \$86.5 million as of March 31, 2012 and \$94.1 million as of September 30, 2011.

The decrease in cash for the first six months of fiscal 2012 was primarily due to cash used in operating activities of \$12.7 million, cash used in financing activities of \$4.1 million and a decrease in cash of \$0.8 million due to the effect of exchange rate changes on cash. The Company maintains a portion of our cash and cash equivalents in euros at our Netherlands and French operations, therefore, changes in the exchange rate have an impact on our cash balances. Cash used in operating, investing and financing activities is discussed below. Our ratio of current assets to current liabilities was 2.6:1 as of March 31, 2012 compared to 2.2:1 as of September 30, 2011.

During calendar 2012, we expect to make approximately \$13 million of income tax payments. See information below regarding other contractual obligations. We have never paid dividends on our Common Stock. Our present policy is to apply cash to investments in product development, acquisitions or expansion; consequently, we do not expect to pay dividends on Common Stock in the foreseeable future. We believe that our principal sources of liquidity discussed above are adequate to support operations for at least the next 12 months.

The success of our growth strategy is dependent upon the availability of additional capital resources on terms satisfactory to management. Our sources of capital in the past have included the sale of equity securities, which include common and preferred stock sold in private transactions and public offerings, capital leases and long-term debt. There can be no assurance that we can raise such additional capital resources on satisfactory terms.

Cash Flows from Operating Activities

Cash used in our operating activities was\$12.7 million for the six months ended March 31, 2012, compared to\$11.2 million provided by such activities for the six months ended March 31, 2011. During the six months ended March 31, 2012, \$2.6 million of cash was used as a result of the net loss from operations, adjusted for non-cash charges. Additional cash was used reduce current liabilities, such as customer deposits, accounts payable, accrued compensation and deferred profit. These decreases in cash were partially offset by collections of accounts receivable.

Cash Flows from Investing Activities

Our investing activities for the six months ended March 31, 2012 and 2011 used\$1.1 million and \$3.9 million, respectively. Purchases of property, plant and equipment for the six months ended March 31, 2012 and 2011 was \$1.1 million and \$2.9 million, respectively. In the second quarter of fiscal 2011, \$1.1 million was used to purchase a 55% interest in Kingstone.

Cash Flows from Financing Activities

For the three months ended March 31, 2012\$4.1 million was used to reacquire shares issued in connection with the Kingstone acquisition. For the three months ended March 31, 2011, the primary source of \$2.0 million of cash provided by financing activities was proceeds from the issuance of common stock through the exercise of stock options.

Off-Balance Sheet Arrangements

As of March 31, 2012, Amtech had no off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K promulgated by the Securities and Exchange Commission.

Contractual Obligations

Purchase obligations decreased \$24.3 million from \$47.2 million as of September 30, 2011 to \$22.9 million as of March 31, 2012. We also have a contractual obligation to fund the development of the solar tool at Kingstone. Refer to Amtech's annual report on Form 10-K for the year ended September 30, 2011, for information on the Company's other contractual obligations.

Critical Accounting Policies

"Management's Discussion and Analysis of Financial Condition and Results of Operations" discusses our condensed consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the condensed consolidated financial statements, the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting period.

On an on-going basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventory valuation, accounts and notes receivable collectability, warranty and impairment of long-lived assets. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances. The results of these estimates and judgments form the basis for making conclusions about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A critical accounting policy is one that is both important to the presentation of our financial position and results of operations, and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. These uncertainties are discussed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended September 30, 2011. We believe our critical accounting policies relate to the more significant judgments and estimates used in the preparation of our consolidated financial statements.

We believe the critical accounting policies discussed in the section entitled "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2011 represent the most significant judgments and estimates used in the preparation of our consolidated financial statements. There have been no significant changes in our critical accounting policies during the three months ended March 31, 2012.

Impact of Recently Issued Accounting Pronouncements

For discussion of the impact of recently issued accounting pronouncements, see "Item 1: Financial Information" under "Impact of Recently Issued Accounting Pronouncements".

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to foreign currency exchange rates to the extent sales contracts, purchase contracts, assets or liabilities of our operations are denominated in currencies other than their functional currency. Our operations in the United States are conducted in their functional currency, the U.S. dollar. Our operations in Europe and China conduct business primarily in their functional currencies, the Euro and renminibi, but occasionally enter into transactions in the U.S. dollar. It is highly uncertain how currency exchange rates will fluctuate in the future. Actual changes in foreign exchange rates could adversely affect our operating results or financial condition.

During fiscal 2011 and in the first half of fiscal 2012, we did not hold any stand-alone or separate derivative instruments. We incurred net foreign currency transaction gains or losses of less than \$0.1 million during the six months ended March 31, 2012 and 2011. As of March 31, 2012, our foreign subsidiaries had\$3.7 million of assets (cash and accounts receivable) denominated in currencies other than their functional currency. A 10% change in the value of the functional currency relative to the non-functional currency would result in a gain or loss of \$0.4 million. As of March 31, 2012, we had\$1.6 million of accounts payable, consisting primarily of amounts owed by our foreign subsidiaries to our U.S. companies, denominated in U.S. dollars. Although the intercompany accounts are eliminated in consolidation, a 10% change in the value of the Euro relative to the U.S. dollar would result in a gain or loss of \$0.2 million. The risk associated with foreign currency translation gains and losses has increased with our recent acquisition in China.

We incurred foreign currency translation losses of \$1.5 million and gains of \$15.0 million during the six months ended March 31, 2012 and 2011, respectively, a type of other comprehensive income (loss), which is a direct adjustment to stockholders' equity. Our net investment in and advances to our foreign operations totaled \$81.0 million as of March 31, 2012. A 10% change in the value of the foreign currencies relative to the U.S. dollar would cause approximately \$8.1 million of other comprehensive income (loss). The risk associated with foreign currency translation adjustments has increased with our recent acquisition in China.

During six months ended March 31, 2012, our European operations transacted U.S. dollar denominated sales and purchases of less than \$0.1 million and \$0.6 million, respectively. As of March 31, 2012, sales commitments denominated in a currency other

than the functional currency of our transacting operation totaled \$0.5 million. Our lead-times to fulfill these commitments generally range between 13 and 26 weeks. A 10% change in the relevant exchange rates between the time the order was taken and the time of shipment would not cause our gross profit on such orders to be significantly greater or less than expected on the date the order was taken. As of March 31, 2012, purchase commitments denominated in a currency other than the functional currency of our transacting operation totaled \$1.4 million. A 10% change in the relevant exchange rates between the time the purchase order was placed and the time the order is received would cause our cost of such items to be \$0.1 million greater or less than expected on the date the purchase order was placed.

Item 4.	CONTROLS	AND
	PROCEDURES	

Disclosure Controls and Procedures

Our management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), has carried out an evaluation of the effectiveness of our disclosure controls and procedures as of March 31, 2012, pursuant to Exchange Act Rules 13a-15(e) and 15(d)-15(e). Based upon that evaluation, our CEO and CFO have concluded that as of such date, our disclosure controls and procedures in place are effective.

Changes in Internal Control Over Financial Reporting

There has been no change in Amtech's internal control over financial reporting during the three months ended March 31, 2012 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1A. Risk Factors

The most significant risk factors applicable to Amtech are described in Part I, Item 1A (Risk Factors) of Amtech's Annual Report on Form 10-K for the fiscal year ended September 30, 2011 (our "2011 Form 10-K"). There have been no material changes to the risk factors previously disclosed on our fiscal 2011 Form 10-K.

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Item 6.	Exhibits	
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
101.INS	XBRL Instance Document	**
101.SCH	XBRL Taxonomy Extension Schema Document	**
101.PRE	Taxonomy Presentation Linkbase Document	**
101.CAL	XBRL Taxonomy Calculation Linkbase Document	**
101.LAB	XBRL Taxonomy Label Linkbase Document	**
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	**

 Filed herewith.

** Pursuant to applicable securities laws and regulations, the Company is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and is not subject to liability under any anti-fraud provisions or other liability provisions of the federal securities laws as long as the Company has made a good faith attempt to comply with the submission requirements and promptly amends the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. In addition, users of this data are advised that, pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise are not subject to liability under these sections.

SIGNATURES

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

AMTECH SYSTEMS, INC.

By /s/ Robert T. Hass

Dated: May 10, 2012

Robert T. Hass Vice President and Chief Accounting Officer (Principal Accounting Officer)

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EXHIBIT INDEX

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31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
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Exhibit 31.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Fokko Pentinga, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the "registrant"),
- 2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By <u>/s/ Fokko Pentinga</u> Fokko Pentinga President and Chief Executive Officer Amtech Systems, Inc. Date: May 10, 2012

Exhibit 31.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Bradley C. Anderson, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the "registrant"),
- 2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By <u>/s/ Bradley C. Anderson</u> Bradley C. Anderson Executive Vice President – Finance and Chief Financial Officer Amtech Systems, Inc. Date: May 10, 2012

Exhibit 32.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Amtech Systems, Inc. (the "Company") on Form 10-Q for the period endedMarch 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Fokko Pentinga, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By <u>/s/ Fokko Pentinga</u> Fokko Pentinga President and Chief Executive Officer Amtech Systems, Inc. Date: May 10, 2012

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.

Exhibit 32.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Bradley C. Anderson, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. sections 1350, as adopted pursuant to sections 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By <u>/s/ Bradley C. Anderson</u> Bradley C. Anderson Executive Vice President-Finance and Chief Financial Officer Amtech Systems, Inc. Date: May 10, 2012

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.