
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

For the quarterly period ended September 30, 2002 or

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

Commission file number 000-30941

AXCELIS TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

34-1818596

(I.R.S. Employer Identification Number)

55 Cherry Hill Drive

Beverly, Massachusetts 01915

(Address of principal executive offices, including zip code)

(978) 787-4000

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities 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 NO .

As of November 04, 2002 there were 98,266,404 shares of the registrant's common stock outstanding.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Axcelis Technologies, Inc.
Consolidated Statements of Operations
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended		Nine Months Ended	
	September 30, 2002	September 30, 2001	September 30, 2002	September 30, 2001
Net sales	\$93,117	\$ 61,796	\$244,190	\$315,947
Cost of products sold	56,672	43,201	159,120	194,904
Gross profit	36,445	18,595	85,070	121,043
Operating expenses:				
Research and development	18,096	18,373	54,380	56,424
Selling	10,912	11,761	33,892	38,570
General and administrative	10,799	14,873	34,419	46,652
Amortization of goodwill and intangible assets	365	2,320	1,095	6,960
Loss from operations	(3,727)	(28,732)	(38,716)	(27,563)
Other income (expense):				
Royalty income	3,483	1,546	7,404	6,127
Equity income of Sumitomo Eaton Nova Corporation	2,235	3,162	3,595	13,361
Interest income	874	1,187	2,850	4,988
Interest expense	(1,535)	—	(4,429)	—
Other-net	(828)	(972)	(2,472)	(1,220)
Income (loss) before taxes	502	(23,809)	(31,768)	(4,307)
Income taxes (credit)	311	(7,598)	(12,451)	(2,137)

Net income (loss)	\$ 191	\$ (16,211)	\$ (19,317)	\$ (2,170)
Basic net income (loss) per share	\$ 0.00	\$ (0.17)	\$ (0.20)	\$ (0.02)
Diluted net income (loss) per share	\$ 0.00	\$ (0.17)	\$ (0.20)	\$ (0.02)
Shares used in computing:				
Basic net income (loss) per share	98,090	97,387	97,849	97,165
Diluted net income (loss) per share	98,213	97,387	97,849	97,165

See accompanying notes to consolidated financial statements.

Axcelis Technologies, Inc.
Consolidated Balance Sheets
(In thousands)
(Unaudited)

	September 30, 2002	December 31, 2001
ASSETS		
Current assets:		
Cash & cash equivalents	\$194,673	\$124,177
Accounts receivable	78,958	63,057
Inventories	109,824	105,339
Deferred income taxes & other current assets	35,354	18,622
Total current assets	418,809	311,195
Property, plant & equipment, net	95,940	92,618
Investment in Sumitomo Eaton Nova Corporation	55,159	48,183
Goodwill	40,682	39,282
Intangible assets	13,506	14,601
Other assets	48,796	45,517
Total assets	\$672,892	\$551,396
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 35,589	\$ 32,602
Accrued compensation	11,428	6,966
Warranty reserve	20,014	24,218
Other current liabilities	20,684	20,997
Total current liabilities	87,715	84,783
Long-term debt	125,000	—
Other long-term liabilities	3,968	3,752
Stockholders' equity:		
Common stock	98	97
Additional paid-in capital	448,006	440,638
Deferred compensation	(1,256)	—
Treasury stock - at cost	(1,218)	(1,218)
Retained earnings	19,202	38,519
Accumulated other comprehensive loss	(8,623)	(15,175)
Total stockholders' equity	456,209	462,861
Total liabilities and stockholders' equity	\$672,892	\$551,396

See accompanying notes to consolidated financial statements.

Axcelis Technologies, Inc.
Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2002	2001
Operating activities:		
Net loss	\$ (19,317)	\$ (2,170)
Adjustments required to reconcile net loss to net cash used by operating activities:		
Depreciation	7,933	7,092
Amortization of goodwill & intangible assets	1,095	6,960
Equity income of Sumitomo Eaton Nova Corporation	(3,595)	(13,361)
Changes in operating assets & liabilities:		
Accounts receivable, net	(13,878)	73,992
Inventories	(2,092)	13,227
Deferred income taxes and other current assets	(16,961)	(6,784)
Accounts payable and other current liabilities	115	(20,268)
Payable to Eaton Corporation	—	(25,818)
Income taxes payable	—	(31,153)
Other assets	150	(10,047)
Other-net	1,069	599
Net cash used by operating activities	(45,481)	(7,731)
Investing activities:		
Expenditures for property, plant & equipment	(11,352)	(21,772)
Other-net	(1,056)	(608)
Net cash used by investing activities	(12,408)	(22,380)
Financing activities:		
Proceeds from long-term debt, net	121,578	—
Proceeds from the exercise of stock options	104	664
Issuance of common stock from Employee Stock Purchase Plan	5,622	2,296
Acquisition of treasury shares	—	(1,218)
Net cash provided by financing activities	127,304	1,742
Effect of foreign exchange rate changes	1,081	(118)
Net increase (decrease) in cash & cash equivalents	70,496	(28,487)
Cash & cash equivalents at beginning of period	124,177	168,157
Cash & cash equivalents at end of period	\$194,673	\$139,670

See accompanying notes to consolidated financial statements.

1) Nature of Business and Basis of Presentation

Axcelis Technologies, Inc. ("Axcelis" or the "Company"), is a leading producer of ion implantation, dry strip and photostabilization equipment used in the fabrication of semiconductors in the United States, Europe and Asia Pacific. The Company also produces rapid thermal processing equipment, which is used in semiconductor manufacturing primarily before and after the ion implantation process. In addition, the Company provides extensive aftermarket service and support, including spare parts, equipment upgrades, maintenance services and customer training. The Company has a 50-50 joint venture with Sumitomo Heavy Industries, Ltd. in Japan. This joint venture, which is known as Sumitomo Eaton Nova Corporation, or SEN, licenses technology from the Company for ion implantation, has exclusive rights to the territory of Japan and is the leading producer of ion implantation equipment in Japan.

The accompanying unaudited consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments, which are of a normal recurring nature, considered necessary for a fair presentation have been included. Operating results for the three and nine months ended September 30, 2002 are not necessarily indicative of the results that may be expected for the year ending December 31, 2002.

The balance sheet at December 31, 2001 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

For further information, refer to the consolidated financial statements and footnotes thereto included in Axcelis Technologies, Inc.'s annual report on Form 10-K for the year ended December 31, 2001.

2) Net Income (Loss) Per Share

Basic net income (loss) per share is calculated based on the weighted average shares of common stock outstanding during the period. Diluted net income (loss) per share is calculated based on the weighted average shares of common stock outstanding, plus the dilutive effect of stock options, calculated using the treasury stock method.

3) Comprehensive Income (Loss)

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

	Three Months Ended		Nine Months Ended	
	September 30, 2002	September 30, 2001	September 30, 2002	September 30, 2001
Net income (loss)	\$ 191	\$(16,211)	\$(19,317)	\$(2,170)
Foreign currency translation adjustments	(1,795)	3,983	6,552	(4,739)
Comprehensive income (loss)	(1,604)	(12,228)	(12,765)	(6,909)

4) Inventories

Inventories are carried at the lower of cost, determined using the first-in, first out (FIFO) method, or market. The components of inventory were as follows (in thousands):

	September 30,	December 31,
	2002	2001
Raw materials	\$ 76,722	\$ 75,821
Work-in-process	14,346	8,889
Finished goods	33,178	31,996
	124,246	116,706
Inventory allowances	(14,423)	(11,367)
	\$109,824	\$105,339

5) Intangible Assets and Goodwill

The components of intangible assets subject to amortization, which consist principally of purchased patented technology, as of September 30, 2002 are as follows (in thousands).

Gross carrying amount	\$ 40,000
Accumulated amortization	(26,494)
	<hr/>
	\$ 13,506

Aggregate amortization expense for the nine months ended September 30, 2002 was \$1,095,087. Estimated amortization expense for the fiscal year ending December 31, 2002 and for each of the four succeeding fiscal years is \$1,460,116.

During the fiscal first quarter ended March 31, 2002, the Company adopted Statement of Financial Accounting Standard (SFAS) No. 142, "Goodwill and Other Intangible Assets" which eliminates the requirement to amortize goodwill and indefinite-lived intangible assets, addresses the amortization of intangible assets with a defined life and addresses the impairment testing and recognition for goodwill and intangible assets. The adoption of SFAS No. 142 did not require the recognition of a loss due to goodwill impairment, and resulted in no amortization of goodwill for the three months and nine months periods ended September 30, 2002. The Company has also determined that based on an examination of the economic life of its intangible assets as of January 1, 2002, the amortization period for these intangible assets should be approximately ten years from that date. Under the guidelines provided in SFAS No. 142, the Company plans to update its goodwill impairment testing during the fourth quarter of 2002. See "Critical Accounting Policies - Goodwill."

Had SFAS No. 142 been adopted for the three months and nine months periods ending September 30, 2001, the impact on net income and earnings per share would have been as follows:

	Three Months Ended		Nine Months Ended	
	September 30, 2002	September 30, 2001	September 30, 2002	September 30, 2001
<i>(000's except for earnings per share amounts)</i>				
Reported net income (loss)	\$ 191	\$(16,211)	\$(19,317)	\$(2,170)
Add back: Goodwill amortization	—	892	—	2,676
Adjust: Intangible asset amortization	—	1,063	—	3,189
Adjusted net income (loss)	<hr/> \$ 191	<hr/> \$(14,256)	<hr/> \$(19,317)	<hr/> \$ 3,695
Basic and diluted earnings (loss) per share:				
Reported net income (loss)	\$0.00	\$ (0.17)	\$ (0.20)	\$ (0.02)
Add back: Goodwill amortization	—	0.01	—	0.03
Adjust: Intangible asset amortization	—	0.01	—	0.03
Adjusted net income (loss) per share	<hr/> \$0.00	<hr/> \$ (0.15)	<hr/> \$ (0.20)	<hr/> \$ 0.04

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Certain statements in "Management's Discussion and Analysis of Financial Condition and Results of Operations" are forward-looking statements that involve risks and uncertainties. Words such as may, will, should, would, anticipates, expects, intends, plans, believes, seeks, estimates and similar expressions identify such forward-looking statements. The forward-looking statements contained herein are based on current expectations and entail various risks and uncertainties that could cause actual results to differ materially from those expressed in such forward-looking statements. Important factors that might cause such a difference are described through this report, including among other things, those set forth under "Financial Condition, Liquidity and Capital Resources," "Outlook" and "Risk Factors" included in these sections and those appearing elsewhere in this Form 10-Q. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's analysis only as of the date hereof. The Company assumes no obligation to update these forward-looking statements to reflect actual results or changes in factors or assumptions affecting forward-looking statements.

Overview

We are a leading producer of ion implantation, dry strip and photostabilization equipment used in the fabrication of semiconductors in the United States, Europe and Asia Pacific. We also manufacture rapid thermal processing equipment, which is used in semiconductor manufacturing primarily before and after the ion implantation process. In

addition, we provide extensive aftermarket service and support, including spare parts, equipment upgrades, maintenance services and customer training. We have a 50-50 joint venture with Sumitomo Heavy Industries, Ltd. in Japan. This joint venture, which is known as Sumitomo Eaton Nova Corporation, or SEN, licenses technology from us for ion implantation, has exclusive rights to the territory of Japan and is the leading producer of ion implantation equipment in Japan.

Critical Accounting Policies

Management's discussion and analysis of its financial condition and results of operations are based upon Axcelis' consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates, including those related to revenue recognition, income taxes, accounts receivable, inventory and warranty and installation obligations. Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates to the extent actual conditions differ from management's assumptions.

The following summarizes those critical accounting policies which the Company believes involve its more significant judgments and estimates:

Revenue Recognition

The Company recognizes revenue at the time of shipment of the system to the customer. The costs of installation at the customer's site are accrued at the time of shipment. The Company believes the customer's post delivery acceptance provisions and installation process have been established to be routine, commercially inconsequential and perfunctory. In the future, if the post delivery acceptance provisions and installation process become more complex or are not successful, the Company may have to revise its revenue recognition policy, which could affect the timing of revenue recognition.

Deferred Tax Assets

As of September 30, 2002, we have approximately \$50.6 million of deferred tax assets, \$17.4 million of which are classified as long-term assets and included in "other assets" on our balance sheet. These deferred tax assets relate principally to domestic loss carryforwards that expire in 2021, for which no valuation allowance has been recorded. The realization of these assets is based upon estimates of future taxable income. Projections of future earnings are based on revenue assumptions consistent with industry forecasts for the next five years along with the necessary operating expenses to support our revenue assumptions. Based on these projections, we estimate that the loss carryforwards will be fully utilized within three years. The Company plans to update these projections in the fourth quarter of 2002. Should these updated projections result in the continuation of future taxable losses, a valuation allowance of up to \$50.6 million may be required.

Goodwill

Axcelis has \$40.7 million of goodwill on its balance sheet as of September 30, 2002. Substantially all of this goodwill relates to the Company's acquisition of Fusion Systems Corporation in 1997. As noted in Part I, Item 1. "Note 5 to Consolidated Financial Statements," the Company's adoption of SFAS No. 142 "Goodwill and Other Intangible Assets" resulted in no recognition of loss due to goodwill impairment. Under the guidelines provided in SFAS No. 142, the Company is required to update its goodwill impairment testing on an annual basis, but more frequently if events dictate that such an update is required. Given management's fourth quarter outlook (see "Outlook" section), the Company plans to update its goodwill impairment testing during the fourth quarter of 2002. Should this testing result in the impairment of the Company's recorded goodwill, the Company would be required to write down all or a portion of its goodwill balance, with a corresponding recognition of a non-cash loss in the Company's statement of operations of up to \$40.7 million.

Accounts Receivable

Axcelis records an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. If the financial condition of Axcelis' customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be necessary.

Inventory

Axcelis records an allowance for estimated excess and obsolete inventory. The allowance is based upon management's assumptions of future materials usage and obsolescence, which are a result of future demand and market conditions. If actual market conditions become less favorable than those projected by management, additional inventory write-downs may be required.

Accrued Warranty and Installation Costs

Axcelis provides for the estimated cost of product warranties and system installations at the time of shipment. The Company's warranty and installation obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure or installing a system at a customer's site. If actual product failure rates, material usage or service delivery costs differ from management's estimates, revisions to the estimated warranty and installation liability may be required.

Results of Operations

The following table sets forth consolidated statements of operations data expressed as a percentage of net sales for the periods indicated:

	Three Months Ended		Nine Months Ended	
	September 30, 2002	September 30, 2001	September 30, 2002	September 30, 2001
Net sales	100.0 %	100.0 %	100.0 %	100.0 %
Gross profit	39.1	30.1	34.8	38.3
Other costs and expenses:				
Research and development	19.4	29.7	22.3	17.9
Selling	11.7	19.0	13.9	12.2
General and administrative	11.6	24.1	14.1	14.8
Amortization of goodwill and intangible assets	0.4	3.8	0.5	2.2
Loss from operations	(4.0)	(46.5)	(15.9)	(8.7)
Other income (expense):				
Royalty income	3.7	2.5	3.0	1.9
Equity income of SEN	2.4	5.1	1.5	4.2
Interest income	0.9	1.9	1.2	1.6
Interest expense	(1.7)	—	(1.8)	—
Other-net	(0.9)	(1.6)	(1.0)	(0.4)
Income (loss) before income taxes	0.5	(38.5)	(13.0)	(1.4)
Income taxes (credit)	0.3	(12.3)	(5.1)	(0.7)
Net income (loss)	0.2 %	(26.2)%	(7.9)%	(0.7)%

Net Sales

Net sales for the third quarter of fiscal 2002 were \$93.1 million, an increase of \$31.3 million, or 50.7%, from \$61.8 million in the third quarter of 2001. The increase in net sales between periods is due mainly to an increase in capital spending by our semiconductor manufacturing customers resulting in increased sales of our products and services compared to a historically low sales level in the third quarter of 2001. Net sales for the nine months ended September 30, 2002 were \$244.2 million, a decrease of \$71.8 million, or 22.7%, from \$315.9 million for the same period in fiscal 2001. The decrease in net sales for the first nine months of 2002 compared to the prior year's nine month period was due to lower capital spending by the Company's customers resulting in lower sales as the downturn in the semiconductor industry in 2001 continued through the first nine months of 2002.

Gross Profit

Gross profit for the third quarter of fiscal 2002 was \$36.4 million, an increase of \$17.8 million, or 96.0%, from \$18.6 million in the third quarter of fiscal 2001. The increase in gross profit in the third quarter of fiscal 2002 compared to the prior year's quarter was driven primarily by higher sales volume. Gross profit for the nine months ended September 30, 2002 was \$85.1 million, a decrease of \$35.9 million, or 29.7%, from \$121.0 million for the same period in fiscal 2001. The decrease in gross profit for the first nine months of fiscal 2002 compared to the prior year's period was due mainly to lower sales volume. Gross profit as a percentage of net sales increased to 39.1% in the third quarter of fiscal 2002 from 30.1% in the comparable prior period. This percentage increase in fiscal 2002 compared to 2001 was due to increased sales volume and the associated favorable impact on factory overhead costs and on an increased percentage of higher margin 200mm product shipments. For the first nine months of fiscal 2002, gross profit as a percentage of net sales decreased to 34.8% from 38.3% for the first nine months of fiscal 2001. This percentage decrease in fiscal 2002 compared to 2001 was principally due to lower manufacturing capacity utilization caused by lower sales volume.

Operating Expenses

Operating expenses were 43.1% of net sales for the three months ended September 30, 2002, compared to 76.6% for

the three months ended September 30, 2001. The decrease from the prior year's three month period is due to higher sales volume and lower operating expenses. Operating expenses were 50.7% of net sales for the nine months ended September 30, 2002, compared to 47.0% for the nine months ended September 30, 2001. The increase from the prior year's nine month period was due primarily to lower sales volume partially offset by lower operating expenses. In terms of absolute dollars, operating expenses for the three months and nine months ended September 30, 2002 decreased \$7.2 million and \$24.8 million, respectively, from the comparable periods in fiscal 2001. Selling, general and administrative expenses decreased by \$4.9 million in the quarter ended September 30, 2002 compared to the quarter ended September 30, 2001 due primarily to lower headcount related expenses. The balance of the favorability in operating expenses for the quarter ending September 30, 2002 was driven by lower amortization of goodwill and intangible assets due to the application of new accounting regulations related to goodwill and intangible assets. See Part I, Item 1. "Note 5 to Consolidated Financial Statements". For the nine month period ended September 30, 2002, selling, general and administrative expenses decreased by \$16.9 million over the first nine months of fiscal 2001 due primarily to decreased 2002 expenses associated with transitioning to a stand-alone company (\$4.1 million), current year headcount-related reductions (\$7.2 million) and lower 2002 expenses incurred in connection with the Company's patent litigation with Applied Materials, Inc. (\$5.6 million). Amortization of goodwill and intangible assets decreased by \$5.9 million due to the reasons discussed under Part I, Item 1. "Note 5 to Consolidated Financial Statements".

Loss From Operations

Loss from operations was \$3.7 million for the third quarter of fiscal 2002 as compared to a loss of \$28.7 million for the third quarter of fiscal 2001. Loss from operations was \$38.7 million for the nine months ended September 30, 2002 as compared to a loss of \$27.6 million for the nine months ended September 30, 2001.

Other Income (Expense)

Other income was \$4.2 million for the third quarter of fiscal 2002 as compared to \$4.9 million for the third quarter of fiscal 2001. Other income was \$6.9 million for the first nine months of fiscal 2002 as compared to \$23.3 million for the first half of 2001. Total other income consists primarily of royalty income and equity income from SEN. Royalty income, primarily from SEN, was \$3.5 million for the third quarter of fiscal 2002 as compared to \$1.5 million for the third quarter of fiscal 2001, and \$7.4 million for the first nine months of 2002 as compared to \$6.1 million in the first nine months of 2001.

Equity income attributable to SEN was \$2.2 million for the third quarter of fiscal 2002 compared to \$3.2 million for the third quarter of fiscal 2001, and \$3.6 million in the first nine months of fiscal 2002 as compared to \$13.4 million in the first nine months of fiscal 2001. The decrease in equity income for the first nine months of fiscal 2002 compared to the prior year's period was due to lower SEN sales volume primarily resulting from the downturn in the Japanese semiconductor market in 2001 that has continued into fiscal 2002.

Interest income was \$2.9 million for the first nine months of fiscal 2002 compared to \$5.0 million for the prior year's period. The decrease in interest income was due mainly to lower cash balances and lower yields on these balances in the first nine months of 2002 compared to the first nine months of 2002.

Interest expense of \$4.4 million in the first nine months of fiscal 2002 relates to the Company's \$125 million convertible subordinated note offering completed in January 2002.

Income Taxes (Credit)

Income taxes were \$0.3 million in the third quarter of fiscal 2002 as compared to an income tax credit of \$7.6 million in the third quarter of fiscal 2001. The Company had an income tax credit of \$12.5 million for the first nine months of fiscal 2002 as compared to an income tax credit of \$2.1 million for the first nine months of fiscal 2001. (See the Deferred Tax Asset section under "Critical Accounting Policies"). The effective income tax rate was 62.0% in the third quarter of fiscal 2002 and 39.2% for the nine months ended September 30, 2002, as compared to 31.9% in the third quarter of fiscal 2001 and 49.6% for the nine months ended September 30, 2001. The tax rate in both periods differs from the U.S. statutory rate primarily due to undistributed nontaxable equity income from SEN and credits from increased research activities.

Net Income (Loss)

Net income was \$0.2 million in the third quarter of fiscal 2002 as compared to a net loss of \$16.2 million in the third quarter of fiscal 2001, principally resulting from the factors discussed above. The Company achieved breakeven profitability on an earnings per share basis in the third quarter of fiscal 2002 and a loss per share of \$0.20 in the first nine months of fiscal 2002. The loss per share was \$0.17 in the third quarter of 2001 and \$0.02 per share in the first nine months of 2001.

Financial Condition, Liquidity and Capital Resources

As of September 30, 2002, cash and cash equivalents were \$194.7 million as compared with \$124.2 million as of December 31, 2001. The increase in cash and cash equivalents, of \$70.5 million, from December 31, 2001 was due mainly to the net proceeds of \$121.6 million received from the Company's convertible subordinated note offering in January 2002 offset by cash used in operating activities of \$45.5 million. Net working capital was \$331.1 million at September 30, 2002 as compared to net working capital of \$226.4 million at December 31, 2001.

Net cash used by operating activities was \$45.5 million for the nine months ended September 30, 2002 as compared to net cash used by operating activities of \$7.7 million for the nine months ended September 30, 2001. The cash used by operating activities in the first nine months of fiscal 2002 was primarily the result of losses from operations of \$38.7 million and increased working capital requirements of \$15.9 million (primarily accounts receivable) associated with the increased sales volume in the third quarter of fiscal 2002, offset by non-cash expenses related to depreciation and amortization of \$9.0 million.

Capital expenditures were \$11.4 million in the first nine months of fiscal 2002 and \$21.8 million in the first nine months of fiscal 2001. The decrease in capital expenditures in the first nine months of fiscal 2002 was principally due to the completion of the Company's addition to its Beverly, Massachusetts facility during the first fiscal quarter of 2002. The amount of future capital requirements will depend on a number of factors, including the timing and rate of the expansion of our business.

During October 2002, the Company renewed the \$15 million, 364 day tranche of its 3 year, \$45 million secured credit facility. Terms and conditions under the renewal were substantially similar to those prior to the renewal, except that the Company's quick ratio covenant increased from 1.35 to 2.0. The Company has had no borrowings against this credit facility since the facility's inception in October of 2001.

Axcelis' liquidity is affected by many factors. Some of these factors are based on normal operations of the business and others relate to the uncertainties of global economies and the semiconductor equipment industry. As a general rule, the Company expects to consume cash at the beginning of a cyclical upturn and generate cash at the beginning of a cyclical downturn, due primarily to changes in working capital requirements. Although the Company's cash requirements fluctuate based on the timing and the extent of these factors, management believes that available cash and our cash flows from operations will provide sufficient working capital and satisfy commitments for capital expenditures and other cash requirements of the business. Management's expectations regarding our use of cash in the fourth quarter is discussed under "Outlook" below.

Outlook

The Company's performance in the third quarter of 2002 is directly related to the continuing low levels of capital expenditures by semiconductor manufacturers, especially manufacturers opening new or expanding existing fabrication facilities. The level of capital expenditures by these manufacturers depends upon the current and anticipated market demand for semiconductors and the products utilizing them, the available manufacturing capacity in manufacturers' fabrication facilities, and the ability of manufacturers to increase productivity in existing facilities without incurring additional capital expenditures. Currently, management believes that its customers see limited growth in important end markets such as telecommunications and personal computers. As a result, management took actions to reduce manufacturing costs, research and development expense and SG&A expense during the third quarter.

Management expects revenues to decline in the fourth quarter from the levels in the third quarter of 2002. Overall bookings during the third quarter of 2002 were \$77 million, down 19% from the second quarter of 2002. Systems backlog at the end of the third quarter of 2002 was \$62 million. Based on this and other data, on October 23, 2002, the Company announced its expectation that net revenues, excluding SEN, will be in the range of \$60 to \$70 million. This forecast revenue decrease reflects continued softness in order rates, as well as customer-requested delays in system shipments. On these forecast revenues, management stated on October 23, 2002 that gross margins would be approximately 30% and the net loss for the fourth quarter was expected to be \$0.08 to \$0.10 per share. In addition, management stated that the Company expected to end the quarter with approximately \$195 million in cash. Management is continuing to manage the Company's cost structure on a quarterly basis with the objective of improving profitability, while at the same time making sure that the Company has the right resources for an upturn in demand for its systems.

It is difficult for us to predict our customer's capital spending plans, which can change very quickly. In addition, at our current sales level, each sale, or failure to make a sale, could have a material effect on us in a particular quarter.

Risk Factors

As defined under Safe Harbor provisions of The Private Securities Litigation Reform Act of 1995, some of the matters discussed in this filing contain forward-looking statements regarding future events that are subject to risks and uncertainties. The following important factors, among others, could cause actual results to differ materially from those described by such statements. These factors include, but are not limited to: the cyclical nature of the semiconductor industry, our ability to keep pace with rapid technological changes in semiconductor manufacturing processes, the highly competitive nature of the semiconductor equipment industry, quarterly fluctuations in operating results attributable to the timing and amount of orders for our products and services, dependence on SEN (our Japanese joint venture) for access to the Japanese semiconductor equipment market, and those risk factors contained in the section titled "Outlook" and Exhibit 99.3 of this Form 10-Q. If any of those risk factors actually occur, our business, financial condition and results of operations could be seriously harmed and the trading price of our common stock could decline.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

A discussion of market risk exposures is included in our Form 10-K for the year ended December 31, 2001 under Management's Discussion and Analysis. During the first quarter of fiscal 2002, the Company completed an offering of \$125.0 million of 4.25% Convertible Subordinated Notes which mature on January 15, 2007. Due to the fixed interest rate associated with this offering, the Company is not subject to market risk for this debt instrument. There were no material changes in our market risk exposure during the three months ended September 30, 2002 from those discussed in the Form 10-K.

Item 4. Controls and Procedures

(a) Evaluation of disclosure controls and procedures. Our chief executive officer and our chief financial officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in the Securities Exchange Act of 1934 Rules 13a-14(c) and 15-d-14(c)) as of a date (the "Evaluation Date") within 90 days before the filing date of this quarterly report, have concluded that, as of the Evaluation Date, our disclosure controls and procedures were adequate and designed to ensure that the information required to be disclosed in the reports filed or submitted by us under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the requisite time periods.

(b) Changes in internal controls. There were no significant changes in our internal controls or in other factors that could significantly affect our internal controls subsequent to the Evaluation Date.

PART II. OTHER INFORMATION

Item 5. Other Information

(a) Pending Sale of Shares by 401(k) plans.

Eaton Corporation has informed Axcelis that there are, as of November 04, 2002 approximately 4,694,415 shares of Axcelis Common Stock held in Eaton Corporation's 401(k) plans (the "Eaton Plans"). These shares were received by participants in the Eaton Plans as a dividend on shares of Eaton stock held in the Eaton Plans on December 31, 2000. Under terms established by Eaton prior to the dividend, all shares of Axcelis Common Stock held by participants in the Eaton Plans were required to be sold over a two year period ending December 31, 2002. Shares of Axcelis Common Stock remaining in the Eaton Plans on December 31, 2002 will automatically be sold by the plans' trustee.

In addition, as of November 04, 2002, there are approximately 429,373 shares of Axcelis Common Stock held in the Axcelis Long Term Investment Plan, a 401(k) plan maintained by Axcelis (the "Axcelis Plan"). These shares were transferred into the Axcelis Plan at the time of its establishment on January 1, 2001 through a transfer of participant accounts from the Eaton Plans. As with the Eaton Plans, all shares of Axcelis Common Stock held by participants in the Axcelis Plan are required to be sold over a two year period ending December 31, 2002. Shares of Axcelis Common Stock remaining in the Axcelis Plan on December 31, 2002 will be automatically sold by the plan trustee.

Given that the aggregate shares currently held by the plans is 5.2% of Axcelis' outstanding Common Stock, this selling activity may adversely affect the trading prices of Axcelis Common Stock until such selling activity is completed.

(b) Deadlines for Shareholder Proposals for Annual Meeting.

The Company's annual meeting of stockholders will be held on Thursday, June 26, 2003. If you wish to bring business before or propose director nominations at the 2003 annual meeting, you must give written notice to Axcelis by May 12, 2003 (45 days prior to the 2003 meeting date). If you intend to bring such a proposal or nomination at the 2003 annual meeting, and you would like us to consider the inclusion of your proposal or nomination in our proxy statement for the meeting, you must provide written notice to Axcelis of such proposal or nomination prior to December 20, 2002. Notices of stockholder proposals and nominations should be given in writing to Axcelis Technologies, Inc., 55 Cherry Hill Drive, Beverly, Massachusetts 01915, Attn: Corporate Secretary.

(c) Resignation of Director and Executive Officer.

Ned C. Lautenbach, a member of the Company's Board of Directors, submitted his resignation effective October 14, 2002. Robert A. Mionis, our Senior Vice President--Worldwide Operations and Global Service Solutions resigned effective October 31, 2002.

Item 6. Exhibits and Reports on Form 8-K

a) Exhibits are numbered in accordance with the Exhibit Table of Item 601 of Regulation S-K:

3.1 Amended and Restated Certificate of Incorporation of the Company. Incorporated by reference from Exhibit 3.1 of the Company's Registration Statement on Form S-1 (Registration No. 333-36330).

3.2 Bylaws of the Company, as amended as of January 23, 2002. Incorporated by reference from Exhibit 3.2 of the Company's Form 10-K for the year ended December 31, 2001, filed with the Commission on March 12, 2002.

3.3 Certificate of Designation of Series A Participating Preferred Stock, filed with the Secretary of State of Delaware on July 5, 2000. Incorporated by reference from Exhibit 3.3 of the Company's Form 10-K for the year ended December 31, 2000, filed with the Commission on March 30, 2001.

99.1 Certification of the Chief Executive Officer pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code (Section 906 of the Sarbanes-Oxley Act), dated November 14, 2002. Filed herewith.

99.2 Certification of the Chief Financial Officer pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code (Section 906 of the Sarbanes-Oxley Act), dated November 14, 2002. Filed herewith.

99.3 Factors Affecting Future Operating Results. Filed herewith.

b) Reports on Form 8-K

None

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

AXCELIS TECHNOLOGIES, INC.

Dated: November 14, 2002

By: /s/ Cornelius F. Moses, III

Cornelius F. Moses, III
Executive Vice President, Chief Financial Officer
Duly authorized officer and
Principal financial officer

CERTIFICATION **of the Principle Executive Officer of Axelis Technologies, Inc.** **under Section 302 of the Sarbanes-Oxley Act of 2002**

I, Mary G. Puma, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Axcelis Technologies, Inc.;
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 quarterly 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 officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - a) designed such disclosure controls and procedures 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 quarterly report is being prepared
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and

c) presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: November 14, 2002

By: /s/ Mary G. Puma

Mary G. Puma
President and Chief Executive Officer

CERTIFICATION
of the Principle Financial Officer of Axelis Technologies, Inc.
under Section 302 of the Sarbanes-Oxley Act of 2002

I, Cornelius F. Moses, III, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Axcelis Technologies, Inc.;

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 quarterly 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 officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

a) designed such disclosure controls and procedures 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 quarterly report is being prepared

b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and

c) presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing

the equivalent function):

a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: November 14, 2002

By: /s/ Cornelius F. Moses, III

Cornelius F. Moses, III
Executive Vice President and Chief Financial Officer

AXCELIS TECHNOLOGIES, INC.**Certification of the Chief Executive Officer****Pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code**

The undersigned Chief Executive Officer of Axcelis Technologies, Inc., a Delaware corporation, hereby certify, for the purposes of Section 1350 of Chapter 63 of title 18 of the United States Code (as implemented by Section 906 of the Sarbanes-Oxley Act of 2002) as follows:

This Form 10-Q quarterly report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) and the information contained herein fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned have executed this Certification as of November 14, 2002.

/s/ Mary G. Puma

Mary G. Puma
Chief Executive Officer of Axcelis Technologies, Inc.

AXCELIS TECHNOLOGIES, INC.**Certification of the Chief Financial Officer****Pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code**

The undersigned Chief Financial Officer of Axcelis Technologies, Inc., a Delaware corporation, hereby certify, for the purposes of Section 1350 of Chapter 63 of title 18 of the United States Code (as implemented by Section 906 of the Sarbanes-Oxley Act of 2002) as follows:

This Form 10-Q quarterly report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) and the information contained herein fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned have executed this Certification as of November 14, 2002.

/s/ Cornelius F. Moses, III

Cornelius F. Moses, III
Chief Financial Officer of Axcelis Technologies, Inc.

AXCELIS TECHNOLOGIES, INC.

Form 10-Q for the quarter ended September 30, 2002

FACTORS AFFECTING FUTURE OPERATING RESULTS

From time to time, we may make forward-looking public statements, such as statements concerning our then expected future revenues or earnings or concerning the prospects for our markets or our product development, projected plans, performance, order procurement as well as other estimates relating to future operations. Forward-looking statements may be in reports filed under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), in registration statements filed under the Securities Act of 1933, as amended (the "Securities Act"), in press releases or informal statements made with the approval of an authorized executive officer. The words or phrases "will likely result," "are expected to," "will continue," "is anticipated," "estimate," "project," or similar expressions are intended to identify "forward-looking statements" within the meaning of Section 21E of the Exchange Act and Section 27A of the Securities Act, as enacted by the Private Securities Litigation Reform Act of 1995.

We wish to caution you not to place undue reliance on these forward-looking statements which speak only as of the date on which they are made. In addition, we wish to advise you that the factors listed below, as well as other factors that we may or may not have not currently identified, could affect our financial or other performance and could cause our actual results for future periods to differ materially from any opinions or statements expressed with respect to future periods or events in any current statement.

We will not undertake and specifically decline any obligation to publicly release revisions to these forward-looking statements to reflect either circumstances after the date of the statements or the occurrence of events which may cause us to re-evaluate our forward-looking statements.

In connection with the "safe harbor" provisions of the Private Securities Litigation Reform Act, we are hereby filing cautionary statements identifying important factors that could cause our actual results to differ materially from those projected in forward-looking statements made by us or on our behalf.

If semiconductor equipment manufacturers do not make sufficient capital expenditures, our sales and profitability will be harmed.

We anticipate that a significant portion of our new orders will depend upon demand from semiconductor manufacturers who build or expand fabrication facilities. If the rate of construction or expansion of fabrication facilities declines, demand for our systems will decline, reducing our revenues. This would also hurt our profitability, because our continued investments in engineering, research and development and marketing necessary to develop new products and

to maintain extensive customer service and support capabilities limit our ability to reduce expenses in proportion to declining sales.

A number of factors may cause semiconductor manufacturers to make reduced capital expenditures, including the following.

Downturns in the semiconductor industry may further reduce demand for our products, harming our sales and profitability.

The semiconductor business is highly cyclical and the industry has been in a severe down cycle since early in 2001, the length of which cannot be predicted. This continues to reduce demand for new or expanded fabrication facilities. Any continuing weakness or future downturns or slowdowns in the industry may adversely affect our financial condition.

Oversupply in the semiconductor industry reduces demand for capital equipment, including our products.

Inventory buildups in the semiconductor industry, resulting in part from the down cycle, have produced a current oversupply of semiconductors. This has caused semiconductor manufacturers to revise capital spending plans, resulting in reduced demand for capital equipment such as our products. If this oversupply is not reduced by increasing demand from the various electronics industries that use semiconductors, which we cannot accurately predict, our sales and profitability will be harmed.

Industry consolidation and outsourcing of semiconductor manufacturing may reduce the number of our potential customers, harming our revenues.

The substantial expense of building, upgrading or expanding a semiconductor fabrication facility is increasingly causing semiconductor companies to contract with foundries to manufacture their semiconductors. In addition, consolidation and joint venturing within the semiconductor manufacturing industry is increasing. We expect these trends to continue, which will reduce the number of our potential customers. This increased concentration of our customers potentially makes our revenues more volatile as a higher percentage of our total revenues are tied to a particular customer's buying decisions.

If we fail to develop and introduce reliable new or enhanced products and services that meet the needs of semiconductor manufacturers, our results will suffer.

Rapid technological changes in semiconductor manufacturing processes require us to respond quickly to changing customer requirements. Our future success will depend in part upon our ability to develop, manufacture and successfully introduce new systems and product lines with improved capabilities and to continue to enhance existing products, including products that process 300 millimeter wafers. This will depend upon a variety of factors, including new product selection, timely and efficient completion of product design and development and of manufacturing and assembly processes, product performance in the field and effective sales and marketing. In particular:

- . We must develop the technical specifications of competitive new systems, or enhancements to our existing systems, and manufacture and ship these systems or enhancements in volume in a timely manner.
- . We will need to accurately predict the schedule on which our customers will be ready to transition to new products, in order to accurately forecast demand for new products while managing the transition from older products.
- . We will need to effectively manage product reliability or quality problems that often exist with new systems, in order to avoid reduced orders, higher manufacturing costs, delays in acceptance and payment and additional service and warranty expenses.
- . Our new products must be accepted in the marketplace.

Our failure to meet any of these requirements will have a material adverse effect on our operating results and profitability.

If we fail to compete successfully in the highly competitive semiconductor equipment industry, our sales and profitability will decline.

The market for semiconductor manufacturing equipment is highly competitive and includes companies with substantially greater financial, engineering, manufacturing, marketing and customer service and support resources than we have that may be better positioned to compete successfully in the industry. In addition, there are smaller, emerging semiconductor equipment companies that provide innovative systems with technology that may have performance advantages over our systems. Competitors are expected to continue to improve the design and performance of their existing products and processes and to introduce new products and processes with improved price and performance characteristics. If we are unable to improve or introduce competing products when demanded by the markets, our business will be harmed. In addition, if competitors enter into strategic relationships with leading semiconductor manufacturers covering products similar to those sold or being developed by us, our ability to sell products to those manufacturers may be adversely affected.

We have been dependent on sales to a limited number of large customers; the loss of any of these customers or any reduction in orders from them could materially affect our sales.

Historically, we have sold a significant proportion of our products and services to a limited number of fabricators of semiconductor products. For example, in 2001, one of our customers, STMicroelectronics N.V. accounted for 13.9% of our net sales, and our top ten customers accounted for 67.2%. None of our customers has entered into a long-term agreement requiring it to purchase our products. Although the composition of the group comprising our largest customers has varied from year to year, the loss of a significant customer or any reduction or delays in orders from any significant customer, including reductions or delays due to customer departures from recent buying patterns, or market, economic or competitive conditions in the semiconductor industry, could adversely affect us. The ongoing consolidation of semiconductor manufacturers may also increase the harmful effect of losing a significant customer.

Our quarterly financial results may fluctuate significantly and may fall short of anticipated levels.

We derive most of our revenues from the sale of a relatively small number of expensive products to a small number of customers. The list prices on these products range from \$200,000 to over \$4.0 million. At our current sales level, each sale, or failure to make a sale, could have a material effect on us in a particular quarter. Our lengthy sales cycle, coupled with customers' competing capital budget considerations, make the timing of customer orders uneven and difficult to predict. In a given quarter, a number of factors can adversely affect our revenues and results, including changes in our product mix, increased fixed expenses per unit due to reductions in the number of products manufactured, and higher fixed costs due to increased levels of research and development and expansion of our worldwide sales and marketing organization. Our gross margins also may be affected by the introduction of new products. We typically become more efficient in producing our products as they mature. For example, our gross margins in 2001 were adversely affected in part as a result of the increased proportion of systems sold to process 300 millimeter wafers. In addition, our backlog at the beginning of a quarter typically does not include all orders required to achieve our sales objectives for that quarter and is not a reliable indicator of our future sales. As a result, our net sales and operating results for a quarter depend on our shipping orders as scheduled during that quarter as well as obtaining new orders for products to be shipped in that same quarter. Any delay in, or cancellation of, scheduled shipments or in shipments from new orders could materially and adversely affect our financial results. Due to the foregoing factors, we believe that period-to-period comparisons of our operating results should not be relied upon as an indicator of our future performance.

A termination of our relationships with Sumitomo Heavy Industries, Ltd. will put additional demands on our business.

We receive royalties under a License Agreement with our joint venture Sumitomo Eaton Nova or SEN. We are also credited with 50% of the equity income or loss from SEN's operations. Royalties and income from SEN have been a substantial contribution to our earnings, and a substantial decline in SEN's sales and income from operations could have a material adverse effect on our net income. We have also benefited from research and development conducted by SEN engineers. This License Agreement is expected to expire on December 31, 2004. If Axcelis and Sumitomo Heavy Industries, Ltd., our joint venture partner, cannot agree to terms on which the license will be extended after the end of 2004, the joint venture will effectively terminate at that time. In that event, we will be required to invest in our own infrastructure to sell and service ion implant products in Japan or find a new partner.

We also have an arrangement with Sumitomo, outside the SEN joint venture, under which Sumitomo distributes and services our dry strip, photostabilization and rapid thermal processing products to semiconductor manufacturers in Japan. This distribution arrangement expires in March 2003 unless renewed. We are currently negotiating the terms of a continuing arrangement with Sumitomo under which they would continue to sell these products in Japan. Although we support Sumitomo's activities in Japan, a termination of the distributor agreement with SHI would

require us to invest in our own infrastructure to sell and service these products in Japan or find a new partner.

A decline in sales of our products and services to customers outside the United States would hurt our business and profits.

We are substantially dependent on sales of our products and services to customers outside the United States, which accounted for approximately 53.5%, 69.4% and 70% of our net sales in 1999, 2000 and 2001, respectively. We anticipate that international sales will continue to account for a significant portion of our net sales. Because of our dependence upon international sales, our results and prospects may be adversely affected by a number of factors, including:

- . unexpected changes in laws or regulations resulting in more burdensome governmental controls, tariffs, restrictions, embargoes or export license requirements;
- . difficulties in obtaining required export licenses;
- . volatility in currency exchange rates;
- . political and economic instability, particularly in Asia;
- . difficulties in accounts receivable collections;
- . extended payment terms beyond those customarily offered in the United States;
- . difficulties in managing distributors or representatives outside the United States;
- . difficulties in staffing and managing foreign subsidiary and branch operations; and
- . potentially adverse tax consequences.

Making more sales denominated in foreign currencies to counteract the strong dollar may expose us to additional risks that could hurt our results.

Substantially all of our sales to date have been denominated in U.S. dollars. Our products become less price competitive in countries with currencies that are declining in value in comparison to the dollar. This could cause us to lose sales or force us to lower our prices, which would reduce our gross margins. Our equity income and royalty income from SEN are denominated in Japanese yen, which exposes us to some risk of currency fluctuations. If it becomes necessary for us to make more sales denominated in foreign currencies to counteract the strong dollar, we will become more exposed to these risks.

We may not be able to maintain and expand our business if we are not able to retain, hire and integrate additional qualified personnel.

Our business depends on our ability to attract and retain qualified, experienced employees. There is substantial competition for experienced engineering, technical, financial, sales and marketing personnel in our industry. In particular, we must attract and retain highly skilled design and process engineers. Competition for such personnel is intense, particularly in the areas where we are based, including the Boston metropolitan area and the Rockville,

Maryland area, as well as in other locations around the world. If we are unable to retain our existing key personnel, or attract and retain additional qualified personnel, we may from time to time experience levels of staffing inadequate to develop, manufacture and market our products and perform services for our customers. As a result, our growth could be limited or we could fail to meet our delivery commitments or experience deterioration in service levels or decreased customer satisfaction, all of which could adversely affect our financial results and cause the value of our notes and stock to decline.

Our dependence upon a limited number of suppliers for many components and sub-assemblies could result in increased costs or delays in manufacture and sales of our products.

We rely to a substantial extent on outside vendors to manufacture many of the components and subassemblies of our products. We obtain many of these components and sub-assemblies from either a sole source or a limited group of suppliers. Because of our reliance on outside vendors generally, and on a limited group of suppliers in particular, we may be unable to obtain an adequate supply of required components on a timely basis, on price and other terms acceptable to us, or at all.

In addition, we often quote prices to our customers and accept customer orders for our products before purchasing components and subassemblies from our suppliers. If our suppliers increase the cost of components or subassemblies, we may not have alternative sources of supply and may not be able to raise the price of our products to cover all or part of the increased cost of components.

The manufacture of some of these components and subassemblies is an extremely complex process and requires long lead times. As a result, we have in the past and may in the future experience delays or shortages. If we are unable to obtain adequate and timely deliveries of our required components or subassemblies, we may have to seek alternative sources of supply or manufacture these components internally. This could delay our ability to manufacture or to ship our systems on a timely basis, causing us to lose sales, incur additional costs, delay new product introductions and suffer harm to our reputation.

Our historical financial information may not be representative of our results as a separate company.

Our combined financial statements for periods ending on or before June 30, 2000 have been carved out from the consolidated financial statements of Eaton Corporation using the historical bases of assets, liabilities and operating results of the semiconductor equipment operations business of Eaton that we comprised. Accordingly, our historical financial information for those periods does not necessarily reflect what our financial position, operating results and cash flows would have been had we been a separate, stand-alone entity during the periods presented. Our costs and expenses for those periods were allocated to our business based on Eaton's internal expense allocation methodology, which charges these expenses to operating locations based both on net working capital, excluding short-term investments and short-term debt, and on property, plant and equipment-net. While we believe this allocation methodology is

reasonable and allocated costs are representative of the operating expenses that would have been incurred had we operated on a stand-alone basis, such historical financial information is not necessarily indicative of what our financial position, operating results and cash flows will be in the future. We have not made adjustments to this historical financial information to reflect any significant changes that may occur in our cost structure and operations as a result of our separation from Eaton, including increased costs associated with being a publicly traded, stand-alone company.

In certain circumstances, we may need additional capital.

Our capital requirements may vary widely from quarter to quarter, depending on, among other things, capital expenditures, fluctuations in our operating results, financing activities, acquisitions and investments and inventory and receivables management. We believe that our available cash, our credit line and our future cash flow from operations will be sufficient to satisfy our working capital, capital expenditure and research and development requirements for the foreseeable future. This, of course, depends on the accuracy of our assumptions about levels of sales and expenses, and a number of factors, including those described in these "Risk Factors," could cause us to require additional capital from external sources. In addition, in the future, we may require or choose to obtain additional debt or equity financing in order to finance acquisitions or other investments in our business. Depending on market conditions, future equity financings may not be possible on attractive terms and would be dilutive to the existing holders of our common stock and convertible notes. Moreover, until the end of 2002, we are restricted in raising substantial amounts of equity capital under a covenant to Eaton Corporation. Our existing credit agreement contains restrictive covenants and future debt financings could involve additional restrictive covenants, all of which may limit the manner in which we conduct our business.

We may incur costly litigation to protect our proprietary technology, and if unsuccessful, we may lose a valuable asset or experience reduced market share.

We rely on a combination of patents, copyrights, trademark and trade secret laws, non-disclosure agreements and other intellectual property protection methods to protect our proprietary technology. Despite our efforts to protect our intellectual property, our competitors may be able to legitimately ascertain the non-patented proprietary technology embedded in our systems. If this occurs, we may not be able to prevent their use of this technology. Our means of protecting our proprietary rights may not be adequate and our patents may not be sufficiently broad to prevent others from using technology that is similar to or the same as our technology. In addition, patents issued to us have been, or might be challenged, and might be invalidated or circumvented and any rights granted under our patents may not provide adequate protection to us. Our competitors may independently develop similar technology, duplicate features of our products or design around patents that may be issued to us. As a result of these threats to our proprietary technology, we may have to resort to costly litigation to enforce or defend our intellectual property rights.

On January 8, 2001, we filed a lawsuit against Applied Materials, Inc. ("Applied") in the United States District Court for the District of Massachusetts. The complaint alleges that Applied's medium current/high energy ion implanter machine launched in November 2000 infringes our patent for ion implantation equipment using radio frequency linear accelerator technology. We have also alleged that Applied unlawfully interfered with our existing and future contracts. On January 18, 2001, we filed a motion for a preliminary injunction for the reason, among others, that infringement at the time of industry transition between equipment capable of handling 200 millimeter wafers and equipment capable of handling 300 millimeter wafers would irreparably harm us. Through this motion, we asked the court to stop Applied from manufacturing, selling or offering to sell its medium current/high energy ion implanter machine and to order Applied to remove all our patented technology from implanters that Applied may have placed in chipmakers' plants for process development trials. Applied filed counterclaims of unfair competition, defamation and tortious interference with prospective economic advantage, all of which, it contends, arise from certain communications we allegedly made about the lawsuit and its claims of infringement.

The court deferred a decision on the preliminary injunction, indicating that it would seek to reach an expeditious trial on the merits. Hearings on summary judgment motions began in December 2001. At that time, the court stated that it would issue a claims construction, interpreting the scope of our patent, prior to ruling on the summary judgement motions. We are awaiting issuance of the court's claims construction. We believe our claims are meritorious and intend to pursue the matter vigorously. Although there can be no assurance of a favorable outcome and we have incurred significant legal expenses to pursue this litigation, we do not believe that our pursuit of this matter will have a material adverse effect on our financial condition, results of operations or liquidity. In the event that Applied is found not to have infringed, we expect that Applied will continue to sell its medium current/high energy implanter as a new and substantial competitor for sales of high energy/medium current ion implantation equipment.

We might face intellectual property infringement claims or patent disputes that may be costly to resolve and, if resolved against us, could be very costly to us and prevent us from making and selling our systems.

From time to time, claims and proceedings have been or may be asserted against us relative to patent validity or infringement matters. Our involvement in any patent dispute or other intellectual property dispute or action to protect trade secrets, even if the claims are without merit, could be very expensive to defend and could divert the attention of our management. Adverse determinations in any litigation could subject us to significant liabilities to third parties, require us to seek costly licenses from third parties and prevent us from manufacturing and selling our systems. Any of these situations could have a material adverse effect on us and cause the value of our common stock to decline.

Our agreements with Eaton Corporation may not have the same terms that such agreements would have if they had been negotiated in an arm's length transaction.

Before our initial public offering, we entered into a number of agreements with Eaton Corporation. These agreements were negotiated at a time when we were a wholly-owned subsidiary of Eaton and therefore may not have the same terms that such agreements would have had if they had been negotiated in an arm's length transaction.

Covenants and payables in favor of Eaton. Our agreements with Eaton restrict our operations and obligate us to make payments to Eaton in certain situations, including:

- . The Tax Sharing and Indemnification Agreement makes us liable to Eaton for our allocable share of taxes arising for all periods beginning after December 31, 1999 through December 29, 2000. If Eaton were audited for this period and additional taxes were due, we would be obligated to indemnify Eaton.
- . Until December 29, 2002, without Eaton's consent, we may not liquidate, merge or consolidate with any person, dispose of or restructure the holding of our assets, or enter into any transaction or make any change in our equity structure that would violate a restrictive covenant designed to protect the tax-free nature of Eaton's distribution of our shares in December 2000.
- . We have agreed not to solicit or recruit employees of Eaton without Eaton's consent until December 29, 2002.

Conflicts under Eaton agreements and otherwise. Conflicts may arise under our agreements with Eaton Corporation and other interests of Axcelis and Eaton may differ from time to time. We have agreed to submit all disputes under the agreements with Eaton to binding arbitration, following nonbinding mediation, unless the failure to initiate litigation would cause serious and irreparable injury to one of us or others. Two of our current directors are also directors of Eaton and one, Alexander M. Cutler, is also the Chairman and Chief Executive Officer of Eaton. Our directors who are also directors of Eaton have obligations to both companies and may have conflicts of interest with respect to matters that could have different implications for Eaton and us.

