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, 2005

or

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

For the transition period from to

Commission file number 000-30941

AXCELIS TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

Delaware	**34-1818596**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)

108 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 o.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act). Yes ☒ No o.

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

As of November 4, 2005 there were 100,523,916 shares of the registrant's common stock outstanding.

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PART 1. FINANCIAL INFORMATION

Item 1. Financial Statements

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

	Three months ended September 30,		Nine months ended September 30,	
	2005	2004	2005	2004
Revenue				
Systems	$ 47,083	$ 79,402	$ 155,723	$ 277,992
Services	39,280	44,827	116,724	125,097
Royalties, primarily Sumitomo Eaton Nova Corporation	1,019	3,667	7,149	10,380
	87,382	127,896	279,596	413,469
Cost of revenue	51,679	73,817	163,156	240,814
Gross profit	35,703	54,079	116,440	172,655
Operating expenses				
Research and development	17,755	16,645	51,165	48,009
Sales and marketing	10,691	12,248	34,565	36,683
General and administrative	11,994	11,943	34,996	34,645
Amortization of intangible assets	612	612	1,836	1,836
Restructuring charges	1,545	—	5,427	—
	42,597	41,448	127,989	121,173
Income (loss) from operations	(6,894)	12,631	(11,549)	51,482
Other income (expense)				
Equity income of Sumitomo Eaton Nova Corporation	1,395	9,065	11,360	22,212
Interest income	1,505	571	3,799	1,205
Interest expense	(1,661)	(1,643)	(4,971)	(5,017)
Other—net	435	(445)	(2)	(1,091)
	1,674	7,548	10,186	17,309
Income (loss) before income taxes	(5,220)	20,179	(1,363)	68,791
Income taxes (credit)	(53)	1,097	1,157	1,657
Net income (loss)	$ (5,167)	$ 19,082	$ (2,520)	$ 67,134
Net income (loss) per share				
Basic	$ (0.05)	$ 0.19	$ (0.03)	$ 0.68
Diluted	(0.05)	0.19	(0.03)	0.66
Shares used in computing net income (loss) per share				

Basic	100,428	99,797	100,256	99,432
Diluted	100,428	101,007	100,256	101,271

See accompanying Notes to Consolidated Financial Statements

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

	September 30, 2005	December 31, 2004
ASSETS		
Current assets		
Cash and cash equivalents	$ 85,806	$ 108,295
Short-term investments	87,688	78,703
Restricted cash	8,149	3,498
Accounts receivable, net	65,914	83,767
Inventories	108,296	116,330
Prepaid expenses and other current assets	38,829	14,986
Total current assets	394,682	405,579
Property, plant & equipment, net	72,633	75,275
Investment in Sumitomo Eaton Nova Corporation	108,817	109,095
Goodwill	46,773	46,773
Intangible assets	15,835	17,671
Restricted cash, long-term portion	2,562	2,841
Other assets	21,744	31,628
	$ 663,046	$ 688,862
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 22,957	$ 24,278
Accrued compensation	16,721	27,030
Warranty	8,321	9,218
Income taxes	2,627	4,530
Deferred revenue	33,682	34,050
Other current liabilities	8,449	8,289
Total current liabilities	92,757	107,395
Long-term debt	125,000	125,000
Long-term deferred revenue	8,880	7,697
Other long-term liabilities	5,530	5,297
Stockholders' equity		
Preferred stock	—	—
Common stock	101	100
Additional paid-in capital	466,496	457,335
Deferred compensation	(5,974)	(566)
Treasury stock	(1,218)	(1,218)
Accumulated deficit	(29,852)	(27,332)
Accumulated other comprehensive income	1,326	15,154
	430,879	443,473
	$ 663,046	$ 688,862

See accompanying Notes to Consolidated Financial Statements

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

	Nine months ended September 30,	
	2005	2004
Operating activities		
Net income (loss)	$ (2,520)	$ 67,134

Adjustments required to reconcile net income (loss) to net cash provided by (used for) operating activities		
Depreciation and amortization	15,835	14,998
Amortization of intangible assets	1,836	1,836
Stock compensation expense	593	196
Impairment of fixed assets	725	—
Undistributed income of Sumitomo Eaton Nova Corporation	(11,360)	(22,212)
Changes in operating assets and liabilities		
Accounts receivable	16,719	(36,547)
Inventories	5,981	6,268
Other current assets	(24,506)	(6,362)
Accounts payable and other current liabilities	(11,663)	(2,399)
Deferred revenue	902	26,151
Income taxes	(1,818)	(1,207)
Other assets and liabilities	3,035	(2,927)
Net cash provided by (used for) operating activities	(6,241)	44,929
Investing activities		
Purchases of short-term investments	(86,297)	(83,770)
Sales and maturities of short-term investments	77,115	38,900
Proceeds from sale of building	—	5,958
Expenditures for property, plant and equipment	(6,329)	(3,240)
Decrease (increase) in restricted cash	(4,372)	430
Net cash used for investing activities	(19,883)	(41,722)
Financing activities		
Proceeds from the exercise of stock options	1,142	1,540
Proceeds from employee stock purchase plan	2,150	3,376
Net cash provided by financing activities	3,292	4,916
Effect of exchange rate changes on cash	343	331
Net increase (decrease) in cash and cash equivalents	(22,489)	8,454
Cash and cash equivalents at beginning of period	108,295	65,749
Cash and cash equivalents at end of period	$ 85,806	$ 74,203

See accompanying Notes to Consolidated Financial Statements

Axcelis Technologies, Inc.
Notes To Consolidated Financial Statements (Unaudited)
(In thousands, except per share amounts)

Note 1. Nature of Business and Basis of Presentation

Axcelis Technologies, Inc. (“Axcelis” or the “Company”), is a worldwide producer of ion implantation, dry strip, thermal processing and curing equipment used in the fabrication of semiconductors in the United States, Europe and Asia. In addition, the Company provides extensive aftermarket service and support, including spare parts, equipment upgrades, and maintenance services. The Company owns 50% of the equity of a 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 relating to the manufacture of ion implantation products and has exclusive rights to manufacture and sell these products in the territory of Japan. SEN 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 interim periods presented are not necessarily indicative of the results that may be expected for other interim periods or for the year as a whole.

Certain prior year amounts have been reclassified to conform with the current year presentation.

The balance sheet at December 31, 2004 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 regarding Axcelis, refer to the consolidated financial statements and footnotes thereto included in Axcelis’ Annual Report on Form 10-K for the year ended December 31, 2004. For further information regarding SEN, refer to the financial statements and footnotes thereto included in Amendment No. 1 to Axcelis’ Annual Report on Form 10-K/A for the year ended December 31, 2004.

Note 2. Short-term Investments and Cash and Cash Equivalents

Axcelis invests excess cash primarily in money market funds, commercial paper, corporate notes, direct and indirect U.S. government obligations, bank certificates of deposit, time deposits and auction rate securities. Investments purchased with a maturity of ninety days or less at the time of acquisition and considered highly liquid are classified as cash equivalents.

Axcelis’ practice is to minimize investment risk by diversifying according to issuer, type and maturity. Axcelis generally intends to hold its investments until final maturity. In the case of auction rate securities, however, which have long-term underlying maturities, Axcelis’ intent is not to hold them until final maturity. Instead, Axcelis’ practice is to take advantage of the rate reset feature for liquidity and enhanced yield relative to alternative short-term investments. Rates on auction rate securities reset at auction every 7, 28, or 35 days.

Beginning in the first quarter of 2005 Axcelis began classifying its investments in auction rates securities as short-term investments and began accounting for all of its investments as available-for-sale. Pursuant to Statement of Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities," investments are carried on the balance sheet at fair market value. Unrealized gains and losses are excluded from earnings and included as a separate component of stockholders' equity, until realized. Realized gains and losses are included in earnings.

The following table summarizes the effect of the reclassification of auction rate securities from cash equivalents to short-term investments and the accounting change from held-to-maturity to available-for-sale:

	Cash & cash equivalents		Short-term investments	
	As reported	Reclassified	As reported	Reclassified
December 31, 2004	168,495	108,295	18,517	78,703
September 30, 2004	138,004	74,204	23,549	87,339
June 30, 2004	139,095	89,295	18,616	68,401
March 31, 2004	120,784	86,384	—	34,400
December 31, 2003	93,249	65,749	14,972	42,472

The following tables summarize the composition of short-term available-for-sale investments at September 30, 2005 and December 31, 2004. Fair value was determined based upon quoted market prices.

	As of September 30, 2005	
	Amortized Cost	Fair Value
Auction rate securities	$ 60,850	$ 60,850
U.S. corporate debt	21,955	21,911
U.S. government agencies	4,928	4,927
	$ 87,733	$ 87,688

	As of December 31, 2004	
	Amortized Cost	Fair Value
Auction rate securities	$ 60,200	$ 60,200
U.S. corporate debt	13,517	13,503
Certificates of deposit	5,000	5,000
	$ 78,717	$ 78,703

The following tables summarize the contractual maturities of short-term available for sale investments at September 30, 2005 and December 31, 2004.

	As of September 30, 2005		
	Amortized Cost	Fair Value	Gross unrealized loss
Due in one year or less	$ 26,883	$ 26,838	$ (45)
Due after 10 years	60,850	60,850	—
	$ 87,733	$ 87,688	$ (45)

	As of December 31, 2004		
	Amortized Cost	Fair Value	Gross unrealized loss
Due in one year or less	$ 18,517	$ 18,503	$ (14)
Due after 10 years	60,200	60,200	—
	$ 78,717	$ 78,703	$ (14)

Note 3. Revenue Recognition

The Company's revenue recognition policy involves significant judgment by management. As described in detail below, the Company considers a broad array of facts and circumstances in determining when to recognize revenue, including contractual obligations to the customer, the complexity of the customer's post delivery acceptance provisions, payment history, customer creditworthiness and the installation process. In the future, if the post delivery acceptance provisions and installation process become more complex or result in a materially lower rate of acceptance, the Company may have to revise its revenue recognition policy, which could affect the timing of revenue recognition.

For revenue arrangements prior to July 1, 2003, Axcelis generally recognized the full sale price at the time of shipment to the customer. The costs of system installation at the customer's site were accrued at the time of shipment for installation and acceptance testing performance obligations incurred at the time of sale. In addition, the standard and non-standard warranties were accrued at the time of shipment. The Company recognized the full sales price at the time of shipment, as management believed that the customer's post delivery acceptance provisions and installation process were established to be routine, commercially inconsequential and perfunctory because the process was a replication of the pre-shipment procedures. Also, customer payment terms typically

provided that the majority of the purchase price was payable upon shipment. Terms generally contained delayed payment arrangements for a portion of the purchase price, which were typically time-based.

In November 2002, the Financial Accounting Standards Board's Emerging Issues Task Force reached a consensus on Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables" ("EITF 00-21"). This issue addresses determination of whether an arrangement involving more than one deliverable contains more than one unit of accounting and how the arrangement consideration should be measured and allocated to the separate units of accounting. EITF 00-21 became effective for revenue arrangements entered into in periods beginning after June 15, 2003. For revenue arrangements occurring on or after July 1, 2003, the Company has revised its revenue recognition policy to comply with the provisions of EITF 00-21.

In December 2003, the Securities and Exchange Commission ("SEC") issued Staff Accounting Bulletin No. 104 ("SAB 104"), "Revenue Recognition." SAB 104 supersedes Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB 101"). SAB 104's primary purpose is to rescind accounting guidance contained in SAB 101 related to multiple element revenue arrangements, superseded as a result of the issuance of EITF 00-21. Additionally, SAB 104 rescinds the SEC's Revenue Recognition in Financial Statements Frequently Asked Questions and Answers ("the FAQ") issued with SAB 101 that had been codified in SEC Topic 13, Revenue Recognition. Selected portions of the FAQ have been incorporated into SAB 104. While the wording of SAB 104 has changed to reflect the issuance of EITF 00-21, the revenue recognition principles of SAB 101 remain largely unchanged by the issuance of SAB 104. As a result, the adoption of this pronouncement did not have any impact on the Company's consolidated financial statements.

Axcelis' revenue transactions include sales of systems under multiple element arrangements. Revenue under these arrangements is allocated to each element, except systems, based upon its estimated fair market value. The amount of revenue allocated to systems is calculated on a residual method. Under this method, the total value of the arrangement is allocated first to the undelivered elements, with the residual amount being allocated to systems revenue. The value of the undelivered elements includes (a) the greater of (i) the fair value of the installation or (ii) the portion of the sales price that will not be received until the installation is completed (the "retention") plus (b) the fair value of all other undelivered elements. The amount allocated to installation is based upon the fair value of the service performed, including labor, which is based upon the estimated time to complete the installation and hourly rates, and material components. The fair value of all other undelivered elements is based upon the price charged when these elements are sold separately. Systems revenue is generally recognized upon shipment provided title and risk of loss has passed to the customer, evidence of an arrangement exists, fees are contractually fixed or determinable, collectibility is reasonably assured through historical collection results and regular credit evaluations, and there are no uncertainties regarding customer acceptance. Revenue from installation services is recognized at the time formal acceptance is received from the customer or, for installation of certain systems to certain customers, when both the formal acceptance and retention payment have been received. Revenue for other elements is recognized at the time products are shipped or the related services are performed.

Management continues to believe recognition of systems revenue at the time of shipment is appropriate because the customer's post delivery acceptance provisions and installation process have been established to be routine, commercially inconsequential and perfunctory. The significant majority of Axcelis' systems are designed and tailored to meet the customer's specifications, as outlined in the contract between the customer and Axcelis, which may be the Axcelis standard specification. To ensure that the customer's specifications are satisfied, many customers request that newer systems be tested at Axcelis' facilities prior to shipment, normally with the customer present, under conditions that substantially replicate the customer's production environment. Customers for mature products generally do not require pre-shipment testing. The Company believes the risk of failure to complete a system installation is remote. Should an installation not be completed successfully, the contractual provisions do not provide for

forfeiture, refund or other purchase price concession beyond those prescribed by the provisions of the Uniform Commercial Code applicable generally to such transactions.

In the small number of instances where Axcelis is unsure of meeting the customer's specifications or obtaining customer acceptance upon shipment of the system or for initial shipments of systems with new technologies, Axcelis will defer the recognition of systems revenue until written customer acceptance of the system and or cash payment is obtained. This deferral period is generally within twelve months from shipment.

Services revenue includes revenue from spare parts, equipment upgrades and maintenance services. Revenue related to maintenance and service contracts is generally recognized ratably over the duration of the contracts, or based on parts usage, where appropriate. Revenue related to time and material services is recognized when the services are performed. Revenue related to spare parts sales is recognized upon the later of shipment or when the title and risk of loss passes to the customer. Revenue related to equipment upgrades is recognized upon the later of shipment or when the title and risk of loss passes to the customer, unless payment from the customer is contingent upon the upgrade being installed and accepted in which case revenue recognition is deferred until acceptance.

Note 4. Net Income (Loss) Per Share

SFAS 128, "Earnings Per Share," requires two presentations of earnings per share, "basic" and "diluted." Basic earnings per share is computed by dividing income available to common stockholders (the numerator) by the weighted-average number of common shares outstanding (the denominator) for the period. The computation of diluted earnings per share is similar to basic earnings per share, except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potentially dilutive common shares had been issued.

A reconciliation of net income and shares used in computing basic and diluted earnings per share follows:

	Three months ended September 30,		Nine months ended September 30,	
	2005	2004	2005	2004
Income (loss) available to common stockholders	$ (5,167)	$ 19,082	$ (2,520)	$ 67,134
Weighted average common shares outstanding used in computing basic net income (loss) per share	100,428	99,797	100,256	99,432
Incremental shares	—	1,210	—	1,839
Weighted average common shares outstanding used in computing diluted net income (loss) per share	100,428	101,007	100,256	101,271
Basic net income (loss) per share	$ (0.05)	$ 0.19	$ (0.03)	$ 0.68
Diluted net income (loss) per share	(0.05)	0.19	(0.03)	0.66

The Company has excluded 6,250 of common stock equivalents attributable to conversion of its 4.25% convertible subordinated notes, computed using the if converted method, from the computation of diluted earnings per share for the three and nine months ended September 30, 2005 and September 30, 2004, because they were anti-dilutive. Additionally, the exercise prices for certain stock options that the Company has awarded exceed the average market price of the Company's common stock. Such stock options are anti-dilutive and were not included in the computation of diluted earnings per share. The anti-dilutive stock options outstanding were 9,524 and 8,147 for the three and nine months ended September 30, 2004, respectively. For the three and nine months ended September 30, 2005, all options outstanding at September 30, 2005 (13,861 common shares) were excluded from the computation of dilutive earnings per share because the Company incurred a loss for these periods.

Note 5. Comprehensive Income (Loss)

The components of comprehensive income (loss) follow:

	Three months ended September 30,		Nine months ended September 30,	
	2005	2004	2005	2004
Net income (loss)	$ (5,167)	$ 19,082	$ (2,520)	$ 67,134
Other comprehensive income (loss):				
Foreign currency translation adjustments	(3,276)	(420)	(13,797)	(1,762)
Unrealized gain (loss) on short term investments	(16)	5	(31)	(10)
Comprehensive income (loss)	$ (8,459)	$ 18,667	$ (16,348)	$ 65,362

Note 6. Accounts Receivable

The components of accounts receivable follow:

	September 30, 2005	December 31, 2004
Trade receivables	$ 69,509	$ 87,395
Allowance for doubtful accounts	(3,595)	(3,628)
	$ 65,914	$ 83,767

Note 7. Inventories

The components of inventories follow:

	September 30, 2005	December 31, 2004
Raw materials	$ 72,905	$ 77,669
Work-in-process	25,079	29,134
Finished goods (completed systems)	10,312	9,527
	$ 108,296	$ 116,330

Note 8. Property, Plant & Equipment

The components of property, plant & equipment follow:

	September 30, 2005	December 31, 2004
Land & buildings	$ 71,527	$ 72,283
Machinery & equipment	57,819	61,675
Construction in process	7,876	3,841
	137,222	137,799
Accumulated depreciation	(64,589)	(62,524)
	$ 72,633	$ 75,275

Note 9. Intangible Assets

The components of intangible assets follow:

	September 30, 2005	December 31, 2004
Developed technology	$ 48,030	$ 48,030
Customer-related	903	903
	48,933	48,933

Accumulated amortization	(33,098)	(31,262)
	$ 15,835	$ 17,671

Note 10. Restructuring

The Company recorded restructuring charges of $1,545 and $5,427 for the three and nine months ended September 30, 2005, respectively, primarily related to severance and other termination benefits associated with reduction in force actions and the consolidation of the Company's Rockville, Maryland operations into its headquarters and manufacturing facility located in Beverly, Massachusetts. In addition to amounts reported as restructuring expense, $1,386 and $4,214 of relocation and other incremental expenses related to the consolidation of the Rockville, Maryland operations are included in general and administrative expense in the three and nine months ended September 30, 2005, respectively.

In total, the Company expects to incur approximately $13,000 in restructuring and general and administrative expenses related to these actions, of which $10,635 has been recognized as expense since the fourth quarter of 2004. The Company expects to incur approximately $2,000 to $3,000 in additional expense over the fourth quarter of 2005 and through the first half of 2006. Of the total cost related to these actions, approximately $12,000 is expected to result in cash expenditures.

Changes in the Company's restructuring liability are as follows:

	Severance	Retention	Leases	Leasehold Improvements	Total
Balance at December 31, 2004	$ 724	$ 44	$ —	$ —	$ 768
Restructuring expense	3,039	563	1,100	725	5,427
Cash payments	(2,662)	(509)	(196)	—	(3,367)
Non-cash impairment	—	—	—	(725)	(725)
Balance at September 30, 2005	$ 1,101	98	904	—	2,103

Amounts associated with the Company's restructuring liability are included in accrued compensation, other current liabilities and other long-term liabilities in the consolidated balance sheet.

Note 11. Product Warranty

The Company offers a one to three year warranty for all of its products, the terms and conditions of which vary depending upon the product sold. For all systems sold, the Company accrues a liability for the estimated cost of standard warranty at the time of system shipment and defers the portion of systems revenue attributable to the fair value of non-standard warranty. Factors that affect the Company's warranty liability include the number of installed units, historical and anticipated product failure rates, material usage and service labor costs. The Company periodically assesses the adequacy of its recorded liability and adjusts the amount as necessary.

Changes in the Company's product warranty liability are as follows:

	Nine months ended September 30,	
	2005	2004
Balance at December 31	$ 10,924	$ 17,197
Warranties issued during the period	7,181	15,693
Settlements made during the period	(6,944)	(18,328)
Changes in liability for pre-existing warranties during the period	(1,152)	580
Balance at September 30	$ 10,009	$ 15,142
Amount classified as current	$ 8,321	$ 12,689
Amount classified as long term	1,688	2,453
Balance at September 30	$ 10,009	$ 15,142

Note 12. Stock-Based Compensation

As permitted under SFAS No. 123, "Accounting for Stock-Based Compensation," as amended by SFAS No. 148, "Accounting for Stock-Based Compensation Transition and Disclosure," Axcelis has elected to follow the provisions of Accounting Principles Board ("APB") No. 25, "Accounting for Stock Issued to Employees," to account for stock-based awards to employees. Under APB No. 25, compensation expense with respect to such awards is not recognized, if, on the date the awards were granted, the exercise price was not less than the market value of the common shares.

As required by SFAS No. 123 the following pro forma information is presented as if Axcelis had accounted for stock-based awards to its employees granted subsequent to 1995 under the fair value method. The fair values of the options granted and shares purchased under the Employee Stock Purchase Plan have been estimated at the date of grant using the Black-Scholes options valuation model. The Black-Scholes options valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because Axcelis' options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in the opinion of management, the existing models do not necessarily provide a reliable single measure of the fair value of the Company's options.

For purposes of the following pro forma information, the estimated fair values of the options are assumed to be amortized to expense over the options' vesting periods.

	Three months ended September 30,		Nine months ended September 30,	
	2005	2004	2005	2004
Net income (loss)	$ (5,167)	$ 19,082	$ (2,520)	$ 67,134
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related income tax effects	(3,066)	(5,513)	(11,249)	(16,259)
Pro forma net income (loss)	$ (8,233)	$ 13,569	$ (13,769)	$ 50,875
Net income (loss) per share				
Basic – as reported	$ (0.05)	$ 0.19	$ (0.03)	$ 0.68
Basic – pro forma	(0.08)	0.14	(0.14)	0.51
Diluted – as reported	$ (0.05)	$ 0.19	$ (0.03)	$ 0.66
Diluted – pro forma	(0.08)	0.13	(0.14)	0.50

On July 1, 2005, the Compensation Committee of the Board of Directors approved the issuance of 814 restricted stock units (“RSUs”) to selected employees, including executive officers, and the issuance of 44 shares of restricted stock to Directors under the Company’s 2000 Stock Plan. RSUs represent the Company’s unfunded and unsecured promise to issue shares of the Company’s common stock, $0.001 par value (“Common Stock,” as defined in the 2000 Plan) at a future date, subject to the terms of the RSU Award Agreement and the 2000 Plan. The purpose of these awards is to assist in attracting and retaining highly competent employees and Directors and to act as an incentive in motivating selected employees and Directors to achieve long-term corporate objectives. The awards vest over four years for employees and executive officers, and in six months for Directors. Based on the market price of Axcelis Common Stock on the date of issuance, the total value of the awards was $5,910, of which $300 relates to restricted stock granted to Directors. The total issuance value of $5,910 is being amortized to expense over the respective vesting periods using the straight-line amortization method.

On October 24, 2005, the Compensation Committee of the Board of Directors of Axcelis Technologies, Inc. (the “Company”) approved the acceleration of vesting of certain unvested and “out-of-the-money” stock options with exercise prices equal to or greater than $10.00 per share previously awarded to its employees and other eligible participants, including its executive officers, under the Company’s 2000 Stock Plan. The acceleration of vesting will be effective for stock options outstanding as of December 15, 2005. The weighted average exercise price of the options subject to the acceleration is $11.52. On October 24, 2005 the closing price of the Company’s common stock was $5.68 per share.

The Company believes that because the options that have been accelerated have exercise prices in excess of the current market value of the Company’s common stock, the options have limited economic value and were not fully achieving their original objective of incentive compensation and employee retention. The acceleration enables the Company to avoid recognizing compensation expense associated with these options in future periods in its consolidated statements of operations, upon effectiveness of the application of FASB Statement No. 123R (Share-Based Payment) which the Company will adopt effective January 1, 2006. The pre-tax charge estimated by the Company to be avoided as a result of the acceleration amounts to approximately $8.7 million over the course of the original vesting periods, which on average is approximately 1.5 years from the effective date of the acceleration. The avoided estimated pre-tax charge is $4.8 million in 2006, $2.6 million in 2007 and $1.2 million in 2008. Of the approximately 1.5 million accelerated options, 309 options, or 21.2%, are held by executive officers.

Note 13. Income Taxes

At December 31, 2004, the Company had $90.9 million of deferred tax assets relating to net operating loss carryforwards, tax credit carryforwards and other temporary differences (principally in the United States and Europe), which are available to reduce income taxes in future years. SFAS No. 109 “Accounting for Income Taxes” requires that a valuation allowance be established when it is “more likely than not” that all or a portion of deferred tax assets will not be realized. A review of all available positive and negative evidence needs to be considered, including a company’s performance, the market environment in which the company operates, length of carryback and carryforward periods, existing sales backlog, and projections of future operating results. Where there are cumulative losses in recent years, SFAS No. 109 creates a strong presumption that a valuation allowance is needed. This presumption can be overcome in very limited circumstances.

During the second quarter of 2003, the Company entered a three-year cumulative loss position and revised its projections of the amount and timing of profitability in future periods. As a result, the Company increased its valuation allowance to reduce the carrying value of deferred tax assets to zero.

The Company will maintain a valuation allowance on future tax benefits until it can sustain an appropriate level of profitability. However, going forward should the Company’s return to profitability provide sufficient evidence, in accordance with the provisions of SFAS No. 109, to support the ultimate realization of income tax benefits attributable to net operating losses, tax credit carryforwards, and other deductible temporary differences, a reduction in the valuation allowance may be recorded and the carrying value of deferred tax assets may be restored, resulting in a non-cash credit to earnings.

The Company does not provide income tax expense on the equity income of Summitomo Eaton Nova Corporation since material distributions of such earnings in the form of dividends is not anticipated nor does the Company have the ability to unilaterally initiate a distribution of these earnings. If such earnings were distributed in the future, some portion of the distribution would be subject to both U.S. income taxes and foreign withholding taxes, less an adjustment for applicable foreign tax credits. At the present time the Company has available net operating loss carryforwards and income tax credits that would substantially offset any resulting tax liability.

The Company recorded an income tax credit of $0.1 million and income tax expense of $1.2 million in the three and nine months ended September 30, 2005, respectively. Income tax expense for these periods was reduced by $0.5 million by adjustments to income tax provisions recorded in prior years. The Company has significant net operating losses in the United States and certain foreign tax jurisdictions and, as a result, does not pay significant income taxes in those jurisdictions. In other foreign jurisdictions the Company is a taxpayer. Income taxes for the three and nine months ended September 30, 2005 is principally based on the estimated annual effective tax rate applied to estimated taxable income of those foreign entities generating taxable income.

The Company recorded income tax expense of $1.1 million and $1.7 million in the three and nine months ended September 30, 2004, respectively. Income tax expense for these period was reduced by $4.0 million as a result of reversal of income tax accruals recorded in prior years related to the underlying tax matters that were resolved in the second quarter of 2004. The Company has significant net operating losses in the United States and certain foreign tax jurisdictions and, as a result, does not pay significant income taxes in those jurisdictions. In other foreign jurisdictions the Company is a taxpayer. Income taxes for the three and nine months ended September 30, 2004 was principally based on the estimated annual effective tax rate applied to

estimated taxable income of those foreign entities generating taxable income. Income tax expense attributable to U.S. operations in 2004 was minimal because taxable income derived from current year operating results was substantially offset by available net operating loss carryforwards.

Note 14. Significant Customers

In the third quarter of 2005, one customer accounted for approximately 10% of revenue, a second customer accounted for approximately 11% of revenue, and a third customer accounted for approximately 13% of revenue. In the third quarter of 2004, two customers each accounted for approximately 10% of revenue. For the nine months ended, September 30, 2005 one customer accounted for approximately 21% of revenue. For the nine months ended, September 30, 2004 one customer accounted for approximately 17% of revenue.

Note 15.   Contingencies

Litigation

From time to time, the Company may be subject to legal proceedings and claims arising from the conduct of its business including litigation related to intellectual property matters, customer contract matters, employment claims and environmental matters. At September 30, 2005, the Company is not a party to any material legal proceedings.

Indemnifications

The Company’s system sales agreements typically include provisions under which the Company agrees to take certain actions, provide certain remedies and defend its customers against third-party claims of intellectual property infringement under specified conditions and to indemnify customers against any damage and costs awarded in connection with such claims. The Company has not incurred any material costs as a result of such indemnifications and has not accrued any liabilities related to such obligations in the accompanying consolidated financial statements.

Note 16. Recent Accounting Pronouncements

SFAS 151

In November 2004 the FASB issued Statement of Financial Accounting Standards No. 151 (“SFAS 151”) “Inventory Costs, an amendment of ARB 43, Chapter 4”. SFAS 151 amends the guidance in ARB No. 43, Chapter 4, “Inventory Pricing”, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs and wasted material (spoilage). SFAS 151 requires that idle facility expense, excessive spoilage, double freight, and rehandling costs be recognized as current period charges. In addition, SFAS 151 requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. SFAS 151 is effective for inventory costs incurred during fiscal years beginning after June 15, 2005, however early adoption is permitted for inventory costs incurred during fiscal years beginning after November 2004. The Company plans to adopt SFAS 151 on January 1, 2006. The Company estimates that adopting SFAS 151 will have no material effect on its financial position or results of operations.

SFAS 123R

On December 16, 2004 the FASB issued SFAS No. 123 (revised 2004), “Share-Based Payment” (“SFAS 123(R)”), which is a revision of SFAS No. 123, “Accounting for Stock-based Compensation”. SFAS 123(R) supersedes APB Opinion No. 25, “Accounting for Stock Issued to Employees” and Amends SFAS No. 95, “Statement of Cash Flows”. Generally, the approach in SFAS 123(R) is similar to the approach described in SFAS 123. However, SFAS 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the determination of net income based on their fair values. Pro forma disclosure is not an alternative. The Company plans to adopt SFAS 123(R) effective January 1, 2006.

SFAS 123(R) permits public companies to adopt its requirements using one of two methods: (1) a “modified prospective” approach or (2) a “modified retrospective” approach. Under the modified prospective approach, compensation cost is recognized beginning with the effective date based on (a) the requirements of SFAS 123(R) for all share based payments granted after the effective date and (b) the requirements of SFAS 123(R) for all awards granted to employees prior to the effective date of SFAS 123(R) that remain unvested on the effective date. The modified retrospective approach includes the requirements of the modified prospective approach, but also permits entities to restate based on the amounts previously recognized under SFAS 123 for purposes of pro forma disclosures either all prior periods presented or prior interim periods of the year of adoption. The Company plans to adopt the modified prospective approach.

As permitted by SFAS 123, the Company currently accounts for share-based payments to employees using APB Opinion No. 25’s intrinsic value method, and, as such, generally recognizes no compensation cost for employee stock options. Accordingly, the adoption of the fair value method will have a significant impact on results of operations, although it will have no impact on overall financial position. The impact of adoption of SFAS 123(R) cannot be predicted at this time because it will depend on levels of share-based payments granted in the future. However, had we adopted SFAS 123(R) in prior periods, the Company believes the impact of that standard would have approximated the impact of SFAS 123 as described above in the disclosure of pro forma net income (loss) per share.

SFAS 123(R) also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow. Since the Company does not recognize the benefit of tax deductions in excess of recognized compensation cost, because of its net operating loss position, this change will have no impact on the Company’s consolidated financial statements.

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. Factors that might cause such a difference include, among other things, those set forth under "Liquidity and Capital Resources" and "Risk Factors" 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

Axcelis Technologies, Inc. ("Axcelis" or the "Company"), is a worldwide producer of ion implantation, dry strip, thermal processing and curing equipment used in the fabrication of semiconductors. In addition, the Company provides extensive aftermarket service and support, including spare parts, equipment upgrades, and maintenance services. The Company owns 50% of the equity of a joint venture known as Sumitomo Eaton Nova Corporation, or "SEN" with Sumitomo Heavy Industries, Ltd. in Japan. SEN licenses technology from the Company relating to the manufacture of specified ion implantation products and has exclusive rights to manufacture and sell these products in the territory of Japan. SEN is the leading producer of ion implantation equipment in Japan.

The semiconductor capital equipment industry is subject to significant cyclical swings in capital spending by semiconductor manufacturers. Capital spending is influenced by demand for semiconductors and the products using them, the utilization rate and capacity of existing semiconductor manufacturing facilities and changes in semiconductor technology, all of which are outside of the Company's control. As a result, the Company's revenues and gross margins, to the extent affected by increases or decreases in

volume, can fluctuate significantly from year to year and period to period. The Company's gross margins also may be affected by the introduction of new products. The Company typically becomes more efficient in producing its products as they mature. For example, the Company's gross margins in 2002, 2003 and 2004 were adversely affected in part as a result of the increased proportion of relatively new systems sold to process 300mm wafers. At December 31, 2004, gross margins on 300mm products were in line with gross margins on the Company's 200mm products. The Company's expense base is largely fixed and does not vary significantly with changes in volume. Therefore, the Company expects to experience significant fluctuations in operating results and cash flows depending on the level of capital expenditures by semiconductor manufacturers.

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. The Company expects these trends to continue, which will reduce the number of our potential customers. This increased concentration of Axcelis' customers potentially makes its revenues more volatile as higher percentages of its total revenues are tied to a particular customer's or a small number of customers' buying decisions.

The years 2005 and 2006 are transition years in implant products and technology. While customers continue to buy multi-wafer tools, leading edge customers are shifting to single wafer tools. The Company introduced its single wafer Optima platform in 2005 and has development projects under way to produce and launch several new products with single wafer technology.

Axcelis accesses the important Japanese market for certain ion implant systems through a joint venture that the Company does not control. The joint venture agreement gives both owners veto rights, so that neither of the owners alone can effectively control SEN. SEN's business is subject to the same risks as the Company's business. Royalties and equity income from SEN have made a substantial contribution to the Company's earnings, and a substantial decline in SEN's sales and net income could have a material adverse effect on the Company's operating results. As a result of this joint venture structure, the Company has less control over SEN management than over the Company's own management and may not have timely knowledge of factors affecting SEN's business. In addition, given the equal balance of ownership, it is possible that the SEN Board may be unable to reach consensus on important matters from time to time which could delay important decisions. The license agreement between SEN and Axcelis continues in its existing form on a year-to-year basis, subject to the right of either party to terminate. Under the SEN bylaws, termination of the license agreement by SEN would be an important matter requiring approval of a majority of the SEN directors. Given Axcelis' 50% representation on the SEN Board, the license agreement will be perpetual until such time as Axcelis deems a termination to be in its interest. Axcelis has no present intent to terminate the SEN license agreement. During 2005, Axcelis and SEN sought to agree on amendments to the license agreement to add additional licensed products and related royalty terms, but no agreement has been reached as of September 30, 2005. As a result the current license agreement continues in effect.

Operating results for the interim periods presented are not necessarily indicative of the results that may be expected for other interim periods or for the year as a whole.

Critical Accounting Estimates

Management's discussion and analysis of our 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 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 under different assumptions or conditions.

The critical accounting estimates are those that the Company believes are the more significant judgments and estimates used in the preparation of the Company's condensed consolidated financial statements. As of September 30, 2005 there have been no material changes to the critical accounting estimates as described in the Company's Management's Discussion and Analysis of Financial Condition and Results of Operations and in the Notes to the consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2004.

Results of Operations

The following table sets forth Axcelis' results of operations as a percentage of total revenue for the periods indicated:

	Three months ended September 30,		Nine months ended September 30,	
	2005	2004	2005	2004
Revenue				
Systems	53.9%	62.1%	55.7%	67.2%
Services	45.0	35.0	41.7	30.3
Royalties, primarily from Sumitomo Eaton Nova Corporation	1.1	2.9	2.6	2.5
	100.0	100.0	100.0	100.0
Cost of revenue	59.1	57.7	58.4	58.2
Gross profit	40.9	42.3	41.6	41.8
Operating expenses				
Research and development	20.3	13.0	18.3	11.6
Sales and marketing	12.2	9.6	12.4	8.9
General and administrative	13.7	9.3	12.5	8.4
Amortization of intangible assets	0.7	0.5	0.7	0.4
Restructuring charges	1.8	—	1.9	—
	48.7	32.4	45.8	29.3
Income (loss) from operations	(7.9)	9.9	(4.1)	12.5
Other income (expense)				
Equity income of Sumitomo Eaton Nova Corporation	1.6	7.1	4.1	5.4
Interest income	1.7	0.5	1.4	0.3
Interest expense	(1.9)	(1.3)	(1.8)	(1.2)
Other-net	0.5	(0.4)	—	(0.3)
	1.9	5.9	3.6	4.2
Income (loss) before income taxes	(6.0)	15.8	(0.5)	16.6
Income taxes (credit)	(0.1)	0.9	0.4	0.4
Net income (loss)	(5.9)%	14.9%	(0.9)%	16.2%

Three and nine months ended September 30, 2005 in comparison to the three and nine months ended September 30, 2004.

Revenue

Systems revenue was $47.1 million, or 53.9% of revenue for the third quarter of 2005 compared with systems revenue of $79.4 million, or 62.1% of revenue for the third quarter of 2004. Systems revenue was $155.7 million, or 55.7% of revenue for the nine months ended September 30, 2005 compared with systems revenue of $278.0 million, or 67.2% of revenue for the nine months ended September 30, 2004. The decrease in systems revenue compared with 2004 was primarily attributable to the cyclicality of the semiconductor industry and the related declining market demand from the Company's semiconductor manufacturing customers, particularly with respect to capacity expansion at 200mm manufacturing facilities. While the effect is not quantifiable, systems

revenue has also declined because of semiconductor manufacturers shifting to single wafer ion implant systems, away from the Company's multi-wafer ion implant systems (principally for high dose products which the Company believes constitute approximately fifty percent of the worldwide ion implant market). The Company began shipping its new mid dose single wafer ion implant system in 2005, but has not recognized revenue for any shipments to date. The Company's first shipment of its new single wafer high dose ion implant system is expected in 2006.

Approximately 60% of systems revenue for the third quarter of 2005 was from the sale of 200mm products and 40% was from the sale of 300mm products, compared with 65% and 35%, respectively, for the third quarter of 2004. For the nine months ended September 30, 2005 approximately 44% was from the sale of 200mm products and 56% was from the sale of 300mm products compared with 63% and 37%, respectively for the nine months ended, September 30, 2004. This highlights the market trend towards 300mm products and the decrease in expansion of facilities using 200mm products.

Services revenue, which include spare parts, equipment upgrades and maintenance services, was $39.3 million, or 45.0% of revenue for the third quarter of 2005 compared with $44.8 million, or 35.0% of revenue, for the third quarter of 2004. Services revenue was $116.7 million, or 41.7% of revenue for the nine months ended September 30, 2005, compared with $125.1 million, or 30.3% of revenue for the nine months ended September 30, 2004. Services revenue fluctuates with capacity utilization by the Company's customers and the decline in services revenue for both the third quarter of 2005 and the nine months ended September 30, 2005 as compared with the corresponding periods of the preceding year is attributable to declining utilization by semiconductor manufacturers.

As described in Note 3 to the Consolidated Financial Statements, "Revenue Recognition", a portion of the Company's systems revenue is deferred until installation and other services related to future deliverables are performed. The total amount of deferred revenue at September 30, 2005 and 2004 was $42.6 million and $42.7 million, respectively. Of the $42.6 million of deferred revenue at September 30, 2005, $33.7 million is currently expected to be recognized as revenue over the next twelve months.

Royalties were $1.0 million, or 1.1% of revenue, in the third quarter of 2005, compared with $3.7 million, or 2.9% of revenue, in the third quarter of 2004. Royalties for the nine months ended September 30, 2005 were $7.1 million, or 2.6% of revenue, compared with $10.4 million, or 2.5% of revenue, in the nine months ended September 30, 2004. Royalties are primarily earned under the terms of the Company's license agreement with SEN. Revenue changes are mainly attributed to fluctuations in SEN sales volume based on demand for equipment by Japanese semiconductor manufacturers and the timing of shipments in Japan.

Revenue from sales of ion implantation products, services, and royalties accounted for $69.1 million, or 79.0%, of total revenue in the third quarter of 2005, compared with $98.1 million, or 76.7%, of total revenue in the third quarter of 2004. Revenue from sales of ion implantation products and services for the nine months ended September 30, 2005 accounted for $222.9 million, or 79.7%, of total revenue, compared with $334.3 million, or 80.9% of revenue for the nine months ended September 30, 2004.

Worldwide revenues, including revenues of SEN, for the third quarter and nine months ended September 30, 2005 were $126.3 million and $472.4 million, respectively. Worldwide revenues for the third quarter and nine months ended September 30, 2005 decreased by $92.7 million and $180.8 million, respectively as compared to the comparable periods in 2004 due to the decline in demand for equipment by semiconductor manufacturers discussed above and the timing of shipments in Japan. Axcelis believes that the information regarding the combined revenues of SEN, a 50% owned unconsolidated subsidiary of Axcelis, and Axcelis' own revenues for the periods presented, is useful to investors. SEN's ion implant products are covered by a license from Axcelis and therefore the combined revenue of the two companies indicates the full market penetration of Axcelis' technology.

Gross Profit

Gross profit was 40.9% of revenue in the third quarter of 2005 compared with gross profit of 42.3% of revenue in the third quarter of 2004. The gross profit decrease of 1.4 percentage points was the result of losses on two tools recorded in the quarter (approximately 2.1 percentage points), the unfavorable impact of systems produced at higher operating overheads (approximately 2.1 percentage points), an unfavorable product mix in the quarter (approximately 2.0 percentage points) and lower royalty revenues (approximately 1.7 percentages points), partially offset by higher margins on service revenues (approximately 5.5 percentage points).

Gross profit was 41.6% of revenue for the nine months ended September 30, 2005 compared with gross profit of 41.8% of revenue for the nine months ended September 30, 2004. The gross profit decrease of 0.2 percentage points was the result of unfavorable systems cost and mix (approximately 2.5 percentage points) and volume (approximately 1.8 percentage points), impact of systems produced at higher operating overheads (approximately 0.4 percentage points), losses on two tools recorded during the third

quarter (approximately 0.7 percentage points), offset by higher margins on service revenues (approximately 5.3 percentage points).

Research and Development

Research and development expense was $17.7 million in the third quarter of 2005, an increase of $1.1 million, or 6.6%, compared with $16.6 million in the third quarter of 2004 due to expenses associated with the timing of project material usage and contract labor ($1.8 million) and increased amortization related to demo tools used in research and development ($0.3 million). Cost increases were partially offset by lower costs associated with variable compensation ($1.0 million). Research and development expense was $51.2 million for the nine months ended September 30, 2005, an increase of $3.2 million, or 6.7%, compared with $48.0 million for the nine months ended September 30, 2004 primarily due to expenses associated with the timing of project material usage and contract labor ($4.1 million) and increased amortization related to demo tools used in research and development ($0.9 million). Cost increases were partially offset by lower costs associated with variable compensation ($2.1 million). Increases in overall research and development expenses in 2005 compared with 2004 are attributable to development efforts related to the Company's single wafer Optima platform.

Sales and Marketing

Sales and marketing expense was $10.7 million in the third quarter of 2005, a decrease of $1.5 million, or 12.3%, compared with $12.2 million in the third quarter of 2004 primarily due to lower payroll and payroll related expenses associated with reduction in force actions ($0.9 million) and lower commission expense ($0.4 million). Sales and marketing expense was $34.6 million for the nine months ended September 30, 2005, a decrease of $2.1 million, or 5.7%, compared with $36.7 million for the nine months ended September 30, 2004 primarily due to lower payroll and payroll related expenses associated with reduction in force actions ($1.6 million) and lower commission expense ($0.7 million).

General and Administrative

General and administrative expense was $12.0 million in the third quarter of 2005, an increase of $0.1 million, or 0.8%, compared with $11.9 million in the third quarter of 2004 primarily due to the consolidation of the Company's Rockville, Maryland operations into its headquarters and manufacturing facility located in Beverly, Massachusetts ($1.4 million), offset in part primarily by lower expenses associated with variable compensation ($1.3 million). General and administrative expense was $35.0 million for the nine months ended September 30, 2005, an increase of $0.4 million, or 1.2%, compared with $34.6 million for the nine months ended September 30, 2004 primarily due to the consolidation of the Company's Rockville, Maryland operations into its headquarters and manufacturing facility located in Beverly, Massachusetts ($4.2 million), offset in part primarily by lower costs associated with variable compensation ($2.8 million).

Restructuring

Restructuring expense was $1.5 million and $5.4 million in the three and nine months ended September 30, 2005, respectively. Restructuring expense consists primarily of severance and other termination benefits related to reduction in force actions and the consolidation of the Company's Rockville, Maryland operations into its headquarters and manufacturing facility located in Beverly, Massachusetts. In total, the Company expects to incur approximately $13.0 million in restructuring and general and administrative expenses related to these actions, of which $10.6 million has been recognized as expense since the fourth quarter of 2004. The Company expects to incur approximately $2.0 to $3.0 million in additional expense over the fourth quarter of 2005 and through the first half of 2006. Of the total cost related to these actions, approximately $12.0 million is expected to result in cash expenditures.

See Note 10 to the Notes to Consolidated Financial Statements for the detail of the Company's restructuring liability.

Other Income (Expense)

Equity income attributable to SEN was $1.4 million and $9.1 million for the third quarter of 2005 and 2004, respectively. Equity income was $11.4 million for the nine months ended September 30, 2005 compared with $22.2 million for the nine months ended September 30, 2004. Fluctuations in equity contributions from SEN reflect changes in its sales volume and net income resulting from demand changes in the Japanese semiconductor market, and the timing of shipments in Japan.

Interest income was $1.5 million and $0.6 million in the third quarter of 2005 and 2004, respectively. Interest income was

$3.8 million for the nine months ended September 30, 2005 compared with $1.2 million for the nine months ended September 30, 2004. The increase in interest income primarily relates to increased levels of cash, cash equivalents and short-term investments in 2005, as well as higher interest rates.

Interest expense was $1.7 million and $1.6 million for the third quarter of 2005 and 2004, respectively. Interest expense was $5.0 million for the nine months ended September 30, 2005 and 2004. Interest expense primarily relates to the Company's long-term debt issued in January 2002.

Income Taxes (Credit)

The Company recorded an income tax credit of $0.1 million and income tax expense of $1.2 million in the three and nine months ended September 30, 2005, respectively. Income tax expense for these periods was reduced by $0.5 million by adjustments to income tax provisions recorded in prior years. The Company has significant net operating losses in the United States and certain foreign tax jurisdictions and, as a result, does not pay significant income taxes in those jurisdictions. In other foreign jurisdictions the Company is a taxpayer. Income taxes for the three and nine months ended September 30, 2005 is principally based on the estimated annual effective tax rate applied to estimated taxable income of those foreign entities generating taxable income.

The Company recorded income tax expense of $1.1 million and $1.7 million in the three and nine months ended September 30, 2004, respectively. Income tax expense for these period was reduced by $4.0 million as a result of reversal of income tax accruals recorded in prior years related to the underlying tax matters that were resolved in the second quarter of 2004. The Company has significant net operating losses in the United States and certain foreign tax jurisdictions and, as a result, does not pay significant income taxes in those jurisdictions. In other foreign jurisdictions the Company is a taxpayer. Income taxes for the three and nine months ended September 30, 2004 was principally based on the estimated annual effective tax rate applied to estimated taxable income of those foreign entities generating taxable income. Income tax expense attributable to U.S. operations in 2004 was minimal because taxable income derived from current year operating results was substantially offset by available net operating loss carryforwards.

Liquidity and Capital Resources

Cash, cash equivalents and short-term investments at September 30, 2005 were $173.5 million compared with $187.0 million at December 31, 2004. The $13.5 million decrease in cash, cash equivalents and short-term investments is mainly attributable to $6.3 million in capital expenditures, a $4.4 million increase in restricted cash, and $6.2 million in cash used in operations. Cash uses were partially offset by $3.3 million in proceeds from the exercise of stock options and the Employee Stock Purchase Plan.

Capital expenditures were $6.3 million and $3.2 million for the nine months ended September 30, 2005 and 2004, respectively. The increase was primarily due to the consolidation of the Company's Rockville, Maryland operations into its headquarters and manufacturing facility located in Beverly, Massachusetts. The Company has no significant capital projects planned for the remainder of 2005 and 2006. Total capital expenditures for 2005 are projected to be less than $10.0 million. Future capital expenditures beyond 2005 will depend on a number of factors, including the timing and rate of the expansion of the Company's business.

Investments for demo tools, used in-house for research and development and training, and evaluation tools, which are located at customers' sites and are being evaluated for potential purchase, increased by approximately $11.2 million and $2.7 million for the nine months ended September 30, 2005 and 2004, respectively. Demo and evaluation tools are included in amounts reported as inventory, other current assets and other assets. In 2006, the Company expects to increase its investment in evaluation tools to support its single wafer Optima platform.

The Company has no off-balance sheet arrangements other than foreign currency exchange contracts used to hedge inter-company balances and the Company's royalty receivable from SEN (totaling $2.7 million at September 30, 2005).

The Company has a $50 million revolving credit facility that expires in October of 2006. The purpose of the facility is to provide funds for working capital and general corporate purposes as required. To the extent that the Company has borrowings under the agreement, those borrowings would bear interest at the bank's base rate, as defined in the agreement, or LIBOR plus an applicable percentage. The Company currently has no plans to borrow against the facility but may use the facility to support letters of credit in the future. The credit facility is secured by substantially all of the Company's assets (excluding the Company's investment in SEN) and contains certain financial and other restrictive covenants including restrictions on the payment of dividends, minimum levels of tangible net worth, liquidity and profitability as well as maximum levels of indebtedness and capital spending. At September 30, 2005, the Company was in compliance with all covenants. The Company incurs an annual commitment fee based on an EBITDA formula outlined in the agreement applied to the full commitment.

At September 30, 2005 the Company had outstanding standby letters of credit, bank guarantees and surety bonds of $17.0 million, which support certain operating lease obligations, the Company's workers' compensation insurance program, and certain value added tax refunds in Europe. In addition, at September 30, 2005, $10.7 million of cash was pledged as collateral for certain outstanding standby letters of credit and bank guarantees, and is reflected as restricted cash on the balance sheet.

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. Although cash requirements fluctuate based on the timing and extent of these factors, the Company believes that its existing cash and cash equivalents and short-term investments will be sufficient to satisfy the Company's anticipated cash requirements for at least the next twelve months.

Outlook

The Company's performance is directly related to its customers' capital spending plans, the Company's product positioning, as well as operational improvements implemented by the Company in recent quarters. The level of capital expenditures by semiconductor 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.

Since the third quarter of 2004, the Company has experienced a slowdown in capital spending by semiconductor manufacturers and customer requested delays of anticipated shipments and delays of customer orders. The Company, based on ongoing discussions with its customers of their future plans and requirements, is currently forecasting that revenues will be in the range of $85.0 million to $95.0 million for the quarter ended December 31, 2005.

On October 26, 2005, the Company announced its expectations for the fourth quarter of 2005. The Company anticipates gross margins in the 37% to 40% range. The expected decline in gross margins compared to the first three quarters of 2005 is due mainly to product mix. Net loss for the quarter was projected in the range of $3.0 million to $7.0 million ($0.03 to $0.07 loss per share). The forecast net loss includes $2.0 million of restructuring and related costs ($0.02 per share). The Company expects no change in the cash position during the fourth quarter.

It is difficult to predict the Company's customers' capital spending plans since they can change very quickly. At the Company's current sales level, each sale, or failure to make a sale, could have a material effect on the Company's results of operations in a particular quarter.

Looking beyond the fourth quarter and into 2006, the Company expects continuing margin pressure as it starts to recognize revenue from new products. Rolling out new products require incremental costs that typically result in lower product margins in the short-term. The Company expects the Optima platform margins to return to normal levels for the Company's implant products as the Company achieves volume production of the new products.

Risk Factors

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, the Company's ability to keep pace with rapid technological changes in semiconductor manufacturing processes, the highly competitive nature of the semiconductor equipment industry, acceptance of next generation technology developed by the Company (including the single wafer Optima platform), quarterly fluctuations in operating results attributable to the timing and amount of orders for the Company's products and services, dependence on SEN for access to the Japanese semiconductor equipment market, and those risk factors contained in the section titled "Outlook" and Exhibit 99.1 of this Form 10-Q, which is incorporated herein by reference. If any of those risk factors actually occurs, the Company's business, financial condition and results of operations could be seriously harmed and the trading price of Axcelis' common stock could decline.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

As of September 30, 2005, there have been no material changes to the quantitative and qualitative information about market risk disclosed in Item 7a to the Company's Form 10-K for the year ended December 31, 2004.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company's management, with the participation of its principal executive officer and principal financial officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this quarterly report (the "Evaluation Date"). Based on this evaluation, the Company's principal executive officer and principal financial officer concluded that, as of the Evaluation Date, these disclosure controls and procedures are effective and designed to ensure that the information required to be disclosed in the Company's reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the requisite time periods.

Changes in Internal Control over Financial Reporting

There was no change in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) identified in connection with the evaluation of the Company's internal control performed during its third quarter of 2005 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The Company is not a party to any material legal proceedings.

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

None

Item 3. Defaults Upon Senior Securities

None

Item 4. Submission of Matters to a Vote of Security Holders

None

Item 5. Other Information

None

Item 6. Exhibits

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

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of the Company. Incorporated by reference to 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 to 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 to 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.
4.1	Indenture between the Company and State Street Bank and Trust Company, as Trustee, including the form of note, dated as of January 15, 2002. Incorporated by reference to Exhibit 4.1 to the Company's Current Report

	on Form 8-K filed with the Commission on January 15, 2002.
4.5	Revolving Credit Agreement dated as of October 3, 2003 among the Company, ABN Amro Bank N.V. and the other lenders named therein, as amended by the First Amendment to Revolving Credit Agreement, dated as of May 3, 2004. Pursuant to Regulation S-K, Item 601(b)(4)(iii), this exhibit has not been filed, since the total amount of the facility does not exceed 10% of the Company's total assets at this time. The Company will furnish a copy of the Credit Agreement to the Commission on request.
10.1	Axcelis Technologies, Inc. Employee Stock Purchase Plan, as amended through May 12, 2005, effective January 1, 2006. Filed herewith.
10.2	Non-Employee Director Compensation effective July 1, 2005. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Commission on June 28, 2005.
10.3	Executive Separation Agreement dated as of July 1, 2005 between the Company and David W. Duff, Ph.D. Incorporated by reference to Exhibit 10.7 to the Company's Form 10-Q for the quarter ended, June 30, 2005, filed with the Commission on August 9, 2005.
10.4	Form of Lock-Up Agreement dated October 26, 2005 between the registrant and each of its executive officers. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Commission on October 26, 2005.
31.1	Certification of the Principal Executive Officer under Exchange Act Rule 13a-14(a)/15d-14(a) (Section 302 of the Sarbanes-Oxley Act), dated November 9, 2005. Filed herewith.
31.2	Certification of the Principal Financial Officer under Exchange Act Rule 13a-14(a)/15d-14(a) (Section 302 of the Sarbanes-Oxley Act), dated November 9, 2005. Filed herewith.
32.1	Certification of the Principal 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 9, 2005. Filed herewith.
32.2	Certification of the Principal 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 9, 2005. Filed herewith.
99.1	Factors Affecting Future Operating Results for the Form 10-Q for the period ended September 30, 2005. Filed herewith.

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 9, 2005	/s/ Stephen G. Bassett
	By: Stephen G. Bassett, Chief Financial Officer Duly authorized officer and Principal Financial Officer

AXCELIS TECHNOLOGIES, INC.

EMPLOYEE STOCK PURCHASE PLAN

Adopted by the Board of Directors and the sole stockholder on June 9, 2000, and effective on July 10, 2000
As amended by the Board of Directors on
January 27, 2005 and May 12, 2005 (stockholder approval not required)
to be effective January 1, 2006

1. PURPOSE.

The purpose of this Plan is to provide an opportunity for Employees of Axcelis Technologies, Inc. (the "Corporation") and its Designated Subsidiaries, to purchase Common Stock of the Corporation and thereby to have an additional incentive to contribute to the prosperity of the Corporation. It is the intention of the Corporation that the Plan qualifies as an "Employee Stock Purchase Plan" under Section 423 of the Internal Revenue Code of 1986, as amended.

2. DEFINITIONS.

(a) **"Board"** shall mean the Board of Directors of the Corporation.

(b) **"Code"** shall mean the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein shall be a reference to any successor or amended section of the Code.

(c) **"Committee"** shall mean the committee appointed by the Board in accordance with Section 14 of the Plan.

(d) **"Common Stock"** shall mean the Common Stock of the Corporation, or any stock into which such Common Stock may be converted.

(e) **"Compensation"** shall mean base pay, including pay under any system which measures earnings by quantity and quality of production, variable pay, including without limitation, bonuses and incentive payments (but excluding sign-on bonuses and bonuses paid under the Axcelis Team Incentive Plan, and any successors to such plans and any other similar management bonuses or incentive payments), shift premium and overtime pay, but excluding severance pay in a single lump sum and not as salary continuation, pay in lieu of vacation, cost-of-living allowance, retainers, fees, and any other special remuneration, with any modifications determined by the Committee. The

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Committee shall have the authority to determine and approve all forms of pay to be included in the definition of Compensation and may change the definition on a prospective basis.

(f) **"Corporation"** shall mean Axcelis Technologies, Inc., a Delaware corporation.

(g) **"Designated Subsidiary"** shall mean a Subsidiary that has been designated by the Committee as eligible to participate in the Plan with respect to its Employees.

(h) **"Employee"** shall mean an individual classified as an employee (within the meaning of Code Section 3401(c) and the regulations thereunder) by the Corporation or a Designated Subsidiary on the Corporation's or such Designated Subsidiary's payroll records during the relevant participation period. Employees shall not include individuals classified as independent contractors.

(i) **"Entry Date"** shall mean the first Trading Day of an Offering Period.

(j) **"Fair Market Value"** shall be the closing sales price for the Common Stock (or the closing bid, if no sales were reported) as quoted on the NASDAQ National Market, or other principal securities market on which the Common Stock is traded, on the date of determination if that date is a Trading Day, or if the date of determination is not a Trading Day, the last market Trading Day prior to the date of determination, as reported in *The Wall Street Journal* or such other source as the Committee deems reliable.

(k) **"Offering Period"** shall mean the period of six (6) months commencing on the first Trading Day on or about July 1 of every year and terminating on the last Trading Day in the period ending six (6) months later. Subsequent Offering Periods, if any, shall run consecutively after the termination of the preceding Offering Period. The duration and timing of Offering Periods may be changed or modified by the Committee, subject to the limitations set forth in Section 4.

(l) **"Participant"** shall mean a participant in the Plan as described in Section 5 of the Plan.

(m) **"Plan"** shall mean the Axcelis Technologies, Inc. Employee Stock Purchase Plan.

(n) **"Purchase Date"** shall mean the last Trading Day of each Offering Period.

(o) **"Purchase Price"** shall mean 85% of the Fair Market Value of a share of Common Stock on the Purchase Date; provided however, that the Purchase Price may be adjusted by the Committee pursuant to Section 7.4.

(q) **"Shareholder"** shall mean a record holder of shares entitled to vote shares of Common Stock under the Corporation's by-laws.

(r) **"Subsidiary"** shall mean any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, as described in Code Section 424(f).

(s) **"Trading Day"** shall mean a day on which U.S. national stock exchanges and the NASDAQ System are open for trading.

3. ELIGIBILITY.

3.1 Any Employee regularly employed on a full-time or part-time basis by the Corporation or by any Designated Subsidiary on an Entry Date shall be eligible to participate in the Plan with respect to the Offering Period commencing on such Entry Date, provided that the Committee may establish administrative rules requiring that employment commence some minimum period (e.g., one pay period) prior to an Entry Date to be eligible to participate with respect to the Offering Period beginning on that Entry Date.

3.2 The Committee may also determine that a designated group of highly compensated Employees are ineligible to participate in the Plan so long as the excluded category fits within the definition of "highly compensated employee" in Code Section 414(q). No Employee may participate in the Plan if immediately after an option is granted the Employee owns or is considered to own (within the meaning of Code Section 424(d)), shares of stock, including stock which the Employee may purchase by conversion of convertible securities or under outstanding options granted by the Corporation, possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Corporation or of any of its Subsidiaries.

3.3 All Employees who participate in the Plan shall have the same rights and privileges under the Plan except for differences which may be mandated by local law and which are consistent with Code Section 423(b)(5); provided, however, that any affiliate of the Corporation whose Employees are not granted options under this Plan may adopt a separate "sub-plan" in accordance with the provisions of Section 15 which is not designed to qualify under Code section 423 and the Employees participating thereunder need not have the same rights and privileges as Employees participating in the Code section 423 Plan. The Board may impose restrictions on eligibility and participation of Employees who are officers and directors to facilitate compliance with federal or state securities laws or foreign laws.

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4. OFFERING PERIODS.

The Plan shall be implemented by consecutive Offering Periods with a new Offering Period commencing on the first Trading Day on or after the date six (6) months from the first date of the immediately preceding Offering Period, or on such other date as the Committee shall determine, and continuing thereafter for six (6) months or until terminated pursuant to Section 13 hereof. Unless otherwise determined by the Committee, the Plan will operate with successive six (6) month Offering Periods commencing at July 1 and January 1. The Committee shall have the power to change the duration of future Offering Periods, without Shareholder approval, and without regard to the expectations of any Participants if such change is announced at least five (5) days prior to the scheduled beginning of the first Offering Period to be affected thereafter**,** provided, however, that an Offering Period shall in no event be longer than twenty-seven (27) months or such longer period as may be consistent with Section 423 of the Code.

5. PARTICIPATION.

5.1 An Employee who is eligible to participate in the Plan in accordance with Section 3 may become a Participant by completing and submitting, on a date prescribed by the Committee prior to an applicable Entry Date (unless a later date is set by the Committee), a completed payroll deduction authorization and Plan enrollment form provided by the Corporation or by following an electronic or other enrollment process as prescribed by the Committee. An eligible Employee may authorize payroll deductions at the rate of any whole percentage of the Employee's Compensation, not to exceed ten percent (10%) of the Employee's Compensation. As determined by the Committee, payroll deductions may begin at a date after the effective date of the Plan. All payroll deductions may be held by the Corporation and commingled with its other corporate funds where administratively appropriate. No interest shall be paid or credited to the Participant with respect to such payroll deductions. The Corporation shall maintain a separate bookkeeping account for each Participant under the Plan and the amount of each Participant's payroll deductions shall be credited to such account. A Participant may not make any additional payments into such account.

5.2 Under procedures established by the Committee, a Participant may withdraw from the Plan during an Offering Period, by completing and filing a new payroll deduction authorization and Plan enrollment form with the Corporation or by following electronic or other procedures prescribed by the Committee, prior to a date set by the Committee that precedes the Purchase Date. If a Participant withdraws from the Plan during an Offering Period, his or her accumulated payroll deductions will be refunded to the Participant without interest. The Committee may establish rules limiting the frequency with which Participants may withdraw and re-enroll in the Plan

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and may impose a waiting period on Participants wishing to re-enroll following withdrawal.

5.3 A Participant may change his or her rate of contribution through payroll deductions during the periods specified by the Committee by filing a new payroll deduction authorization and Plan enrollment form or by following electronic or other procedures prescribed by the Committee. If a Participant has not followed such procedures to change the rate of contribution, the rate of contribution shall continue at the originally elected rate throughout the Offering Period and future Offering Periods. In accordance with Section 423(b)(8) of the Code, the Committee may reduce a Participant's payroll deductions to zero percent (0%) at any time during an Offering Period.

6. TERMINATION OF EMPLOYMENT.

In the event any Participant terminates employment with the Corporation or any of its Designated Subsidiaries for any reason (including death) prior to the expiration of an Offering Period, the Participant's participation in the Plan shall terminate and all amounts credited to the Participant's account shall be paid to the Participant or, in the case of death, to the Participant's heirs or estate, without interest. Whether a termination of employment has occurred shall be determined by the Committee. The Committee may also establish rules regarding when leaves of absence or changes of employment status will be

considered to be a termination of employment, including rules regarding transfer of employment among Designated Subsidiaries, Subsidiaries and the Corporation, and the Committee may establish termination of employment procedures for this Plan which are independent of similar rules established under other benefit plans of the Corporation and its Subsidiaries.

7. OFFERING.

7.1 Subject to adjustment as set forth in Section 10, the maximum number of shares of Common Stock which may be issued pursuant to the Plan shall be 2.5 million shares, plus an annual increase to be added on the last day of each fiscal year of the Corporation beginning in 2001, equal to one percent (1%) of the outstanding shares of the Corporation on such date or a lesser amount determined by the Committee, provided that the maximum number of shares of Common Stock that may be issued pursuant to the Plan shall be 7.5 million shares. If, on a given Purchase Date, the number of shares with respect to which options are to be exercised exceeds the number of shares then available under the Plan, the Corporation shall make a pro rata allocation of the shares remaining available for purchase in as uniform a manner as shall be practicable and as it shall determine to be equitable.

7.3 With respect to any Offering Period, each eligible Employee who has elected to participate as provided in Section 5.1 shall be granted, as of such Employee's Entry Date, an option for each Offering Period to purchase that number of whole shares of Common Stock (not to exceed 1,500 shares) which may be purchased with the payroll deductions accumulated on behalf of such Employee during each such Offering Period at the purchase price specified in Section 7.4 below, subject to the additional limitation that no Employee participating in the Section 423 Plan shall be granted an option to purchase Common Stock under the Plan at a rate which exceeds U.S. twenty-five thousand dollars (U.S. $25,000) of the Fair Market Value of such Common Stock (determined at the time such option is granted) for each calendar year in which such option is outstanding at any time. The foregoing sentence shall be interpreted so as to comply with Code Section 423(b)(8).

7.4 The purchase price under each option shall a percentage (not less than eighty-five percent (85%)) established by the Committee ("Designated Percentage") of the Fair Market Value of the Common Stock on the Purchase Date on which the Common Stock is purchased. The Committee may change the Designated Percentage with respect to any future Offering Period, but not below eighty-five percent (85%).

8. PURCHASE OF STOCK.

Upon the expiration of each Offering Period, a Participant's option shall be exercised automatically for the purchase of that number of whole and fractional shares of Common Stock which the accumulated payroll deductions credited to the Participant's account at that time shall purchase at the applicable price specified in Section 7.4. Notwithstanding the foregoing, the Corporation or its designee may make such provisions and take such action as it deems necessary or appropriate for the withholding of taxes and/or social insurance which the Corporation or its Designated Subsidiary is required by law or regulation of any governmental authority to withhold. Each Participant, however, shall be responsible for payment of all individual tax liabilities arising under the Plan.

9. PAYMENT AND DELIVERY.

As soon as practicable after the exercise of an option, the Corporation shall deliver to the Participant a record of the Common Stock purchased and the balance of any amount of payroll deductions credited to the Participant's account not used for the purchase, except as specified below. The Committee may permit or require that shares be deposited directly with a broker designated by the Committee or to a designated agent of the Corporation, and the Committee may utilize electronic or automated methods of share transfer. The Committee may require that shares be retained with such broker or agent for a designated period of time and/or may establish other procedures to permit tracking of disqualifying dispositions of such shares. The Corporation shall

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retain the amount of payroll deductions used to purchase Common Stock as full payment for the Common Stock and the Common Stock shall then be fully paid and non-assessable. No Participant shall have any voting, dividend, or other Shareholder rights with respect to shares subject to any option granted under the Plan until the shares subject to the option have been purchased and delivered to the Participant as provided in this Section 9.

10. RECAPITALIZATION.

If after the grant of an option, but prior to the purchase of Common Stock under the option, there is any increase or decrease in the number of outstanding shares of Common Stock because of a stock split, stock dividend, combination or recapitalization of shares subject to options, the number of shares to be purchased pursuant to an option, the price per share of Common Stock covered by an option and the maximum number of shares specified in Section 7.1 may be appropriately adjusted by the Board, and the Board shall take any further actions which, in the exercise of its discretion, may be necessary or appropriate under the circumstances.

The Board's determinations under this Section 10 shall be conclusive and binding on all parties.

11. MERGER, LIQUIDATION, OTHER CORPORATION TRANSACTIONS.

In the event of shareholder approval of a liquidation or dissolution of the Corporation, the Offering Period will terminate immediately, unless otherwise provided by the Board in its sole discretion, and all outstanding options shall automatically terminate and the amounts of all payroll deductions will be refunded without interest to the Participants.

In the event of a sale of all or substantially all of the assets of the Corporation, the acquisition by a person (including any entity or group) of beneficial ownership of a majority of the Corporation's outstanding capital stock (based on voting power, but excluding any acquisition by the Corporation, its affiliate, employee benefit plans of the Corporation or its affiliate, and any underwriter holding securities temporarily pursuant to an offering), or the merger or consolidation of the Corporation with or into another corporation, then in the sole discretion of the Board, (1) each option shall be assumed or an equivalent option shall be substituted by the successor corporation or parent or subsidiary of such successor corporation, (2) a date established by the Board

on or before the date of consummation of such merger, consolidation or sale shall be treated as a Purchase Date, and all outstanding options shall be exercised on such date, or (3) all outstanding options shall terminate and the accumulated payroll deductions will be refunded without interest to the Participants.

12. TRANSFERABILITY.

Options granted to Participants may not be voluntarily or involuntarily assigned, transferred, pledged, or otherwise disposed of in any way, and any attempted assignment, transfer, pledge, or other disposition shall be null and void and without effect. If a Participant in any manner attempts to transfer, assign or otherwise encumber his or her rights or interests under the Plan, other than as permitted by the Code, such act shall be treated as an election by the Participant to discontinue participation in the Plan pursuant to Section 5.2.

13. AMENDMENT OR TERMINATION OF THE PLAN.

13.1 The Plan shall continue until June 30, 2020 unless otherwise terminated in accordance with Section 13.2.

13.2 The Board may, in its sole discretion, insofar as permitted by law, terminate or suspend the Plan, or revise or amend it in any respect whatsoever, except that, without approval of the Shareholders, no such revision or amendment shall materially increase the number of shares subject to the Plan, other than an adjustment under Section 10 of the Plan.

14. ADMINISTRATION.

The Board shall appoint a Committee consisting of at least two members who will serve for such period of time as the Board may specify and whom the Board may remove at any time. The Committee will have the authority and responsibility for the day-to-day administration of the Plan, the authority and responsibility specifically provided in this Plan and any additional duty, responsibility and authority delegated to the Committee by the Board, which may include any of the functions assigned to the Board in this Plan. The Committee may delegate to one or more individuals the day-to-day administration of the Plan. The Committee shall have full power and authority to promulgate any rules and regulations which it deems necessary for the proper administration of the Plan, to interpret the provisions and supervise the administration of the Plan, to make factual determinations relevant to Plan entitlements and to take all action in connection with administration of the Plan as it deems necessary or advisable, consistent with the delegation from the Board. Decisions of the Board and the Committee shall be final and binding upon all participants. Any decision reduced to writing and signed by a majority of the members of the Committee shall be fully effective as if it had been made at a meeting of the Committee duly held. The Corporation shall pay all expenses incurred in the administration of the Plan. No Board or Committee member shall be liable for any action or determination made in good faith with respect to the Plan or any option granted hereunder.

15. COMMITTEE RULES FOR FOREIGN JURISDICTIONS.

The Committee may adopt rules or procedures relating to the operation and administration of the Plan to accommodate the specific requirements of local laws and procedures. Without limiting the generality of the foregoing, the Committee is specifically authorized to adopt rules and procedures regarding handling of payroll deductions, payment of interest, conversion of local currency, payroll tax, withholding procedures and handling of stock certificates which vary with local requirements.

The Committee may also adopt “sub-plans” separate from this Plan for purposes of Code Section 423 applicable to particular affiliates of the Corporation, which sub-plans may be designed to be outside the scope of Code section 423. Notwithstanding the foregoing, the shares of Common Stock issued under any sub-plan shall be aggregated with the shares of Common Stock issued under this Plan and such aggregate number of shares shall be subject to the maximum number set forth under Section 7.1 hereof. The rules of such sub-plans may take precedence over other provisions of this Plan, with the exception of Section 7.1, but unless otherwise superseded by the terms of such sub-plan, the provisions of this Plan shall govern the operation of such sub-plan.

16. SECURITIES LAWS REQUIREMENTS.

The Corporation shall not be under any obligation to issue Common Stock upon the exercise of any option unless and until the Corporation has determined that: (i) it and the Participant have taken all actions required to register the Common Stock under the Securities Act of 1933, or to perfect an exemption from the registration requirements thereof; (ii) any applicable listing requirement of any stock exchange on which the Common Stock is listed has been satisfied; and (iii) all other applicable provisions of state, federal and applicable foreign law have been satisfied.

17. GOVERNMENTAL REGULATIONS.

This Plan and the Corporation’s obligation to sell and deliver shares of its stock under the Plan shall be subject to the approval of any governmental authority required in connection with the Plan or the authorization, issuance, sale, or delivery of stock hereunder.

18. NO ENLARGEMENT OF EMPLOYEE RIGHTS.

Nothing contained in this Plan shall be deemed to give any Employee the right to be retained in the employ of the Corporation or any Designated Subsidiary or to interfere with the right of the Corporation or Designated Subsidiary to discharge any Employee at any time.

19. GOVERNING LAW.

This Plan shall be governed by Delaware law, without regard to that State's choice of law rules.

20. EFFECTIVE DATE.

This Plan was adopted by the Corporation's Board of Directors on June 9, 2000, was approved by the sole shareholder of the Corporation on June 9, 2000, and became effective on July 10, 2000. The amendments to the Plan adopted by the Board of Directors on January 27, 2005 shall become effective for Offering Periods commencing on or after January 1, 2006.

21. REPORTS.

Individual accounts shall be maintained for each Participant in the Plan. Statements of account shall be given to Participants at least annually, which statements shall set forth the amounts of payroll deductions, the Purchase Price, the number of shares purchased and the remaining cash balance, if any.

Exhibit 31.1

CERTIFICATION

of the Principal Executive Officer

Pursuant to Rule 13a-14(a)/15d-14(a) (implementing Section 302 of the Sarbanes-Oxley Act)

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 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 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 Company as of, and for, the periods presented in this report;

4. The Company's other certifying officer(s) 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 Company 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 Company, 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 Company'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 Company's internal control over financial reporting that occurred during the Company's most recent fiscal

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quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and

5. The Company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 company'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.

Date: November 9, 2005

/s/ Mary G. Puma
Mary G. Puma, Chairman and Chief Executive Officer

CERTIFICATION

of the Principal Financial Officer

Pursuant to Rule 13a-14(a)/15d-14(a) (implementing Section 302 of the Sarbanes-Oxley Act)

I, Stephen G. Bassett, certify that:

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

2. Based on my knowledge, this 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 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 Company as of, and for, the periods presented in this report;

4. The Company's other certifying officer(s) 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 Company 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 Company, 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 Company'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 Company's internal control over financial reporting that occurred during the Company's most recent fiscal

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quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and

5. The Company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 company'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.

Date: November 9, 2005

/s/ Stephen G. Bassett
Stephen G. Bassett, Chief Financial Officer
and Executive Vice President

EXHIBIT 32.1

AXCELIS TECHNOLOGIES, INC.

Certification of the Principal 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 certifies, 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 has executed this Certification as of November 9, 2005.

/s/ Mary G. Puma

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

EXHIBIT 32.2

AXCELIS TECHNOLOGIES, INC.

Certification of the Principal 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 certifies, 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 has executed this Certification as of November 9, 2005.

/s/ Stephen G. Bassett

Stephen G. Bassett
Executive Vice President and Chief Financial Officer of
Axcelis Technologies, Inc.

Exhibit 99.1

AXCELIS TECHNOLOGIES, INC.

Form 10-Q for the quarter ended September 30, 2005
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. These statements speak only as of the date on which they are made and represent management’s expectations based on information available to them at that time. 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 that 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 manufacturers do not make sufficient capital expenditures, our sales and profitability will be harmed.

Almost all 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 of our high fixed cost structure and 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.

Our quarterly financial results may fluctuate significantly.

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. 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. Axcelis’ financial results also fluctuate based on gross profit realized on sales. Gross profit as a percentage of revenue may vary based on a variety of factors, including the mix and average selling prices of products sold, costs to manufacture and customize systems and warranty costs. Our gross margins also may be affected by the introduction of new products. 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.

Our quarterly financial results may fall short of anticipated levels; forecasting quarterly revenues and profitability is complex and may be inaccurate.

Management typically provides financial forecasts for the subsequent quarter in the earnings release for each quarter. These forecasts are based on assumptions believed to be reasonable when made of shipment timing and contract terms, but in some cases, at the time the forecast is made the final customer terms may not have been agreed and documented, so the level of revenues recognizable in a particular quarter may vary from the forecast. Our lengthy sales cycle, coupled with customers’ competing capital budget considerations, make the timing of customer orders uneven and difficult to predict. 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 revenues 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.

The SEC’s Staff Accounting Bulletin 104, addressing revenue recognition, has added additional complexity in forecasting quarterly revenues and profitability. Orders for our products usually contain multiple delivery elements that result in revenue deferral under generally accepted accounting principles. Due to the foregoing factors, investors should understand that our actual financial results for a quarter may vary significantly from our forecasts of financial performance for that quarter. Failure to meet forecast financial performance may have an adverse effect on the price of our common stock.

The semiconductor industry is highly cyclical and we expect that demand for our products will regularly increase and decrease, making it difficult to manage the business and potentially causing harm to our sales and profitability.

The semiconductor business is highly cyclical, experiencing upturns where the demand for our products is high and downturns where our customers are not investing in new or expanded fabrication facilities. Our revenues can vary significantly from one point in the cycle to another, making it difficult to manage the business, both when revenues are increasing and when they are decreasing. In addition, a substantial portion of the Company’s operating expenses are fixed and do not fluctuate with changes in volume. Significant decreases in revenues can therefore have a disproportionate effect on profitability.

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

From time to time, inventory buildups in the semiconductor industry, resulting in part from the down cycle, produce an oversupply of semiconductors. This will cause semiconductor manufacturers to revise capital spending plans, resulting in reduced demand for capital equipment such as our products. If an 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.

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 using a single wafer platform. 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. Finally, if we must lower prices to maintain competitive without commensurate cost of goods savings, our gross margins and profitability will 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 2004, our customer, ST Microelectronics accounted for 14.9% of our net sales. Also, in 2004, our top ten customers accounted for 61% of our net sales. 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 one or more significant customers.

We have exclusively licensed the right to manufacture and sell certain ion implant products in Japan to a joint venture that we do not control.

We own 50% of the equity of a Japanese corporation called Sumitomo Eaton Nova Corporation or SEN, to which we have granted an exclusive license to manufacture and sell specified multi-wafer and single wafer ion implanters in Japan. Historically, Japan has represented approximately 20% of the annual worldwide market for ion implanters. Sumitomo Heavy Industries, Ltd., a Japanese manufacturer of industrial machinery and ships, owns the remaining 50% of the equity. Neither Axcelis nor Sumitomo has the right to buy out the other’s interest in SEN and the SEN joint venture is perpetual (although SEN’s license to use our technology could be terminated, as described below). Our joint venture agreement with Sumitomo gives both owners veto rights, so that neither of us alone can effectively control SEN. SEN’s business is subject to the same risks as our business. Royalties and income from SEN have been a substantial contribution to our earnings, and a substantial decline in SEN’s sales and net income could have a material adverse effect on our net income.   As a result of this joint venture structure, we have less control over SEN management than over our own management. In addition, given the equal balance of ownership, it is possible that the SEN Board may be unable to reach consensus from time to time, which could delay important decisions, or create a deadlock, which could lead to liquidation of SEN.

In 2003, both SEN and Axcelis elected to enter into a one-year period of negotiating modifications to the license agreement. SEN and Axcelis have not agreed to modifications to the license agreement. Accordingly, the current license agreement continues in effect until terminated by Axcelis or by SEN with the approval of the Axcelis representatives on the SEN Board, on twelve months notice. Axcelis does not expect to terminate the SEN license agreement. During 2005, Axcelis and SEN discussed proposed amendments to the license agreement to add additional licensed products and establish related royalty terms. To date, Axcelis has not licensed SEN to sell Axcelis’ new single wafer implant systems (the Optima MD, Optima HD and Optima HE), and Axcelis may decide to sell these products in Japan directly or through a distributor.

We have in the past allowed, and may in the future allow, SEN to sell implanters outside of Japan. We allow these sales when they are consistent with Axcelis' marketing policies and procedures. When these sales are allowed, we receive commissions in addition to royalties from SEN on these extra-territorial sales and assume most of the post-installation warranty responsibility. However, the financial benefit to Axcelis from the sale of a SEN implanter is less than the financial benefit of a sale of an Axcelis implanter, so such extra-territorial sales may have an adverse effect on the Company's revenues.

Axcelis is subject to the risks of operating internationally and we derive a substantial portion of our revenues from outside the United States, especially from Asia.

We are substantially dependent on sales of our products and services to customers outside the United States. International sales, including export sales from our U.S. manufacturing facilities to non-U.S. customers and sales by our non-U.S. subsidiaries and branches, accounted for 77.0% of total revenue in 2004, 65.3% in 2003, and 53.3% in 2002. In recent years, the percentage of shipments to Asia has been increasing. System shipments to Asian customers represented 74% of total shipment dollars in 2004 in comparison to 60% of total shipment dollars in 2003. We anticipate that international sales will continue to account for a significant portion of our revenue. 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.

We may not be able to maintain and expand our business if we are not able to hire, retain and integrate 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 Boston metropolitan 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.

Our dependence upon a limited number of suppliers for many components and sub-assemblies could result in increased costs or delays in the manufacture and sale 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 international operations involve currency risk.

Substantially all of our sales are billed in U.S. dollars, thereby reducing the impact of fluctuations in foreign exchange rates on our results. Operating margins of certain foreign operations can fluctuate with changes in foreign exchange rates to the extent revenues are billed in U.S. dollars and operating expenses are incurred in the local functional currency. During the year ended December 31, 2004, approximately 13% of the Company's revenues were derived from foreign operations with this inherent risk. In addition, at December 31, 2004, the Company's operations outside of the United States accounted for approximately 29% of the Company's total assets, the majority of which was denominated in currencies other than the U.S. dollar. Our investment in SEN and our royalty and equity income from SEN are subject to foreign currency exchange risks. The Company uses forward contracts to hedge the risk of currency fluctuation with respect to SEN royalties for which payment is received in Japanese yen.

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. Our outstanding convertible debt in the principal amount of $125 million becomes due in January 2007. We believe that our exiting cash and cash equivalents will be sufficient to satisfy our anticipated cash requirements for at least the next twelve

months. 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 debt or equity financings may not be possible on attractive terms or at all. In addition, future debt or equity financings could be dilutive to the existing holders of our common stock and convertible notes. Moreover, our existing credit agreement, which expires in October 2006, contains restrictive covenants limiting our ability to engage in additional debt financings without the permission of the banks.

Our stock price could be volatile and you could lose the value of your investment.

Our stock price has been volatile and has fluctuated significantly to date. The trading price of our stock is likely to continue to be highly volatile and subject to wide fluctuations. Your investment in our stock could lose value. Some of the factors that could significantly affect the market price of our stock include:

- actual or anticipated variations in results;
- analyst reports or recommendations;
- changes in interest rates; and
- other events and factors, many of which are beyond our control.

The stock market in general and Nasdaq and technology companies in particular have experienced extreme price fluctuations.

We seek to protect our proprietary technology through patents and trade secrets that may be vulnerable to efforts by competitors to challenge or design around, potentially reducing our 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. Finally, all patents expire after a period of time (in the U.S., patents expire 20 years from the date of filing of the patent application). Our market share could be negatively impacted by the expiration of a patent which had created a barrier for our competitors.

Axcelis also has agreements with third parties for licensing of patented or proprietary technology, both where Axcelis is the licensor and the licensee. These agreements include royalty-bearing licenses and technology cross-licenses. Termination of license agreements could have an adverse impact on our financial performance or ability to ship products with existing configurations.

We or customers that we indemnify 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 system sales documentation typically includes an indemnification by Axcelis of our customers from liability to third parties for intellectual property infringement arising from the use of our products in their intended manner. Therefore, Axcelis on occasion receives notification from customers who believe that Axcelis owes them indemnification or other obligations related to infringement claims made against the customers by third parties. 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. In addition, infringement indemnification clauses in system sale agreements may require us to take other actions or require us to provide certain remedies to customers who are exposed to indemnified liabilities. Any of these situations could have a material adverse effect on our business results.

If operations were disrupted at Axcelis’ primary manufacturing facility it would have a negative impact on our business.

We have one primary manufacturing facility, located in Massachusetts, and its operations could be subject to disruption for a variety of reasons, including, but not limited to natural disasters, work stoppages, operational facility constraints and terrorism. Such disruption could cause delays in shipments of products to our customers and could result in cancellation of orders or loss of customers and could seriously harm our business.