

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K/A**

AMENDMENT NO. 1 TO FORM 10-K

(Mark one)

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

For the fiscal year ended December 31, 2006

**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**  
(State or other jurisdiction of incorporation or  
organization)

**34-1818596**  
(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)

Securities registered pursuant to Section 12(b) of the Act:

| <u>Title of class</u> | <u>Name of each exchange on which registered</u> |
|-----------------------|--|
| None                  | None   |

Securities registered pursuant to Section 12(g) of the Act:

**Common Stock, \$0.001 par value**  
**Preferred Share Purchase Rights**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer  Accelerated filer  Non-accelerated filer

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

Aggregate market value of the voting stock held by non-affiliates of the registrant as of June 30, 2006: \$511,545,240.

Number of shares outstanding of the registrant's Common Stock, \$0.001 par value, as of March 13, 2007: 101,543,129.

**Documents incorporated by reference:**

## AMENDMENT NO. 1

### EXPLANATORY NOTE

We are filing this amendment to our Annual Report on Form 10-K for the fiscal year ended December 31, 2006, originally filed with the Securities and Exchange Commission on March 15, 2007, solely for the purpose of complying with Regulation S-X, Rule 3-09. Rule 3-09 requires that Form 10-K, but not the annual shareholders' report, contain separate financial statements for unconsolidated subsidiaries and investees accounted for by the equity method when such entities are individually significant.

We have determined that our 50% owned joint venture with Sumitomo Heavy Industries, Ltd., known as SEN Corporation, an SHI and Axcelis Company ("SEN"), which is not consolidated in the Axcelis Technologies, Inc. financial statements (and is accounted for under the equity method) was significant under Rule 3-09 in relationship to the Axcelis Technologies, Inc. financial results for the year ended December 31, 2006. Since SEN's fiscal year ended after the date of the filing of our Form 10-K, Rule 3-09 provides that the SEN financial statements may be filed as an amendment to our Form 10-K within 90 days after the end of SEN's fiscal year ended March 31, 2007.

Therefore, this Form 10-K/A amends the following portions of the Axcelis Technologies Form 10-K filed on March 15, 2007:

- Item 8 is being amended by submitting the financial statements of SEN for the fiscal years ended March 31, 2005, 2006 and 2007 (the "SEN Financial Statements") as a separate section of this report immediately following Item 15;
- Item 15 is being amended to:
  - include the list of the SEN Financial statements being filed herewith as required by Item 15(a); and
  - add to the list of exhibits and exhibits filed in accordance with Item 601 of Regulation S-K an Exhibit 23.2, Consent of Ernst & Young - Independent Auditors relating to the SEN Financial Statements, as required by Item 15(c).

As required by Rule 3-09, we will determine with respect to each future fiscal year, whether SEN has been significant with respect to Axcelis' financial results for such year, and file SEN financial statements as necessary to comply with Rule 3-09.

#### Item 15. Exhibits, Financial Statement Schedules

(a) The following documents are filed as part of the Company's Form 10-K, as originally filed on March 15, 2007, and as amended by this form 10-K/A:

(1)(A) Financial Statements of Axcelis Technologies, Inc.:

Report of Independent Registered Public Accounting Firm

Consolidated Statements of Operations — For the years ended December 31, 2006, 2005 and 2004

Consolidated Balance Sheets — December 31, 2006 and 2005

Consolidated Statements of Stockholders' Equity — For the years ended December 31, 2006, 2005 and 2004

Consolidated Statements of Cash Flows — For the years ended December 31, 2006, 2005 and 2004

Notes to Consolidated Financial Statements

(1)(B) Financial Statements of SEN Corporation, an SHI and Axcelis Company:

Report of Independent Auditors

Consolidated Statements of Operations — For the years ended March 31, 2005, 2006 and 2007

Consolidated Balance Sheets — March 31, 2006 and 2007

Consolidated Statements of Stockholders' Equity — For the years ended March 31, 2005, 2006 and 2007

Consolidated Statements of Cash Flows — For the years ended March 31, 2005, 2006 and 2007

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(2) Financial Statement Schedules:

Schedule II — Valuation and Qualifying Accounts for the years ended December 31, 2006, 2005 and 2004

All other schedules for which provision is made in the applicable regulation of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore have been omitted.

(b) Exhibits

The exhibits filed as part of this Form 10-K are listed on the Exhibit Index immediately preceding such Exhibits, which Exhibit Index is incorporated herein by reference.

The response to this portion of Item 15 is submitted as a separate section of this report.

### Report of Independent Auditors

The Board of Directors  
SEN Corporation, an SHI and Axcelis Company

We have audited the accompanying consolidated balance sheets of SEN Corporation, an SHI and Axcelis Company (the "Company") as of March 31, 2007 and 2006, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the three years in the period ended March 31, 2007, all expressed in Japanese yen. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company at March 31, 2007 and 2006, and the consolidated results of its operations and its cash flows for each of the three years in the period ended March 31, 2007, in conformity with U.S. generally accepted accounting principles.

We have also recomputed the translation of the consolidated financial statements as of and for the year ended March 31, 2007 into United States dollars. In our opinion, the consolidated financial statements expressed in Japanese yen have been translated into United States dollars on the basis described in Note 1.

Tokyo, Japan  
June 1, 2007

/s/ Ernst & Young ShinNihon

### SEN Corporation, an SHI and Axcelis Company

#### Consolidated Statements of Income

|  | Years ended March 31, |              |              | Year ended                     |
|--|-----------------------|--------------|--------------|--------------------------------|
|  | 2005                  | 2006         | 2007         | March 31,<br>2007              |
|  | (Thousands of yen)    |              |              | (U.S. dollars in<br>thousands) |
| Net sales:                                   |                       |              |              |                                |
| Systems                                      | ¥ 28,457,929          | ¥ 20,026,152 | ¥ 24,261,306 | \$ 207,308                     |
| Services                                     | 6,987,942             | 7,831,507    | 8,336,320    | 71,233                         |
| Net sales                                    | 35,445,871            | 27,857,659   | 32,597,626   | 278,541                        |
| Cost of sales                                | 19,319,808            | 15,660,181   | 18,787,848   | 160,539                        |
| Gross profit                                 | 16,126,063            | 12,197,478   | 13,809,778   | 118,002                        |
| Operating expenses:                          |                       |              |              |                                |
| Research and development                     | 3,002,413             | 2,271,112    | 2,683,775    | 22,932                         |
| Selling, general and administrative expenses | 3,810,538             | 3,851,467    | 4,037,048    | 34,496                         |
|  | 6,812,951             | 6,122,579    | 6,720,823    | 57,428                         |
| Income from operations                       | 9,313,112             | 6,074,899    | 7,088,955    | 60,574                         |
| Other income (expense), net                  | 10,444                | (11,002)     | 11,299       | 96                             |
| Income before income taxes                   | 9,323,556             | 6,063,897    | 7,100,254    | 60,670                         |
| Income taxes (benefit):                      |                       |              |              |                                |
| Current                                      | 3,900,102             | 2,023,686    | 2,764,273    | 23,620                         |
| Deferred                                     | (389,016)             | 184,847      | (85,646)     | (732)                          |
|  | 3,511,086             | 2,208,533    | 2,678,627    | 22,888                         |
| Net income                                   | ¥ 5,812,470           | ¥ 3,855,364  | ¥ 4,421,627  | \$ 37,782                      |

See accompanying notes to consolidated financial statements.

## SEN Corporation, an SHI and Axcelis Company

## Consolidated Balance Sheets

|   | March 31,          |            | March 31, |                             |    |          |
|---|--------------------|------------|-----------|-----------------------------|----|----------|
|   | 2006               | 2007       | 2007      | (U.S. dollars in thousands) |    |          |
|   | (Thousands of yen) |            |           |                             |    |          |
| <b>Assets</b>   |                    |            |           |                             |    |          |
| Current assets:   |                    |            |           |                             |    |          |
| Cash and cash equivalents   | ¥                  | 8,836,834  | ¥         | 6,136,016                   | \$ | 51,961   |
| Trade receivables, net  |                    | 16,408,130 |           | 22,552,485                  |    | 190,978  |
| Due from affiliates – current                                     |                    | 149,250    |           | 62,031                      |    | 525      |
| Inventories   |                    | 7,014,229  |           | 8,186,374                   |    | 69,323   |
| Other current assets  |                    | 448,529    |           | 472,245                     |    | 3,998    |
| Total current assets  |                    | 32,856,972 |           | 37,409,151                  |    | 316,785  |
| Property, plant and equipment, net                                |                    | 2,776,813  |           | 2,642,516                   |    | 22,377   |
| Other assets  |                    | 660,160    |           | 642,338                     |    | 5,440    |
|   | ¥                  | 36,293,945 | ¥         | 40,694,005                  | \$ | 344,602  |
| <b>Liabilities and shareholders' equity</b>                       |                    |            |           |                             |    |          |
| Current liabilities:  |                    |            |           |                             |    |          |
| Trade payables:   |                    |            |           |                             |    |          |
| Notes   | ¥                  | 1,964,205  | ¥         | 2,398,831                   | \$ | 20,314   |
| Accounts  |                    | 3,087,637  |           | 3,232,634                   |    | 27,374   |
|   |                    | 5,051,842  |           | 5,631,465                   |    | 47,688   |
| Due to affiliates   |                    | 1,819,222  |           | 1,931,440                   |    | 16,356   |
| Income taxes payable  |                    | 1,247,358  |           | 1,816,063                   |    | 15,379   |
| Other current liabilities   |                    | 656,653    |           | 766,315                     |    | 6,489    |
| Total current liabilities   |                    | 8,775,075  |           | 10,145,283                  |    | 85,912   |
| Accrued retirement benefits                                       |                    | 16,354     |           | —                           |    | —        |
| Shareholders' equity:   |                    |            |           |                             |    |          |
| Capital stock:  |                    |            |           |                             |    |          |
| Authorized – 20,000 shares Issued and outstanding – 12,000 shares |                    | 600,000    |           | 600,000                     |    | 2,511    |
| Retained earnings   |                    | 26,902,516 |           | 29,948,722                  |    | 266,533  |
| Accumulated other comprehensive loss                              |                    | —          |           | —                           |    | (10,354) |
| Total shareholders' equity  | ¥                  | 27,502,516 | ¥         | 30,548,722                  | \$ | 258,690  |
|   | ¥                  | 36,293,945 | ¥         | 40,694,005                  | \$ | 344,602  |

See accompanying notes to consolidated financial statements.

## SEN Corporation, an SHI and Axcelis Company

## Consolidated Statements of Shareholders' Equity

|   | Capital stock      |         | Retained earnings | Accumulated other comprehensive income (loss) | Total |             |
|---|--------------------|---------|-------------------|---|-------|-------------|
|   | (Thousands of yen) |         |                   |   |       |             |
| Balance at March 31, 2005                 | ¥                  | 600,000 | ¥                 | 23,167,152                                    | ¥     | 23,767,152  |
| Net income and total comprehensive income |                    | —       |                   | 3,855,364                                     |       | 3,855,364   |
| Cash dividends                            |                    | —       |                   | (120,000)                                     |       | (120,000)   |
| Balance at March 31, 2006                 |                    | 600,000 |                   | 26,902,516                                    |       | 27,502,516  |
| Net income and total comprehensive income |                    | —       |                   | 4,421,627                                     |       | 4,421,627   |
| Cash dividends                            |                    | —       |                   | (1,375,421)                                   |       | (1,375,421) |
| Balance at March 31, 2007                 | ¥                  | 600,000 | ¥                 | 29,948,722                                    | ¥     | 30,548,722  |

  

|                           | Capital stock               |       | Retained earnings | Accumulated other comprehensive income (loss) | Total |        |    |         |
|---------------------------|-----------------------------|-------|-------------------|---|-------|--------|----|---------|
|                           | (U.S. dollars in thousands) |       |                   |   |       |        |    |         |
| Balance at March 31, 2005 | \$                          | 2,511 | \$                | 207,541                                       | \$    | 11,264 | \$ | 221,316 |
| Net income                |                             | —     |                   | 34,022  |       | —      |    | 34,022  |

|   |                 |                   |                    |                   |
|---|-----------------|-------------------|--------------------|-------------------|
| Foreign currency translation adjustment | —               | —                 | (20,155)           | (20,155)          |
| Total comprehensive income              |                 |                   |                    | 13,867            |
| Cash dividends                          | —               | (1,059)           | —                  | (1,059)           |
| Balance at March 31, 2006               | 2,511           | 240,504           | (8,891)            | 234,124           |
| Net income                              | —               | 37,782            | —                  | 37,782            |
| Foreign currency translation adjustment | —               | —                 | (1,463)            | (1,463)           |
| Total comprehensive income              |                 |                   |                    | 36,319            |
| Cash dividends                          | —               | (11,753)          | —                  | (11,753)          |
| Balance at March 31, 2007               | <u>\$ 2,511</u> | <u>\$ 266,533</u> | <u>\$ (10,354)</u> | <u>\$ 258,690</u> |

See accompanying notes to consolidated financial statements.

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SEN Corporation, an SHI and Axcelis Company

Consolidated Statements of Cash Flows

|   | Year ended March 31, |                    |                    | Year ended                  |
|---|----------------------|--------------------|--------------------|-----------------------------|
|   | 2005                 | 2006               | 2007               | March 31,<br>2007           |
|   | (Thousands of yen)   |                    |                    | (U.S. dollars in thousands) |
| <b>Operating activities</b>   |                      |                    |                    |                             |
| Net income  | ¥ 5,812,470          | ¥ 3,855,364        | ¥ 4,421,627        | \$ 37,782                   |
| Adjustments to reconcile net income to net cash provided by (used in) operating activities: |                      |                    |                    |                             |
| Depreciation  | 428,129              | 402,684            | 480,787            | 4,108                       |
| Loss on fixed asset disposal  | 584,384              | 6,699              | 10,391             | 89                          |
| Deferred income taxes (benefit) provision   | (389,016)            | 184,847            | (85,646)           | (732)                       |
| Changes in operating assets and liabilities:  |                      |                    |                    |                             |
| Trade receivables   | (4,732,133)          | (1,497,284)        | (6,144,355)        | (52,031)                    |
| Due from/ to affiliates   | (152,853)            | (55,417)           | 199,437            | 1,688                       |
| Inventories   | 1,379,066            | (963,531)          | (1,172,145)        | (9,926)                     |
| Trade payables  | (1,212,661)          | 276,339            | 579,623            | 4,908                       |
| Income taxes payable  | 1,188,473            | (1,611,852)        | 568,705            | 4,816                       |
| Other, net  | 410,355              | (614,369)          | 178,845            | 1,515                       |
| Net cash (used in) provided by operating activities   | 3,316,214            | (16,520)           | (962,731)          | (7,783)                     |
| <b>Investing activities</b>   |                      |                    |                    |                             |
| Purchases of property, plant and equipment, net of proceeds from sale                       | (508,557)            | (398,440)          | (356,881)          | (3,049)                     |
| Other, net  | (34,234)             | 26,604             | (5,785)            | (49)                        |
| Net cash used in investing activities   | (542,791)            | (371,836)          | (362,666)          | (3,098)                     |
| <b>Financing activities</b>   |                      |                    |                    |                             |
| Cash dividends paid   | —                    | (120,000)          | (1,375,421)        | (11,753)                    |
| Net cash used in financing activities   | —                    | (120,000)          | (1,375,421)        | (11,753)                    |
| Effect of exchange rate changes on cash and cash equivalents                                | —                    | —                  | —                  | (631)                       |
| Net (decrease) increase in cash and cash equivalents  | 2,773,423            | (508,356)          | (2,700,818)        | (23,265)                    |
| Cash and cash equivalents at beginning of the year  | 6,571,767            | 9,345,190          | 8,836,834          | 75,226                      |
| Cash and cash equivalents at end of the year  | <u>¥ 9,345,190</u>   | <u>¥ 8,836,834</u> | <u>¥ 6,136,016</u> | <u>\$ 51,961</u>            |
| <b>Supplementary information</b>  |                      |                    |                    |                             |
| Income taxes paid during the year   | ¥ 2,768,804          | ¥ 3,676,965        | ¥ 2,264,769        | \$ 19,352                   |

See accompanying notes to consolidated financial statements.

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SEN Corporation, an SHI and Axcelis Company

Notes to Consolidated Financial Statements

March 31, 2007

## **Note 1. Nature of Business and Significant Accounting Policies**

### **General**

SEN Corporation, an SHI and Axcelis Company (the "Company"), was established on April 1, 1983 under the Commercial Code of Japan. The Company is owned equally by Sumitomo Heavy Industries, Ltd. ("SHI"), a Japanese corporation, and Axcelis Technologies, Inc. ("Axcelis"), a U.S. corporation. The Company designs, manufactures, sells and repairs ion implantation equipment and semiconductor equipment primarily for Japanese semiconductor manufacturing customers under a license agreement with Axcelis.

The Company and its wholly-owned subsidiary maintain their records and prepare their financial statements in accordance with accounting principles generally accepted in Japan. Certain adjustments and reclassifications have been incorporated in the accompanying consolidated financial statements to conform to U.S. generally accepted accounting principles. These adjustments were not recorded in the statutory books of account.

On April 1, 2006, the Company changed its name from "Sumitomo Eaton Nova Corporation" to "SEN Corporation, an SHI and Axcelis Company."

### **Basis of Financial Statements**

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary. All significant intercompany balances and transactions are eliminated in consolidation.

### **Use of Estimates**

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The actual results could differ from those estimates.

### **Foreign Currency**

The Company's functional currency is the Japanese yen. Transaction gains and losses, which arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency, are included in the results of operations as incurred. Transaction gains and losses in each of the years in the three year period ended March 31, 2007 were not material.

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The accompanying consolidated financial statements expressed in U.S. dollars have been prepared for use in conjunction with the preparation of the consolidated financial statements of Axcelis and have been translated into U.S. dollars in accordance with Statement of Financial Accounting Standards No. 52, *Foreign Currency Translation*. Assets and liabilities are translated using the exchange rate in effect at year-end. Statement of income items are translated using the average exchange rate for the year. The effects of these translation adjustments are accumulated and included in accumulated other comprehensive loss, a separate component of shareholders' equity.

### **Cash Equivalents**

All highly liquid investments with a maturity of three months or less when purchased are considered to be cash equivalents.

### **Inventories**

Inventories are stated at the lower of cost or market. The cost of raw material inventories is determined on the average cost method. The cost for work in process inventories are determined based on the specific identification method.

### **Property, Plant and Equipment**

Property, plant and equipment is stated on the basis of cost. Depreciation is computed by the declining-balance method over the estimated useful lives of the respective assets (buildings – 6 to 40 years; machinery – 5 to 13 years; and furniture, fixtures and automobiles – 2 to 20 years) except for buildings purchased after April 1, 1998, which are depreciated on the straight-line basis over 31 years.

### **Impairment of Long-Lived Assets**

Long-lived assets are reviewed for impairment losses whenever events or changes in circumstances indicate the carrying amount may not be recoverable. The assets would be considered impaired when the net undiscounted future cash flows generated by the assets are less than its carrying value. An impairment loss would be recognized based on the amount by which the carrying value of the asset exceeds its fair value.

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### **Accumulated Other Comprehensive Loss**

At March 31, 2006 and 2007, accumulated other comprehensive loss on a U.S. dollar basis was comprised entirely of the accumulated foreign currency translation adjustment.

### **Concentration of Credit Risk**

Financial instruments, which potentially expose the Company to concentrations of credit risk, consist primarily of trade notes and accounts receivable. These financial instruments are carried at cost less an allowance for doubtful accounts, which approximates fair value. Substantially all of the Company's notes and accounts receivable are due from companies in the semiconductor industry located in Japan. The Company performs ongoing credit evaluations of its customers' financial condition and provides an allowance for specific doubtful trade notes and accounts receivable and generally does not require collateral to secure the trade notes and accounts receivable.

For the year ended March 31, 2005, three customers accounted for net sales of 17%, 13% and 10%. Three customers accounted for net sales of 19%, 14% and 13% for the year ended March 31, 2006. For the year ended March 31, 2007, three customers accounted for net sales of 22%, 13%, and 13%, respectively.

At March 31, 2006 and 2007 accounts receivable from one customer accounted for approximated 17% and 26% of total consolidated trade receivables, respectively.

### **Contingencies**

Axcelis, one of SEN's shareholders, filed for arbitration to the Japan Commercial Arbitration Association on September 8, 2006, seeking, among others, royalty payments from SEN for the sale of SEN's single-wafer high-current ion implanter SHX ("SHX"). However, SEN disputes the entirety of Axcelis' claims, arguing that SHX is a product which was developed by SEN based on its own technologies, and there is no reason for SEN to pay any royalties to Axcelis on the sales of SHX products. In addition, SEN filed counter claims against Axcelis on October 30, 2006, seeking, among others, a remedy of damages, the refund of royalties paid to Axcelis and a permanent injunction prohibiting Axcelis from infringing SEN's U.S. and Japanese patents. To date, an arbitrator has been appointed, and the arbitration proceeding has been commenced. Management believes the ultimate resolution of this matter will not have a material adverse effect on the Company's financial position, results of operations or cash flows.

### **Revenue Recognition**

The Company's revenue transactions include sales of systems under multiple element arrangements. Revenue under these arrangements is allocated to all elements, except systems, based upon their 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 based on the greater of the fair value of the undelivered elements or the portion of the sales price that will not be received until the elements are delivered, with the residual amount being allocated to systems revenue. The amount allocated to installation is based upon hourly rates and the estimated time to complete the service. The fair value of all other elements is based upon the price charged when these elements are sold separately.

For domestic sales, the payment for equipment and installation is contingent upon final acceptance, which is signed by the customer when installation is completed. Accordingly, the Company recognizes revenue on such arrangements upon receipt of the final acceptance from the customer. For export sales, revenue from equipment sales is recognized when title and risk of loss transfers to the customer, generally upon shipment. Revenue for installation service is recognized upon receipt of final acceptance. The amount allocated to installation service is calculated by multiplying the hourly rate by estimated service hours.

Service revenue includes revenue from spare parts, maintenance services and equipment overhaul services. Revenue related to maintenance service contracts is recognized ratably over the duration of the contracts. Revenue related to equipment overhauls is recognized upon completion of the service. Revenue related to spare parts is recognized upon the later of shipment or when title and risk of loss passes to the customer.

### **Shipping and Handling Costs**

Shipping and handling costs are included in cost of products sold.

### **Research and Development Costs**

Research and development costs are expensed in the year in which such costs are incurred, except for costs relating to equipment that is acquired or constructed for research and development activities and have alternative future uses.

### **Retirement Benefits**

The cost of retirement benefits for seconded employees is incurred by and reimbursed to SHI (see Note 6). The provision for accrued employees' retirement benefits represents the cost for employees who have been employed directly by the Company (see Note 9).

### **Reclassifications**

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

### **Recent Accounting Pronouncements**

SFAS 158

In September 2006, the Financial Accounting Standards Board (“FASB”) issued Statement of Financial Accounting Standard No. 158, *Employers’ Accounting for Defined Benefit Pension and Other Postretirement Plans—An Amendment of FASB Statements No. 87, 88, 106, and 132R* (“SFAS 158”). SFAS 158 requires companies to recognize the funded status of pension and other postretirement benefit plans on sponsoring employers’ balance sheets and to recognize changes in the funded status in the year the changes occur. It also requires the measurement date of plan assets and obligations to occur at the end of the employers’ fiscal year. The Company will initially apply the requirement to recognize the funded status of its benefit plan and the disclosure requirements in its financial statement as of and for the year ending March 31, 2008. The requirement to measure plan assets and benefit obligations as of the date of the employer’s fiscal year-end statement of financial position shall be effective for the Company’s fiscal year ending March 31, 2009.

If the Company had adapted SFAS 158 as of March 31, 2007, the impact of adoption would have been as follows:

|   | (Thousands of<br>yen) | (U.S. dollars in<br>thousands) |
|---|-----------------------|--------------------------------|
| Pension asset as recorded                       | ¥ (23,311)            | \$ (197)                       |
| Proforma effect of SFAS 158                     | 136,548               | 1,156                          |
| Pension liability assuming adoption of SFAS 158 | ¥ 113,237             | \$ 959                         |

#### FIN 48

In June 2006, FASB issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109* (“FIN 48”). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise’s financial statements in accordance with SFAS 109, *Accounting for Income Taxes*. FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006. The Company will adopt FIN 48 as of April 1, 2007, as required. The Company believes that the adoption of FIN 48 will not have a significant impact on the Company’s financial position or results of operations.

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#### Note 2. Trade Receivables

The components of trade receivables at March 31, 2006 and 2007 were as follows:

|                                 | 2006<br>(Thousands of yen) | 2007<br>(Thousands of yen) | 2007<br>(U.S. dollars<br>in thousands) |
|---------------------------------|----------------------------|----------------------------|--|
| Notes                           | ¥ 10,842                   | ¥ 284,277                  | \$ 2,407                               |
| Accounts                        | 16,415,823                 | 22,293,689                 | 188,787                                |
|                                 | 16,426,665                 | 22,577,966                 | 191,194                                |
| Allowance for doubtful accounts | (18,535)                   | (25,481)                   | (216)                                  |
|                                 | ¥ 16,408,130               | ¥ 22,552,485               | \$ 190,978                             |

#### Note 3. Inventories

The components of inventories at March 31, 2006 and 2007 were as follows:

|                         | 2006<br>(Thousands of yen) | 2007<br>(Thousands of yen) | 2007<br>(U.S. dollars<br>in thousands) |
|-------------------------|----------------------------|----------------------------|--|
| Work in process         | ¥ 4,879,669                | ¥ 5,755,442                | \$ 48,738                              |
| Raw materials and parts | 2,134,560                  | 2,430,932                  | 20,585                                 |
|                         | ¥ 7,014,229                | ¥ 8,186,374                | \$ 69,323                              |

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#### Note 4. Property, Plant and Equipment, Net

The components of property, plant and equipment at March 31, 2006 and 2007 were as follows:

|                                     | 2006<br>(Thousands of yen) | 2007<br>(Thousands of yen) | 2007<br>(U.S. dollars<br>in thousands) |
|-------------------------------------|----------------------------|----------------------------|--|
| Land                                | ¥ 299,485                  | ¥ 299,485                  | \$ 2,536                               |
| Building and land improvements      | 4,551,082                  | 4,611,371                  | 39,049                                 |
| Machinery                           | 871,017                    | 932,455                    | 7,896                                  |
| Furniture, fixtures and automobiles | 1,974,027                  | 2,158,992                  | 18,283                                 |
| Construction in process             | 173,472                    | 11,278                     | 96                                     |
|                                     | 7,869,083                  | 8,013,581                  | 67,860                                 |
| Accumulated depreciation            | (5,092,270)                | (5,371,065)                | (45,483)                               |



In 2005, the Company determined that certain machinery used in its research and development activities had no current or future use and was disposed of. As a result, the Company recorded a loss on disposal of ¥584 million, which was included in selling, general and administrative expenses in the accompanying consolidated statements of income.

#### Note 5. Product Warranty

The Company offers a one year warranty for all of its products, the terms and conditions of which vary depending upon the product sold. The Company estimates the costs that may be incurred under its warranty and records a liability in the amount of such costs at the time product revenue is recognized.

Factors that affect the Company's warranty 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 warranty and adjusts the amount as necessary.

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Changes in the Company's product warranty (included in other current liabilities on the consolidated balance sheets) for the years ended March 31, 2005, 2006 and 2007 are as follows:

|  | 2005               | 2006            | 2007            | 2007                           |
|--|--------------------|-----------------|-----------------|--------------------------------|
|  | (Thousands of yen) |                 |                 | (U.S. dollars<br>in thousands) |
| Balance at April 1 (beginning of year) | ¥ 36,700           | ¥ 54,900        | ¥ 39,200        | \$ 334                         |
| Warranties issued during the period    | 125,874            | 49,896          | 93,464          | 796                            |
| Settlements made during the period     | (107,674)          | (65,596)        | (81,664)        | (698)                          |
| Balance at March 31 (end of year)      | <u>¥ 54,900</u>    | <u>¥ 39,200</u> | <u>¥ 51,000</u> | <u>\$ 432</u>                  |

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#### Note 6. Transactions with Affiliates

Transactions with affiliates for the years ended March 31, 2005, 2006 and 2007 were as follows:

|   | 2005               | 2006               | 2007               | 2007                           |
|---|--------------------|--------------------|--------------------|--------------------------------|
|   | (Thousands of yen) |                    |                    | (U.S. dollars<br>in thousands) |
| <b>Revenues:</b>  |                    |                    |                    |                                |
| SHI and affiliates  | ¥ —                | ¥ —                | ¥ 2,400            | \$ 20                          |
| Axcelis and affiliates                                      | 533,061            | 375,464            | 512,490            | 4,380                          |
|   | <u>¥ 533,061</u>   | <u>¥ 375,464</u>   | <u>¥ 514,890</u>   | <u>\$ 4,400</u>                |
| <b>Inventories purchased:</b>                               |                    |                    |                    |                                |
| SHI and affiliates  | ¥ 1,655,123        | ¥ 1,923,477        | ¥ 2,074,908        | \$ 17,731                      |
| Axcelis and affiliates                                      | 288,191            | 281,357            | 461,452            | 3,943                          |
|   | <u>¥ 1,943,314</u> | <u>¥ 2,204,834</u> | <u>¥ 2,536,360</u> | <u>\$ 21,674</u>               |
| <b>Other income from affiliates:</b>                        |                    |                    |                    |                                |
| Territory commission and sales assistance fees from Axcelis | ¥ 25,253           | ¥ —                | ¥ 8,185            | \$ 70                          |
|   | <u>¥ 25,253</u>    | <u>¥ —</u>         | <u>¥ 8,185</u>     | <u>\$ 70</u>                   |
| <b>Other expenses to affiliates:</b>                        |                    |                    |                    |                                |
| Royalties to Axcelis  | ¥ 1,025,965        | ¥ 706,531          | ¥ 715,136          | \$ 6,111                       |
| Commissions to Axcelis and affiliates                       | 315,584            | 218,390            | 327,039            | 2,794                          |
| Other expenses to Axcelis and affiliates                    | 92                 | 390                | 1,394              | 12                             |
| Management fees and royalties to SHI                        | 226,059            | 164,301            | 174,295            | 1,489                          |
| Subcontract charges to SHI affiliates                       | 291,618            | 3,594              | 4,977              | 43                             |
| Other expenses to SHI and affiliates                        | 186,691            | 229,028            | 196,587            | 1,680                          |
|   | <u>¥ 2,046,009</u> | <u>¥ 1,322,234</u> | <u>¥ 1,419,428</u> | <u>\$ 12,129</u>               |

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Balances due from and to affiliates at March 31, 2006 and 2007 were as follows:

|  | 2006               | 2007 | 2007                           |
|--|--------------------|------|--------------------------------|
|  | (Thousands of yen) |      | (U.S. dollars in<br>thousands) |

|                        |   |           |                       |
|------------------------|---|-----------|-----------------------|
| Due from affiliates:   |   |           |                       |
| SHI and affiliates     | ¥ | —         | ¥ 1,456 \$ 12         |
| Axcelis and affiliates |   | 149,250   | 60,575 513            |
|                        | ¥ | 149,250   | ¥ 62,031 \$ 525       |
| Due to affiliates:     |   |           |                       |
| SHI                    | ¥ | 1,186,174 | ¥ 1,353,259 \$ 11,460 |
| Axcelis                |   | 487,271   | 501,038 4,243         |
| SHI affiliates         |   | 121,076   | 50,468 427            |
| Axcelis affiliates     |   | 24,701    | 26,675 226            |
|                        | ¥ | 1,819,222 | ¥ 1,931,440 \$ 16,356 |

Pension funding for seconded employees (employees on temporary assignment) is provided through a plan administered by SHI. Under this arrangement, the Company is billed monthly for the pension costs attributable to those individuals. Under the terms of the pension agreement with SHI, no additional costs related to earned benefits are to be borne by the Company. Pension contributions paid to SHI for the years ended March 31, 2005, 2006 and 2007 were ¥138,227 thousand, ¥126,977 thousand and ¥91,026 thousand (U.S. \$778 thousand), respectively.

#### Note 7. Leases

Rental expenses for equipment, land and office space for the years ended March 31, 2005, 2006 and 2007 amounted to ¥268,802 thousand, ¥266,976 thousand and ¥257,467 thousand (U.S.\$2,200 thousand), respectively. Future minimum non-cancelable rental commitments at March 31, 2007 under operating leases are as follows:

| Year ended March 31 | (Thousands of yen) | (U.S. dollars in thousands) |
|---------------------|--------------------|-----------------------------|
| 2008                | ¥ 197,309          | \$ 1,671                    |
| 2009                | 113,249            | 959                         |
| 2010                | 65,578             | 555                         |
| 2011                | 54,759             | 464                         |
| 2012                | 49,970             | 423                         |
| Thereafter          | 590,600            | 5,001                       |
|                     | ¥ 1,071,465        | \$ 9,073                    |

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#### Note 8. Income Taxes

Income taxes include corporation, enterprise, and inhabitants' taxes which, in the aggregate, resulted in a statutory tax rate of approximately 40.44% in 2005, 2006 and 2007. The difference between income tax expense and the amount computed by applying the statutory income tax rate to income before income taxes for the years ended March 31, 2005, 2006 and 2007 is summarized as follows:

|  | 2005        | 2006               | 2007        | 2007                        |
|--|-------------|--------------------|-------------|-----------------------------|
|  |             | (Thousands of yen) |             | (U.S. dollars in thousands) |
| Tax at statutory rate  | ¥ 3,766,717 | ¥ 2,452,240        | ¥ 2,871,343 | \$ 24,535                   |
| Tax effect of:   |             |                    |             |                             |
| Nondeductible expenses   | 12,675      | 125                | 14,632      | 125                         |
| Tax credit for costs of information technologies and research and development activities | (286,765)   | (290,852)          | (276,568)   | (2,363)                     |
| Other items, net   | 18,459      | 47,020             | 69,220      | 591                         |
| Income tax expense   | ¥ 3,511,086 | ¥ 2,208,533        | ¥ 2,678,627 | \$ 22,888                   |

Deferred income taxes reflect the net tax effect of the temporary differences between the amounts of the assets and liabilities recorded for financial reporting and income tax purposes. Significant components of the Company's deferred tax assets as of March 31, 2006 and 2007 were as follows:

|                        | 2006               | 2007               | 2007                        |
|------------------------|--------------------|--------------------|-----------------------------|
|                        | (Thousands of yen) | (Thousands of yen) | (U.S. dollars in thousands) |
| Current assets:        |                    |                    |                             |
| Accrued enterprise tax | ¥ 94,166           | ¥ 183,806          | \$ 1,556                    |
| Bonus payment reserve  | 186,600            | 194,939            | 1,651                       |
| Other                  | 36,205             | 47,478             | 403                         |
|                        | ¥ 316,971          | ¥ 426,223          | \$ 3,610                    |
| Non current assets:    |                    |                    |                             |
| Depreciation           | ¥ 286,316          | ¥ 236,626          | \$ 2,004                    |
| Other                  | 13,279             | 48,789             | 413                         |
|                        | ¥ 299,595          | ¥ 285,415          | \$ 2,417                    |

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## Note 9. Employees' and Directors' Retirement Benefits

The Company has a defined benefit pension plan that covers substantially all employees, except for the seconded employees described in Note 6. Benefits under the plan are based on the employees' compensation as of the date of retirement and years of service. The Company's policy is to fund amounts which are actuarially determined to provide the plan with sufficient assets to meet future benefit payment requirements. Assets of the plan are invested in equity securities, debt securities, money market instruments, and insured products.

The measurement date used to determine the pension obligation for the benefit plan is December 31.

The reconciliation of beginning and ending balances of the projected benefit obligation and plan assets, and the funded status of the Company's plan at March 31, 2006 and 2007 are as follows:

|  | 2006<br>(Thousands of yen) | 2007<br>(Thousands of yen) | 2007<br>(U.S. dollars<br>in thousands) |
|--|----------------------------|----------------------------|--|
| <b>Change in benefit obligation</b>                      |                            |                            |  |
| Benefit obligation at beginning of year                  | ¥ 876,196                  | ¥ 993,961                  | \$ 8,461                               |
| Service cost   | 66,015                     | 85,849                     | 734                                    |
| Interest cost  | 16,425                     | 19,435                     | 166                                    |
| Actuarial (gain) loss                                    | 80,371                     | (5,861)                    | (50)                                   |
| Foreign currency exchange rate changes                   | —                          | —                          | (51)                                   |
| Benefits paid  | (45,046)                   | (7,954)                    | (68)                                   |
| Benefit obligation at end of year                        | 993,961                    | 1,085,430                  | 9,192                                  |
| <b>Change in plan assets</b>                             |                            |                            |  |
| Fair value of plan assets at beginning of year           | 591,265                    | 761,150                    | 6,479                                  |
| Actual gain on plan assets                               | 83,389                     | 77,797                     | 665                                    |
| Foreign currency exchange rate changes                   | —                          | —                          | (48)                                   |
| Contributions  | 94,815                     | 128,785                    | 1,100                                  |
| Benefits paid  | (8,319)                    | (7,954)                    | (68)                                   |
| Fair value of plan assets at end of year                 | 761,150                    | 959,778                    | 8,128                                  |
| Funded status  | (232,811)                  | (125,652)                  | (1,064)                                |
| Unrecognized transition obligation                       | 43,080                     | 32,309                     | 274                                    |
| Unrecognized net loss                                    | 173,377                    | 116,654                    | 987                                    |
| Net amount recognized in the consolidated balance sheets | ¥ (16,354)                 | ¥ 23,311                   | \$ 197                                 |

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The components of net pension expense of the Company's plan for the years ended March 31, 2005, 2006 and 2007 were as follows:

|                                | 2005     | 2006<br>(Thousands of yen) | 2007     | 2007<br>(U.S. dollars<br>in thousands) |
|--------------------------------|----------|----------------------------|----------|--|
| Service cost                   | ¥ 64,331 | ¥ 66,015                   | ¥ 85,849 | \$ 734                                 |
| Interest cost                  | 10,842   | 16,425                     | 19,435   | 166                                    |
| Expected return on plan assets | (19,386) | (23,651)                   | (30,446) | (260)                                  |
| Net amortization               | 14,927   | 14,151                     | 14,283   | 122                                    |
| Net pension expense            | ¥ 70,714 | ¥ 72,940                   | ¥ 89,121 | \$ 762                                 |

The aggregate accumulated benefit obligation of this plan was as follows:

|  | 2006<br>(Thousands of yen) | 2007      | 2007<br>(U.S. dollars<br>in thousands) |
|--|----------------------------|-----------|--|
| Aggregate accumulated benefit obligation | ¥ 688,196                  | ¥ 768,665 | \$ 6,509                               |

The discount rates and weighted average rates of increases in future salary levels used in determining the actuarial present value of the projected benefit obligation as of March 31, 2006 and 2007 were as follows:

|   | 2006  | 2007  |
|---|-------|-------|
| Discount rate   | 2.00% | 2.00% |
| Weighted average rates of increases in future salary levels | 3.43% | 3.40% |

The discount rates, weighted average rates of increases in future salary levels and the expected long-term rates of return on plan assets used in determining net pension expense for the years ended March 31, 2005, 2006 and 2007 were as follows:

|   | 2005  | 2006  | 2007  |
|---|-------|-------|-------|
| Discount rate   | 1.50% | 1.50% | 2.00% |
| Weighted average rates of increases in future salary levels | 2.67% | 2.67% | 3.43% |

The expected long-term rate of return on plan assets assumption is determined from the plan's asset allocation using forward-looking assumptions in the context of historical returns.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

| Year ended March 31 | (Thousands of yen) | (U.S. dollars in thousands) |
|---------------------|--------------------|-----------------------------|
| 2008                | ¥ 4,071            | \$ 34                       |
| 2009                | 4,731              | 40                          |
| 2010                | 5,372              | 45                          |
| 2011                | 6,663              | 56                          |
| 2012                | 13,636             | 115                         |
| 2013 – 2017         | 233,588            | 1,978                       |

The Company's investment strategy is to manage the assets of the plan to meet its long-term obligations while maintaining sufficient liquidity to pay current benefits. This is primarily achieved by holding equity-like investments while investing a portion of the assets in long duration bonds in order to match the long-term nature of the liabilities. The Company will periodically undertake an asset and liability modeling study if a material shift in the plan's liability profile or changes in the capital markets call for such a study. The Company's weighted-average asset allocations for its defined benefit plan at March 31, 2006 and 2007, by asset category, are as follows:

| Asset Category                              | 2006          | 2007          | Target  |
|---|---------------|---------------|---------|
| Equity securities                           | 38.2%         | 34.4%         | 34%~48% |
| Debt securities                             | 26.2          | 28.2          | 17~31   |
| Foreign currency securities investment fund | 30.5          | 30.6          | 20~44   |
| Loan receivables                            | 5.1           | 6.8           | 0~7     |
|   | <u>100.0%</u> | <u>100.0%</u> |         |

The Company expects to contribute approximately ¥90,841 thousand (U.S. \$769 thousand) to its defined benefit plan for the year ending March 31, 2008.

The Company previously had provided certain defined benefits to its statutory auditors and directors who were not statutory auditors, directors or employees of SHI, Axcelis or one of their affiliates. Such benefits were based on years of service, compensation at retirement and position. This plan was unfunded. In July 2005, the company terminated this plan. The benefit relating to the service period through July 2005 will be paid when the director or statutory auditor terminates employment. The Company has accrued ¥22,206 (U.S. \$188 thousand) for payment of such benefits.

## Note 10. Shareholders' Equity

The Commercial Code of Japan ("Code") provides that an amount equal to at least 10% of the amount to be disbursed as a distribution of earnings be appropriated to the legal reserve until the total of such reserve and the additional paid-in capital account equals 25% of the common stock account. The Code also provides to the extent that the sum of additional paid-in capital account and the legal reserve account exceed 25% of the common stock account then the amount of the excess (if any) is available for appropriations by resolution of the shareholders.

Retained earnings available for dividends under the Code are based on the amount presented in the Company's non-consolidated financial statements, which are prepared in accordance with accounting principles and practices generally accepted in Japan. Under the Code, the amount of retained earnings available for dividends as of March 31, 2007 amounted to ¥27,776,048 thousand (U.S.\$235 million).

## Note 11. Financial Instruments

The total carrying amount reported in the balance sheets for financial instruments, cash and cash equivalents, notes and accounts receivables, notes and accounts payables approximates their respective fair value.

## Note 12. Supplemental Balance Sheet Information

Changes in allowance for doubtful accounts:

|  | 2005               | 2006            | 2007            | 2007                        |
|--|--------------------|-----------------|-----------------|-----------------------------|
|  | (Thousands of yen) |                 |                 | (U.S. dollars in thousands) |
| Balance at April 1 (beginning of year) | ¥ 11,352           | ¥ 18,260        | ¥ 18,535        | \$ 158                      |
| Addition                               | 6,908              | 275             | 6,946           | 59                          |
| Foreign currency exchange rate changes | —                  | —               | —               | (1)                         |
| Balance at March 31(end of year)       | <u>¥ 18,260</u>    | <u>¥ 18,535</u> | <u>¥ 25,481</u> | <u>\$ 216</u>               |

### Note 13. Sales to Foreign Customers

The Company's sales to foreign customers amounted to ¥4,802,513 thousand, ¥3,407,516 thousand and ¥5,060,620 thousand (U.S. \$43,242 thousand) for the years ended March 31, 2005, 2006 and 2007, respectively.

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### SIGNATURE

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.

By: /s/ Mary G. Puma

Mary G. Puma,  
Chairman of the Board, Chief Executive Officer  
and President

DATED: June 25, 2007

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### Exhibit Index

| <u>Exhibit No.</u> | <u>Description</u>  |
|--------------------|---|
| 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                | Specimen Stock Certificate. Incorporated by reference to Exhibit 4.1 of the Company's Registration Statement on Form S-1 (Registration No. 333-36330).  |
| 4.2                | Rights Agreement between the Company and EquiServe Trust Company, N.A. Incorporated by reference to Exhibit 4.1 of the Company's Registration Statement on Form S-1 (Registration No. 333-36330).   |
| 4.3                | Indenture between the Company and U.S. Bank National Association, as trustee, including the form of note, dated as of May 2, 2006. Incorporated by reference to Exhibit 4.12 of the Company's Report on Form 8-K filed with the Commission on May 4, 2006.                                  |
| 10.1*              | Axcelis Technologies, Inc. 2000 Stock Plan, as amended through June 23, 2005. Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the Commission on June 28, 2005.   |
| 10.2*              | Axcelis Team Incentive Plan for executive officers, adopted by the Compensation Committee of the Board of Directors on January 20, 2005. Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed with the Commission on January 31, 2005.                       |
| 10.3               | Form of Indemnification Agreement entered into by the Company with each of its directors and executive officers. Incorporated by reference to Exhibit 10.2 of the Company's Registration Statement on Form S-1 (Registration No. 333-36330).  |
| 10.4*              | Form of Change in Control Agreement, as amended on May 12, 2005, between the Company and each of its executive officers. Incorporated by reference to Exhibit 10.1 of the Company's report on Form 10-Q filed with the Commission on August 9, 2005.  |
| 10.5*              | Form of Employee non-qualified stock option grant under the 2000 Stock Plan, updated as of April 5, 2002. Incorporated by reference to Exhibit 10.1 of the Company's report on Form 10-Q filed with the Commission on November 9, 2004.   |
| 10.6*              | Form of Non-Employee Director stock non-qualified stock option grant under the 2000 Stock Plan, updated as of July 12, 2004. Incorporated by reference to Exhibit 10.2 of the Company's report on Form 10-Q filed with the Commission on November 9, 2004.                                  |
| 10.7*              | Form of Restricted Stock Agreement for use under the 2000 Stock Plan. Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed with the Commission on June 28, 2005.   |
| 10.8*              | Form of Restricted Stock Unit Award Agreement for use under the 2000 Stock Plan. Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed with the Commission on June 28, 2005.  |

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- 10.9\* 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.
- 10.10\* Named Executive Officer Base Compensation at March 1, 2007. Filed with the Original Form 10-K on March 15, 2007.
- 10.11\* Non-Employee Director Cash Compensation at March 1, 2007. Filed with the Original Form 10-K on March 15, 2007.
- 10.12\* Employment Agreement between the Company and Mary G. Puma. Incorporated by reference to Exhibit 10.5 of the Company's Registration Statement on Form S-1 (Registration No. 333-36330).
- 10.13\*\* Organization Agreement dated December 3, 1982 between Eaton Corporation and Sumitomo Heavy Industries, Ltd. relating to SEN Corporation, an SHI and Axcelis Company formerly known as Sumitomo Eaton Nova Corporation, as amended. Incorporated by reference to Exhibit 10.6 of the Company's Registration Statement on Form S-1 (Registration No. 333-36330).
- 10.14\*\* Master License Agreement dated January 16, 1996 between Eaton Corporation and SEN Corporation, an SHI and Axcelis Company formerly known as Sumitomo Eaton Nova Corporation. Incorporated by reference to Exhibit 10.7 of the Company's Registration Statement on Form S-1 (Registration No. 333-36330).
- 10.15 Registration Rights Agreement between the Company and Quantum Partners LDC, dated as of May 2, 2006. Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the Commission on May 4, 2006.
- 14.1 Ethical Business Conduct at Axcelis, revised through January 2003. Incorporated by reference to Exhibit 14.1 of the Company's report on Form 10-K filed with the Commission on March 28, 2003.
- 21.1 Subsidiaries of the Company. Filed with the Original Form 10-K on March 15, 2007.
- 23.1 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm. Filed with the Original Form 10-K on March 15, 2007.
- 23.2 Consent of Ernst & Young ShinNihon, Independent Auditors, relating to the financial statements of SEN Corporation, an SHI and Axcelis Company. Filed herewith.
- 31.1 Certification of the Chief Executive Officer under Exchange Act Rule 13a-14(a)/15d-14(a) (Section 302 of the Sarbanes-Oxley Act), dated June 25, 2007. Filed herewith.
- 31.2 Certification of the Chief Financial Officer under Exchange Act Rule 13a-14(a)/15d-14(a) (Section 302 of the Sarbanes-Oxley Act), dated June 25, 2007. Filed herewith.
- 32.1 Certification of the Chief Executive Officer pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code (Section 906 of the Sarbanes-Oxley Act), dated June 25, 2007. Filed herewith.
- 32.2 Certification of the Chief Financial Officer pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code (Section 906 of the Sarbanes-Oxley Act), dated June 25, 2007. Filed herewith.

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\* Indicates a management contract or compensatory plan.

\*\* Certain confidential information contained in the document has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended, or Rule 24b-2 promulgated under the Securities and Exchange Act of 1934, as amended.

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## Consent of Ernst &amp; Young ShinNihon, Independent Auditors

We consent to the incorporation by reference in the Registration Statement (Form S-3 No. 333-134920) of Axcelis Technologies, Inc. and in the related Prospectuses, the Registration Statement (Form S-8 No. 333-49726) pertaining to the Axcelis Technologies, Inc. Employee Stock Purchase Plan and the Registration Statements (Form S-8 Nos. 333-49768 and 333-120356) pertaining to the Axcelis Technologies, Inc. 2000 Stock Plan, of our report dated June 15, 2007, with respect to the consolidated financial statements of SEN Corporation, an SHI and Axcelis Company, included in the Axcelis Technologies, Inc. amended Annual Report (Form 10-K/A) for the year ended December 31, 2006.

Tokyo, Japan  
June 21, 2007

/s/ Ernst & Young ShinNihon

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**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 annual report on Form 10-K/A 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 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.

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Date: June 25, 2007

/s/ Mary G. Puma

Mary G. Puma,  
Chairman of the Board, Chief Executive Officer and President

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**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 annual report on Form 10-K/A 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 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

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- (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: June 25, 2007

/s/ Stephen G. Bassett

Stephen G. Bassett,

Executive Vice President and Chief Financial Officer

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AXCELIS TECHNOLOGIES, INC.

**Certification of the Chief Executive Officer**

**Pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code**

The undersigned Chief Executive Officer of Axcelis Technologies, Inc., a Delaware corporation, hereby 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-K/A annual 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 June 25, 2007.

/s/ Mary G. Puma

Mary G. Puma

Chairman of the Board, Chief Executive Officer and President

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AXCELIS TECHNOLOGIES, INC.

**Certification of the Chief Financial Officer**

**Pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code**

The undersigned Chief Financial Officer of Axcelis Technologies, Inc., a Delaware corporation, hereby 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-K/A annual 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 June 25, 2007.

/s/ Stephen G. Bassett

Stephen G. Bassett

Executive Vice President and Chief Financial Officer

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