

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

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

Date of Report (Date of earliest event reported): **May 4, 2005**

Axcelis Technologies, Inc.
(Exact name of registrant as specified in charter)

Delaware
(State or other jurisdiction of incorporation)

000-30941
(Commission File Number)

34-1818596
(IRS Employer Identification No.)

108 Cherry Hill Drive, Beverly, Massachusetts
(Address of principal executive offices)

01915
(Zip Code)

Registrant's telephone number, including area code: **(978) 787-4000**

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition

On May 4, 2005, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended March 31, 2005. The Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference herein.

The information under this Item in this Current Report on Form 8-K and Exhibit 99.1 attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, regardless of any general incorporation language in such filing.

Item 9.01 Financial Statements and Exhibits

(c) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release dated May 4, 2005

SIGNATURE

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

Date: May 4, 2005

Axcelis Technologies, Inc.

By: /s/ Stephen G. Bassett

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release dated May 4, 2005

Media Contact:
 Maureen Hart
 Axcelis Technologies, Inc.
 Tel: (978) 787-4266
 Fax: (978) 787-4275
 maureen.hart@axcelis.com

Investor Contact:
 James L. Kowski
 Axcelis Technologies, Inc.
 Tel: (978) 787-4000
 Fax: (978) 787-9133
 investor.relations@axcelis.com

Agency Contact:
 Stacy Grisinger
 The Loomis Group Inc.
 Tel: (617) 638-0022
 Fax: (617) 638-0033
 grisingers@loomisgroup.com

AXCELIS ANNOUNCES FINANCIAL RESULTS FOR THE FIRST QUARTER OF 2005

BEVERLY, Mass. — May 4, 2005 – Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for its first quarter ended March 31, 2005. The Company reported net revenues of \$100.0 million, compared to \$94.5 million for the fourth quarter of 2004. Worldwide revenues for the first quarter, including revenues of the Company's 50% owned joint venture in Japan, Sumitomo Eaton Nova Corporation ("SEN"), were \$154.7 million, compared to \$184.5 million for the preceding quarter. Net income for the first quarter was \$1.9 million, or \$0.02 per diluted share, which included restructuring and related costs of \$2.9 million, or \$0.03 per diluted share. This compared to \$7.0 million, or \$0.07 per diluted share, in the fourth quarter of 2004. Gross margin for the first quarter of 2005 was 41.8%.

Mary Puma, president and chief executive officer, said, "Given Axcelis' lower worldwide revenue and restructuring related costs in the first quarter, our results reflect the progress we have made during the past year in enhancing operating leverage and lowering the Company's breakeven point. As we begin the second quarter, we continue to implement actions to improve our operational performance and sustain profitability through the cycle.

"On the product front, we are proud to be recognized once again as the market share leader in ion implantation in 2004 according to Gartner Dataquest. We are also very pleased with the strides we have made with our next generation implant platform, the Optima™. We have already shipped the first Optima MD, and another Optima MD will ship to a second customer later this quarter. As the industry moves into 65nm production we expect that Axcelis will be the only company to have implant products optimized for both established and emerging markets."

Axcelis believes that the information regarding the aggregate revenues of SEN, a 50% owned unconsolidated subsidiary of Axcelis, combined with Axcelis' own revenues for the quarter, 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.

First Quarter Detail

Shipments

Shipments for the first quarter on a worldwide basis, including SEN, totaled \$169.4 million with net shipments, excluding SEN, totaling \$99.8 million. Worldwide shipments were up 12.6% from the fourth quarter of 2004 and net shipments were up 10.5%.

Geographically, systems shipments were to: Asia 73%, Europe 10% and North America 17%.

Service revenue (service labor, spare parts and consumables) was \$38.4 million for the quarter, down 8.3% from the fourth quarter of 2004.

The ion implantation business (excluding SEN) accounted for 76.3% of total shipments in the first quarter while the other products (RTP, Dry Strip and Curing) accounted for 23.7%.

Orders and Backlog

Orders (new systems bookings and service excluding SEN) received for the first quarter totaled \$82.5 million, compared to \$87.4 million for the fourth quarter of 2004. New system bookings, excluding service, amounted to \$44.1 million compared to \$45.5 million for the preceding quarter. Worldwide orders, including SEN, were \$140.0 million, compared to \$122.7 million for the fourth quarter of 2004.

Backlog plus deferred systems revenue for the quarter ended at \$102.2 million, a decrease of 13.7% since the end of the fourth quarter of 2004. Reported backlog consists of systems only (i.e., excluding service contracts) that are generally scheduled to ship within six months.

Balance Sheet

Axcelis ended the quarter with \$185.0 million in cash, cash equivalents and short-term investments. The Company's cash position decreased by \$8.3 million during the first quarter due largely to seasonal annual expenses.

Second Quarter Outlook

Axcelis' financial outlook for the second quarter of 2005 assumes no material change in the semiconductor spending environment. Worldwide revenues are expected to be \$178 million to \$193 million, a 20 % increase over first quarter levels. Net revenues (excluding SEN) in the second quarter are expected to be in a range of \$85 million to \$95 million. The Company anticipates gross margins in the low 40s and that net income will be in the range of breakeven to \$4 million (\$0.00 to \$0.04 per diluted share). The Company expects to consume approximately \$10 million of cash during the second quarter.

Axcelis assumes no responsibility to update guidance. Axcelis will only confirm or update guidance via a press release.

The Company will be hosting a conference call today, Wednesday, May 4, 2005, beginning at 5:00 pm ET. The purpose of the call is to discuss first-quarter 2005 results and to provide guidance for the second quarter of 2005. The call will be available to interested listeners via an audio web cast that can be accessed through Axcelis' home page at www.axcelis.com or by dialing 1-800-474-8920 (1-719-457-2727 outside North America). Participants calling into the conference call will be requested to provide the company name: Axcelis Technologies, the conference leader: James Kawski, and pass code: Axcelis Q1. A telephone replay will be available from 8:00 pm ET on May 4, 2005 until 11:59 pm ET on May 11, 2005. Dial 1-888-203-1112 (1-719-457-0820 outside North America), and enter conference ID code #2363642. A web cast replay will be available from 8:00 pm ET on May 5, 2005 until 5:00 pm ET June 5, 2005.

Safe Harbor Statement

This document contains forward-looking statements under the SEC safe harbor provisions. These statements are based on management's current expectations and should be viewed with caution. They are subject to various risks and uncertainties, many of which are outside the control of the Company, including the conversion of orders to revenue in any particular quarter, or at all, our ability to implement successfully our profit plans, the continuing demand for semiconductor equipment, relative market growth, continuity of business relationships with and purchases by major customers, competitive pressure on sales and pricing, increases in material and other production costs that cannot be recouped in product pricing and global economic, political and financial conditions. These risks and other risk factors relating to Axcelis are described more fully in the most recent Form 10-K filed by Axcelis and in other documents filed from time to time with the Securities and Exchange Commission.

About Axcelis Technologies, Inc.

Axcelis Technologies, Inc., headquartered in Beverly, Massachusetts, provides innovative, high-productivity solutions for the semiconductor industry. Axcelis is dedicated to developing enabling process applications through the design, manufacture and complete life cycle support of ion implantation, rapid thermal processing, and cleaning and curing systems. Axcelis Technologies has key product development centers in Beverly, Massachusetts, as well as in Toyo, Japan through its joint venture, SEN. The company's Internet address is: www.axcelis.com.

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

	Three months ended March 31,	
	2005	2004
Revenue		
Systems	\$ 59,693	\$ 91,756
Services	38,441	39,091
Royalties	1,902	3,377
	<u>100,036</u>	<u>134,224</u>
Cost of revenue	<u>58,239</u>	<u>84,048</u>
Gross profit	41,797	50,176
Operating expenses		
Research & development	15,867	15,437
Selling	11,870	11,599
General and administrative	11,183	11,095
Amortization of intangible assets	612	612
Restructuring charges	1,799	—
	<u>41,331</u>	<u>38,743</u>
Income from operations	466	11,433
Other income (expense)		
Equity income of Sumitomo Eaton Nova Corporation	2,339	5,569
Interest income	1,010	296
Interest expense	(1,654)	(1,672)
Other-net	(14)	(591)
	<u>1,681</u>	<u>3,602</u>
Income before income taxes	2,147	15,035
Income taxes	249	1,454
Net income	<u>\$ 1,898</u>	<u>\$ 13,581</u>
Basic net income per share	\$ 0.02	\$ 0.14
Diluted net income per share	\$ 0.02	\$ 0.13
Shares used in computing:		
Basic net income per share	100,138	99,208
Diluted net income per share	100,929	101,479

Axcelis Technologies, Inc.
Consolidated Balance Sheets
In thousands

	<u>March 31,</u> <u>2005</u>	<u>December 31,</u> <u>2004</u>
Assets		
Current assets		
Cash, cash equivalents and short-term investments	\$ 178,625	\$ 187,012
Restricted cash	3,805	3,498
Accounts receivable, net	79,491	83,767
Inventories	111,910	116,330
Other current assets	23,185	14,986
Total current assets	<u>397,016</u>	<u>405,593</u>
Property, plant & equipment, net	73,332	75,275
Investment in Sumitomo Eaton Nova Corporation	106,514	109,095
Goodwill	46,773	46,773
Intangible assets	17,059	17,671
Restricted cash, long-term portion	2,583	2,841
Other assets	31,633	31,628
	<u>\$ 674,910</u>	<u>\$ 688,876</u>
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable	\$ 23,222	\$ 24,278
Accrued compensation	17,039	27,030
Warranty	9,615	9,218
Income taxes	3,346	4,530
Deferred revenue	35,765	34,050
Other current liabilities	6,543	8,289
Total current liabilities	<u>95,530</u>	<u>107,395</u>
Long-term debt	125,000	125,000
Long-term deferred revenue	7,796	7,697
Other long-term liabilities	5,289	5,297
Stockholders' equity		
Common stock	100	100
Additional paid-in capital	458,615	457,335
Deferred compensation	(536)	(566)
Treasury stock - at cost	(1,218)	(1,218)
Retained earnings deficit	(25,434)	(27,332)
Accumulated other comprehensive income	9,768	15,168
	<u>441,295</u>	<u>443,487</u>
	<u>\$ 674,910</u>	<u>\$ 688,876</u>