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 1, 2003

Axcelis Technologies, Inc.

(Exact name of registrant as specified in charter)

000-30941

34-1818596

(IRS Employer Identification No.)

(State or other jurisdiction of incorporation)

Delaware

(Commission File Number)

55 Cherry Hill Drive, Beverly, Massachusetts

(Address of principal executive offices)

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

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

01915

(Zip Code)

Item 9. Regulation FD Disclosure (Information furnished pursuant to Item 12, "Disclosure of Results of Operations and Financial Condition").

On July 29, 2003, Axcelis Technologies, Inc. announced its financial results for the quarter ended June 30, 2003. The full text of the press release issued in connection with the announcement is attached as Exhibit 99.1 to this Current Report on Form 8-K.

In accordance with the procedural guidance in SEC Release No. 33-8216, the information in this Form 8-K and the Exhibit attached hereto is being furnished under "Item 9. Regulation FD Disclosure" rather than under "Item 12. Disclosure of Results of Operations and Financial Condition." The information 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, except as expressly set forth by specific reference in such a filing.

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: July 29, 2003

Axcelis Technologies, Inc.

By: /s/ Stephen G. Bassett

Stephen G. Bassett Chief Financial Officer

EXHIBIT INDEX

Exhibit No.

99.1

Description

Press release dated July 29, 2003

Company Contact:Investor Contact:Maureen HartMark NamaroffAxcelis Technologies, Inc.Axcelis Technologies, Inc.Tel: (978) 787-4266Tel: (978) 787-4000Fax: (978) 787-4275Fax: (978) 787-4212maureen.hart@axcelis.cominvestor.relations@axcelis.com

Agency Contact: Stacy Grisinger Axcelis Technologies, Inc. Tel:(617) 638-0022 Fax: (617) 638-0033 grisingers@loomisgroup.com

AXCELIS ANNOUNCES FINANCIAL RESULTS FOR THE SECOND QUARTER 2003 Strength in Japan is highlighted as recovery begins

BEVERLY, Mass.--(BUSINESS WIRE)--July 29, 2003--Axcelis Technologies, Inc. (NASDAQ: ACLS) today announced financial results for its second quarter ended June 30, 2003. Worldwide sales for the second quarter, including SEN, Axcelis' unconsolidated joint venture in Japan, were \$123.3 million, sequentially flat compared to the first quarter of 2003, and down 11% from the second quarter of 2002. Net sales (excluding SEN) for the second quarter were \$84.7 million, up 3% sequentially from the first quarter and down 5% from the second quarter of 2002. Pre-tax loss for the second quarter was \$8.9 million, compared with a pre-tax loss of \$7.6 million in the first quarter of 2003. Net loss for the second quarter 2003, including the effect of a non-cash charge to income tax expense of \$69.7 million (\$0.70 per share), was \$78.9 million (\$0.80 per share) compared to a net loss of \$6.3 million (\$0.06 per share) for the first quarter of 2003 and a net loss of \$1.7 million (\$0.02 per share) for the second quarter of 2002. The non-cash charge to income tax expense reduces the carrying value of deferred tax assets at June 30, 2003 to zero.

Business Highlights:

Consistent with the strategy of driving profitable growth through market share leadership, innovation and diversification, Axcelis achieved a number of important milestones:

- Finalized the acquisition of Matrix Integrated Systems on July 3, 2003 in a \$14 million cash transaction further strengthening the company's diversification strategy. Matrix provides Axcelis with a well-established low cost front-end-of-line (FEOL) dry strip tool as well as a talented technical team and solid IP portfolio. The acquisition is expected to be accretive beginning in the first quarter of 2004.
- Launched a new dry strip tool called the ES3Lk. This is the industry's only "Zero Damage" strip over low-k solution. This tool provides photoresist strip capability through three technology nodes down to 45nm and is fully compatible with all qualified low-k materials. Since the introduction of the tool, several large customers have begun evaluating its capability and we have recently secured one customer commitment for a tool delivery this year.
- Introduced a new multi-wafer implanter called the Axcelis Paradigm for more cost-effective processing of high energy and medium current implants beyond the 90nm technology node. This tool can save chip manufacturers significant capital cost by eliminating the need for redundant tool types. Customer interest is very high with several large integrated device manufacturers (IDMs) evaluating its performance.

Mary Puma, president and chief executive officer, stated, "Our results for the second quarter met our guidance and we continue to take actions to strengthen the business going forward by focusing on our profitability and capturing additional market share in what continues to be a difficult operating environment. We are beginning to see a positive trend in the market as concentrated customer buying during the first half of 2003 is broadening with logic IDMs and foundries starting to order new tools."

Puma continued, "We are looking forward to an improving order environment in the second half of the year. We are currently tracking upwards of 27 fab projects, mostly 300mm. We believe we will see orders from these customers beginning in the third quarter. In addition, SEN is seeing strong activity in Japan, which could significantly improve its outlook for the year. We believe that equipment demand, built up over this extended downturn, will drive considerable improvement for the industry and Axcelis as we move into 2004."

Revenue

The company's net revenue for the second quarter of \$84.7 million was up 3% sequentially compared with the first quarter of 2003. Concentration of buying among our top customers continued for the quarter but logic IDMs represented 47% of revenues as compared with the first quarter at 22%. Memory makers continued to be a large portion of quarterly revenues, representing 47% of sales. Service revenue (service contracts, spare parts and consumables) of \$30.8 million represented 36% of net revenues for the quarter, the same as in the first quarter. Geographically, systems revenue (excluding SEN) was as follows: North America 49%, Asia 33%, and Europe 18%. Including SEN, 54% of worldwide systems revenues came from Asia.

The ion implantation business accounted for 70% of total revenue in the second quarter. Complementary products accounted for 30% of revenues driven by stronger sales of RTP and dry strip systems. This is compared to the first quarter where the ratio was 80% implant/20% complementary products.

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

Orders and Backlog

Net orders (systems and service), excluding SEN, received for the second quarter totaled \$72.4 million, down 10% from the first quarter of 2003. Worldwide orders, including SEN, totaled \$140.3 million, up 26% compared with the first quarter driven by stronger than expected bookings from Japanese logic and memory IDMs. Geographically, system orders were split between Asia and North America as follows: Asia 66% and North America 34%. Orders from China constituted 32% of orders for the quarter as that market continues to expand. Logic IDMs made up the bulk of the order activity with 42% of orders while memory IDMs and foundries made up 23% and 35% of orders, respectively.

Backlog for the quarter ended at \$45.5 million, a decline of 22% since the first quarter of 2003. (Reported backlog consists of systems only (e.g. excluding service contracts) that are generally scheduled to ship within six months).

Gross Margin

Gross margin for the second quarter was 32%, slightly better than expected due to a higher than anticipated percentage of 200mm revenues, but lower than the first quarter gross margins of 34%. The pressure on gross margins is primarily due to product mix and the current competitive pricing environment.

Operating Expenses

Total operating expenses for the fourth quarter (excluding amortization of intangible assets) were \$36.5 million, down 6% sequentially from the first quarter. The decrease in operating expenses reflects positively the cost-cutting initiatives the company has instituted over the past two years.

SEN Contribution

SEN contributed \$2.5 million in combined equity income and royalties on \$38.7 million in revenues for the second quarter. The decline in SEN contribution reflected the decline in revenues attributed to customer buying patterns. However, as noted above, the order environment improved dramatically in Japan during the second quarter.

Pre-Tax Loss and Net Loss

The loss before tax for the second quarter of 2003 was \$8.9 million compared with a pre-tax loss of \$7.6 million in the first quarter of 2003 and a pre-tax loss of \$4.4 million in the second quarter of 2002.

Net loss for the second quarter was \$78.9 million compared with a net loss of \$6.3 million for the first quarter of 2002 and a net loss of \$1.7 million for the second quarter of 2002. The net loss for the quarter includes the effect of a non-cash adjustment of \$69.7 million to income tax expense to reduce the carrying value of deferred tax assets to zero.

Balance Sheet

Axcelis ended the second quarter with \$153.5 million in cash, cash equivalents and short-term investments compared with \$157.3 million in cash at the end of the first quarter. Cash outflow of \$3.7 million was due to timing of customer payments at the end of the quarter. Total liquidity (cash and \$50 million bank line of credit) is now \$204 million.

Third Quarter 2003 Outlook

Worldwide revenue (including SEN) is expected to be \$120 million to \$130 million. Net revenue (excluding SEN) is expected to be in the range of \$60 million to \$70 million. In addition, in the third quarter we are planning to ship a high number of tools on an evaluation basis, which are expected to convert to revenue over the next six to nine months. Gross margins are expected to remain flat for the third quarter in the low 30% range. Contribution from SEN is expected to be in the range of \$6.0 to \$6.5 million as the Japanese market strengthens. Net loss per share is projected to range from \$0.16 to \$0.18. Cash out-flow for the third quarter is expected to be \$30 million to \$35 million due to an increase in our net loss and the cash used for the Matrix acquisition. Orders are expected to increase in the third and fourth quarter, signaling an improvement in business by year-end and setting the stage for a 2004 recovery.

Second Quarter Earnings Conference Call

Please join us for our second quarter conference call on July 29, 2003 at 5:00 p.m. EDT. The call will be available to interested listeners via an audio webcast that can be accessed through Axcelis' home page at www.axcelis.com, or by dialing 1-800-915-4836 (1-973-317-5319 outside North America). Participants calling into the conference call will be requested to provide the company name: Axcelis Technologies, the conference leader: Mark Namaroff, and pass code: Axcelis 2Q. A telephone replay will be available from 7:00 p.m. EDT on July 29, 2003 until 11:59 p.m. EDT on August 5, 2003. Dial 1-800-428-6051 (1-973-709-2089 outside North America), and enter conference ID code #298980. A webcast replay will be available from 8:00 p.m. EDT on July 29, 2003.

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 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 technology centers in Beverly, Massachusetts, and Rockville, Maryland as well as in Toyo, Japan through its joint venture, SEN. The company's Internet address is: www.axcelis.com.

Consolidated Statements of Operations

(In thousands, except per share amounts)

	Three Months Ended		Six Months Ended	
	June 30, 2003	June 30, 2002	June 30, 2003	June 30, 2002
Net sales	\$ 84,671	\$88,988	\$167,076	\$151,073
Cost of products sold	57,655	55,760	112,385	102,448
Gross profit	27,016	33,228	54,691	48,625
Operating expenses:				
Research and development	15,927	18,572	32,103	36,284
Selling	11,509	11,742	23,607	22,980
General and adminstrative	9,099	11,673	19,542	23,620
Amortization of goodwill and intangible				
assets	365	365	730	730
Loss from operations	(9,884)	(9,124)	(21,291)	(34,989)
Other income (expense):				
Royalty income	1,258	3,354	3,023	3,921
Equity income of Sumitomo Eaton Nova				
Corporation	1,298	3,322	4,493	1,360
Interest income	523	1,019	1,054	1,976
Interest expense	(1,409)	(1,696)	(2,787)	(2,894)
Other-net	(719)	(1,283)	(1,002)	(1,644)
Loss before taxes	(8,933)	(4,408)	(16,510)	(32,270)
Income taxes (credit)	69,945	(2,731)	68,694	(12,762)
Net loss	\$(78,878)	\$(1,677)	\$ (85,204)	\$ (19,508)
Basic net loss per share	\$ (0.80)	\$ (0.02)	\$ (0.87)	\$ (0.20)
Diluted net loss per share	\$ (0.80)	\$ (0.02)	\$ (0.87)	\$ (0.20)
Shares used in computing:				
Basic net loss per share	98,289	97,876	98,284	97,846
Diluted net loss per share	98,289	97,876	98,284	97,846
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Consolidated Balance Sheets

(In thousands)

Cash & cash equivalents Short-term investments Accounts receivable Inventories Deferred income taxes & other current assets	\$116,622 36,926 73,227 110,424 2,944	\$150,651 34,992 60,311 115,290 18,329
Total current assets	340,143	379,573
Property, plant & equipment, net	90,015	93,597
Investment in Sumitomo Eaton Nova Corporation	61,892	57,868
Goodwill	40,682	40,682
Intangible assets	12,411	13,141
Deferred income taxes	_	57,136
Other assets	28,294	27,454
Total assets	\$573,437	\$669,451

LIABILITIES AND STOCKHOLDERS' EQUITY

Current liabilities: Accounts payable Accrued compensation Warranty reserve Income taxes payable Other current liabilities	\$ 29,262 6,744 14,948 7,486 17,686	\$ 32,594 6,745 16,625 12,823 18,400
Total current liabilities	76,126	87,187
Convertible debt Other long-term liabilities Stockholders' equity:	125,000 2,979	125,000 4,756
Common stock	99	98
Additional paid-in capital	448,659	447,533
Deferred compensation	(1,080)	(782)
Treasury stock - at cost	(1,218)	(1,218)
Retained earnings	(72,835)	12,369
Accumulated other comprehensive income (loss)	(4,293)	(5,492)
Total stockholders' equity	369,332	452,508
Total liabilities and stockholders' equity	\$573,437	\$669,451