

**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): **November 1, 2006**

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 November 1, 2006, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended September 30, 2006. 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 November 1, 2006

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: November 1, 2006

Axcelis Technologies, Inc.

By: /s/ STEPHEN G. BASSETT

Stephen G. Bassett

Executive Vice President and Chief Financial Officer

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Exhibit No.

Exhibit Index

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Press Release dated November 1, 2006.

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**AXCELIS ANNOUNCES FINANCIAL RESULTS FOR
 THE THIRD QUARTER OF 2006**

*Reports Strong Traction for Optima Single Wafer Implant Technology
 and Continued Demand for Dry Strip Products*

BEVERLY, Mass. — November 1, 2006 — Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for its third quarter ended September 30, 2006. The Company reported revenues of \$122.8 million, compared to \$117.6 million for the second quarter of 2006. Worldwide revenues for the third quarter, which include revenues of SEN Corporation, an SHI and Axcelis Company, the Company's 50%-owned joint venture in Japan, were \$168.1 million, compared to \$198.2 million for the preceding quarter. Net income for the third quarter was \$12.5 million, or \$0.12 per share, compared to net income for the second quarter of 2006 of \$12.1 million, or \$0.12 per share. In the corresponding quarter for the previous year, the Company reported net revenues of \$87.4 million, worldwide revenues of \$126.3 million, and net loss of \$5.2 million, or \$0.05 per share, which included restructuring and related costs of \$2.9 million, or \$0.03 per diluted share.

Commenting on the Company's performance, Chairman and CEO Mary Puma said, "During the quarter, we achieved financial results in line with our expectations, and we continue to execute successfully against our business plan. Since June 30th, we have secured four new penetrations for our single wafer Optima HD high dose system. Two of these systems feature Axcelis' new Imax™ technology, which delivers the power of molecular implants for low energy applications. This new product offering is gaining traction with customers because it delivers compelling productivity and yield advantages, enabling state-of-the-art device manufacturing."

Puma continued, "Our dry strip products are in high demand, as customers continue to add capacity. Overall, the dry strip product line is having a very good year, achieving significant market share gains and providing strong value to our business model."

Axcelis believes that reporting the combined revenues of SEN, a 50%-owned unconsolidated subsidiary of Axcelis, with Axcelis' own revenues, 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.

Third Quarter Detail

Shipments and Margins

Shipments before provision for deferred revenue for the third quarter totaled \$128.1 million with worldwide shipments, including SEN, totaling \$205.4 million. This compares to Axcelis shipments, excluding SEN, of \$116.6 million in the second quarter of 2006 and worldwide shipments, including SEN, of \$195.7 million.

Geographically, Axcelis systems shipments, excluding SEN, were to: Asia, 49%; North America, 20%; and Europe, 31%.

The ion implantation business (excluding SEN) accounted for 73% of total shipments in the third quarter while other products (RTP, Dry Strip and Curing) accounted for 27%.

Service revenue (service labor, spare parts and consumables), excluding SEN, was \$42.1 million for the quarter, compared to \$46.9 million in the second quarter of 2006.

Gross margin for the third quarter was 43.4%, up from 40.8% in the preceding quarter.

Orders and Backlog

Orders (new systems bookings and service excluding SEN) received for the third quarter totaled \$101.0 million, compared to \$159.1 million for the second quarter of 2006. New system bookings, excluding service, amounted to \$59.0 million compared to \$112.2 million for the preceding quarter. Worldwide orders, including SEN, were \$164.1 million, compared to \$260.3 million for the second quarter of 2006.

Backlog plus deferred systems revenue at quarter end was \$107.8 million. Backlog consists of systems only (i.e., excluding service contracts) that are generally scheduled to ship within six months.

Balance Sheet

Cash, cash equivalents and marketable securities increased by \$17.6 million to \$193.8 million at September 30, 2006. The Company ended the quarter with working capital of \$277.6 million.

Business Outlook

Axcelis' financial outlook for the fourth quarter of 2006 includes revenues in the range of \$115.0 million to \$125.0 million. Worldwide revenues, including SEN, are expected to be in a range of \$230.0 million to \$245.0 million. As expected, the Company anticipates lower gross margins in the fourth quarter in the range of 38% to 40%, as a result of revenue recognition on new products. The Company forecasts earnings per share in the range of \$0.11 to \$0.15 per share.

Stephen Bassett, Axcelis executive vice president and CFO, commented, "As expected, our fourth quarter margins are under pressure due to several new products in the mix. Taking into account our fourth quarter guidance and performance year-to-date, Axcelis will outperform our expectations for the year, as shared with investors in our February 2006 earnings call. At that time, we expected

a revenue increase of 15-20% year over year, while maintaining overall margins of 40%. We continue to execute to our business plan, positioning us for significant market share growth and improved profitability in 2007."

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

Third Quarter 2006 Conference Call

The Company will be hosting a conference call today, Wednesday, November 1, 2006, beginning at 5:00 pm ET. The purpose of the call is to discuss third quarter results and to provide guidance for the fourth quarter of 2006.

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 1-800-479-1628 (1-719-457-2729 outside North America). Participants calling into the conference call will be requested to provide the company name: Axcelis Technologies, the conference leader: Maureen Hart, and pass code: #1342692. A webcast replay will be available from 8:00 pm ET on November 1, 2006 until 5:00 pm ET December 1, 2006.

Safe Harbor Statement

This document contains forward-looking statements under the SEC safe harbor provisions. These statements, which include those relating to the company developing new products, building its position in the ion implant market, and its guidance for future financial performance, 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 timing of orders and shipments, 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 Saijo, Japan through its joint venture, SEN Corporation, an SHI and Axcelis Company. The company's Internet address is: www.axcelis.com.



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

	Three months ended September 30,		Nine months ended September 30,	
	2006	2005	2006	2005
Revenue				
Systems	\$ 78,546	\$ 47,083	\$ 198,684	\$ 155,723
Services	42,062	39,280	133,006	116,724
Royalties, primarily from SEN	2,209	1,019	6,688	7,149
	<u>122,817</u>	<u>87,382</u>	<u>338,378</u>	<u>279,596</u>
Cost of Revenue	<u>69,551</u>	<u>51,679</u>	<u>198,128</u>	<u>163,156</u>
Gross profit	53,266	35,703	140,250	116,440
Operating expenses				
Research & development	17,597	17,755	54,000	51,165
Sales and marketing	11,743	10,691	33,919	34,565
General and administrative	11,986	11,994	34,258	34,996
Amortization of intangible assets	656	612	1,895	1,836
Restructuring charges	53	1,545	147	5,427
	<u>42,035</u>	<u>42,597</u>	<u>124,219</u>	<u>127,989</u>
Income (loss) from operations	11,231	(6,894)	16,031	(11,549)
Other income (expense)				
Equity income of SEN	2,372	1,395	10,734	11,360
Interest income	2,250	1,505	5,816	3,799
Interest expense	(2,570)	(1,661)	(6,657)	(4,971)
Other-net	153	435	837	(2)
	<u>2,205</u>	<u>1,674</u>	<u>10,730</u>	<u>10,186</u>

Income before income taxes	13,436	(5,220)	26,761	(1,363)
Income taxes	916	(53)	1,552	1,157
Net income	<u>\$ 12,520</u>	<u>\$ (5,167)</u>	<u>\$ 25,209</u>	<u>\$ (2,520)</u>
Net income per share				
Basic	\$ 0.12	\$ (0.05)	\$ 0.25	\$ (0.03)
Diluted	\$ 0.12	\$ (0.05)	\$ 0.25	\$ (0.03)
Shares used in computing net income per share				
Basic	101,165	100,428	101,003	100,256
Diluted	101,612	100,428	101,205	100,256



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

	<u>September 30,</u> <u>2006</u>	<u>December 31,</u> <u>2005</u>
Assets		
Current assets		
Cash and cash equivalents	\$ 90,452	\$ 71,417
Marketable securities	91,539	93,797
Restricted cash	9,164	8,037
Accounts receivable, net	98,163	79,379
Inventories, net	146,255	109,972
Prepaid expenses and other current assets	37,644	32,767
Total current assets	<u>473,217</u>	<u>395,369</u>
Property, plant & equipment, net	66,534	71,443
Investment in SEN	119,163	108,815
Goodwill	46,773	46,773
Intangible assets	14,205	16,100
Restricted cash, long-term portion	2,694	3,195
Other assets	23,866	19,748
	<u>\$ 746,452</u>	<u>\$ 661,443</u>
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable	\$ 39,627	\$ 25,556
Accrued compensation	21,177	18,437
Warranty	6,569	5,739
Income taxes	2,043	3,021
Deferred revenue	40,420	30,140
Other current liabilities	11,587	11,333
Current portion, long term debt	74,217	—
Total current liabilities	<u>195,640</u>	<u>94,226</u>
Long-term debt	76,165	125,000
Long-term deferred revenue	9,468	11,177
Other long-term liabilities	4,601	4,999
Commitments and contingencies	—	—
Stockholders' equity		
Preferred Stock	—	—
Common stock	101	101
Additional paid-in capital	468,779	466,454
Deferred compensation	—	(5,385)
Treasury stock	(1,218)	(1,218)
Accumulated deficit	(5,978)	(31,187)
Accumulated other comprehensive loss	(1,106)	(2,724)
	<u>460,578</u>	<u>426,041</u>

\$ 746,452

\$ 661,443
