

**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): **February 17, 2010**

Axcelis Technologies, Inc.

(Exact name of registrant as specified in its 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 February 17, 2010, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the fourth quarter and full year ended December 31, 2009. The Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference herein.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

99.1 Press Release dated February 17, 2010. Filed herewith.

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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: February 17, 2010

Axcelis Technologies, Inc.

By: /s/ STEPHEN G. BASSETT
Stephen G. Bassett
Executive Vice President
and Chief Financial Officer

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AXCELIS ANNOUNCES IMPROVED FINANCIAL RESULTS

FOR FOURTH QUARTER AND FULL YEAR 2009

Company Generates Positive Cash Flow

BEVERLY, Mass.—February 17, 2010—Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced improved financial results for the fourth quarter and full year ended December 31, 2009.

Operations

The Company reported fourth quarter revenue of \$38.7 million, compared to \$35.0 million for the third quarter of 2009. Net loss for the fourth quarter was \$10.0 million, or \$0.10 per share. This compares to a net loss for the third quarter of 2009 of \$15.9 million, or \$0.15 per share. In the corresponding quarter for the previous year, the Company reported revenue of \$42.0 million, and a net loss of \$141.4 million, or \$1.37 per share, which included charges for restructuring of \$3.4 million (\$0.03 per share), impairment of intangibles and long-lived assets of \$46.9 million (\$0.46 per share), impairment of goodwill of \$42.1 million (\$0.41 per share) and excess inventory of \$23.2 million (\$0.23 per share).

For the full year 2009, the Company reported revenue of \$133.0 million compared with \$250.2 million in 2008. Net loss for the year was \$77.5 million, or \$0.75 per share which includes charges for restructuring of \$5.5 million (\$0.05 per share). In 2008, the Company reported a net loss of \$196.7 million, or \$1.91 per share which included charges for restructuring of \$6.9 million (\$0.07 per share), impairment of intangible and long-lived assets of \$46.9 million (\$0.46 per share), impairment of goodwill of \$42.1 million (\$0.41 per share), and excess inventory of \$24.6 million (\$0.24 per share).

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Balance Sheet

Cash and cash equivalents, including restricted cash, were \$52.2 million at December 31, 2009. The company generated \$3.7 million in cash during the quarter. The Company ended the quarter with working capital of \$163.8 million.

Commenting on the Company's performance, Mary Puma, chairman and CEO, stated, "During the downturn we made positive strides in improving our business model and we are now seeing the rewards. In particular we are pleased that we generated cash in the quarter. While we expect this positive trend to continue and we believe we will be cash flow positive in 2010, quarterly cash flows may vary due to timing of shipments, customer buying patterns and investments in working capital. We are experiencing a significant increase in recent order flow and are forecasting sales to be up across all product lines and service programs. These contributions strengthen our foundation for the future, and we look forward to capitalizing on the significant opportunities that lie ahead."

Fourth Quarter 2009 Conference Call

The Company will host a conference call today at 5:00 pm ET to discuss results for the fourth quarter and full year 2009. The call will be available to interested listeners via an audio webcast at Axcelis' home page at www.axcelis.com, or by dialing 1-888-679-8040 (1-617-213-4851 outside North America). Participants calling into the conference call will be requested to provide the company name, Axcelis Technologies and pass code: 68128785. Webcast and telephone replays will be available from 8 pm ET on February 17, 2010 until 11:59 pm on May 24, 2010. Dial 1-888-286-8010 (617-801-6888 outside North America), and enter conference ID code# 90659114.

Safe Harbor Statement

This document contains forward-looking statements under the SEC safe harbor provisions. These statements, which include our 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

Axcelis Technologies, Inc. (Nasdaq: ACLS) 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

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support of ion implantation and cleaning systems. The company's Internet address is: www.axcelis.com.

Company Contacts:

Maureen Hart (editorial/media) 978.787.4266

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

	Three Months ended December 31,		Twelve Months ended December 31,	
	2009	2008	2009	2008
Revenue				
Systems	\$ 29,347	\$ 30,732	\$ 98,716	\$ 194,275
Services	9,390	10,520	33,917	51,880
Royalties, primarily from SEN	—	725	389	4,059
	<u>38,737</u>	<u>41,977</u>	<u>133,022</u>	<u>250,214</u>
Cost of revenue				
Systems	21,614	48,404	84,185	161,310
Services	5,772	4,423	20,773	26,289
	<u>27,386</u>	<u>52,827</u>	<u>104,958</u>	<u>187,599</u>
Gross profit	11,351	(10,850)	28,064	62,615
Operating expenses				
Research and development	7,726	13,582	32,661	63,262
Sales and marketing	6,345	7,813	25,209	44,573
General and administrative	7,012	11,802	34,087	43,056
Impairment of goodwill	—	42,115	—	42,115
Impairment of intangibles and long lived assets	—	46,949	—	46,949
Amortization of intangible assets	—	656	—	2,624
Restructuring charges	13	3,361	5,541	6,873
	<u>21,096</u>	<u>126,278</u>	<u>97,498</u>	<u>249,452</u>
Loss from operations	(9,745)	(137,128)	(69,434)	(186,837)
Other income (expense)				
Gain on sale of SEN	—	—	1,080	—
Equity loss of SEN	—	(2,567)	(3,238)	(3,667)
Interest income	29	214	181	1,614
Interest expense	—	(1,739)	(1,676)	(6,744)
Other-net	(319)	(483)	(3,516)	(169)
	<u>(290)</u>	<u>(4,575)</u>	<u>(7,169)</u>	<u>(8,966)</u>
Loss before income taxes	(10,035)	(141,703)	(76,603)	(195,803)
Income taxes (credits)	1	(258)	865	861
Net loss	<u>\$ (10,036)</u>	<u>\$ (141,445)</u>	<u>\$ (77,468)</u>	<u>\$ (196,664)</u>
Net loss per share				
Basic and diluted net loss per share	<u>\$ (0.10)</u>	<u>\$ (1.37)</u>	<u>\$ (0.75)</u>	<u>\$ (1.91)</u>
Shares used in computing basic and diluted net loss per share				
Weighted average common shares outstanding	<u>103,917</u>	<u>103,052</u>	<u>103,586</u>	<u>102,739</u>

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

	December 31,	
	2009	2008
ASSETS		
Current assets		
Cash and cash equivalents	\$ 45,020	\$ 37,694

Restricted cash	4,918	8,654
Accounts receivable, net	19,094	27,486
Inventories, net	114,558	150,113
Prepaid expenses and other current assets	10,016	17,231
Total current assets	193,606	241,178
Property, plant and equipment, net	40,868	44,432
Investment in SEN	—	156,677
Long-term restricted cash	2,245	—
Other assets	13,884	12,894
	<u>\$ 250,603</u>	<u>\$ 455,181</u>

LIABILITIES AND STOCKHOLDERS' EQUITY

Current liabilities		
Accounts payable	\$ 9,680	\$ 8,066
Accrued compensation	9,267	15,841
Warranty	638	3,137
Income taxes	1,499	337
Deferred revenue	5,127	12,508
Other current liabilities	3,546	6,897
Current portion of convertible subordinated debt	—	83,210
Total current liabilities	29,757	129,996
Long-term deferred revenue	563	1,872
Other long-term liabilities	3,884	3,936
Stockholders' equity		
Preferred stock	—	—
Common stock	104	103
Additional paid-in capital	488,321	483,546
Treasury stock	(1,218)	(1,218)
Accumulated deficit	(275,947)	(198,479)
Accumulated other comprehensive income	5,139	35,425
	216,399	319,377
	<u>\$ 250,603</u>	<u>\$ 455,181</u>