

**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 1, 2011**

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 1, 2011, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the fourth quarter and full year ended December 31, 2010. 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 1, 2011. 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 1, 2011

Axcelis Technologies, Inc.

By: /s/ JAY ZAGER
Jay Zager
Executive Vice President
and Chief Financial Officer

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**AXCELIS ANNOUNCES FINANCIAL RESULTS FOR FOURTH QUARTER
AND FULL YEAR 2010**

Company Returns to Profitability with Strong Revenue Growth and Robust Demand for Products

BEVERLY, Mass. — February 1, 2011—Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for the fourth quarter and full year ended December 31, 2010. Net income for the quarter was \$4.3 million, or \$0.04 per diluted share, of which \$0.02 was attributable to a one time tax benefit. This compares to a net loss for the third quarter of 2010 of \$6.3 million, or \$0.06 per share. The Company reported fourth quarter revenue of \$93.4 million, compared to \$75.1 million for the third quarter of 2010, a 24.4% increase. The Company reported a 42.4% increase in systems revenues over the previous quarter. Cash and cash equivalents, including restricted cash, were \$45.9 million at December 31, 2010. The Company ended the quarter with working capital of \$160.5 million.

For the full year 2010, the Company reported revenue of \$275.2 million compared with \$133.0 million in 2009. Net loss for the year was \$17.6 million, or \$0.17 per share. In 2009, the Company reported a net loss of \$77.5 million, or \$0.75 per share, which included charges for restructuring of \$5.5 million (\$0.05 per share).

Commenting on the Company's performance, Chairman and CEO Mary Puma said, "The Company performed exceptionally well during the quarter. This marks the completion of a successful transition year for Axcelis. We executed against our strategy, returned to profitability, and achieved a steep increase in revenue and orders - putting us in a position of strength as we enter 2011."

She continued, "This performance is a clear reflection of the competitiveness of our product lines and the confidence our customers have in our systems' enabling performance. Customer wins during the quarter included several significant high volume orders for both ion implantation and dry strip at leading device manufacturers. We continue to experience robust demand for our products, and anticipate market share gains. Moving forward, we believe these accomplishments have laid the foundation for sustainable growth and profitability in the future."

Fourth Quarter and Full Year 2010 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 2010. 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 1-888-713-4214 (1-617-213-4866 outside North America). Participants calling into the conference call will be requested to provide the company name, Axcelis Technologies and pass code: 17581414. Webcast and telephone replays will be available from 8 pm ET on February 1, 2011 until 11:59 pm on May 1, 2011. Dial 1- 888-286-8010 (1-617-801-6888 outside North America), and enter conference ID code# 89703406.

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

Company Contacts:

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**In thousands, except per share amounts
(Unaudited)**

| | Three Months ended December 31, | | Twelve Months ended December 31, | |
|-------------------------------------------------------------|------------------------------------|--------------------|-------------------------------------|--------------------|
| | 2010 | 2009 | 2010 | 2009 |
| Revenue | | | | |
| Product | \$ 85,638 | \$ 29,347 | \$ 242,771 | \$ 98,716 |
| Services | 7,765 | 9,390 | 32,441 | 33,917 |
| Royalties, from SEN | — | — | — | 389 |
| | <u>93,403</u> | <u>38,737</u> | <u>275,212</u> | <u>133,022</u> |
| Cost of revenue | | | | |
| Product | 56,189 | 21,614 | 168,047 | 84,185 |
| Services | 5,721 | 5,772 | 21,327 | 20,773 |
| | <u>61,910</u> | <u>27,386</u> | <u>189,374</u> | <u>104,958</u> |
| Gross profit | 31,493 | 11,351 | 85,838 | 28,064 |
| Operating expenses | | | | |
| Research and development | 11,042 | 7,726 | 39,524 | 32,661 |
| Sales and marketing | 7,188 | 6,345 | 27,549 | 25,209 |
| General and administrative | 9,083 | 7,012 | 32,132 | 34,087 |
| Restructuring charges | — | 13 | — | 5,541 |
| | <u>27,313</u> | <u>21,096</u> | <u>99,205</u> | <u>97,498</u> |
| Income (loss) from operations | 4,180 | (9,745) | (13,367) | (69,434) |
| Other income (expense) | | | | |
| Gain on sale of SEN | — | — | — | 1,080 |
| Equity loss of SEN | — | — | — | (3,238) |
| Interest income | 27 | 29 | 96 | 181 |
| Interest expense | — | — | — | (1,676) |
| Other-net | (1,929) | (319) | (3,990) | (3,516) |
| | <u>(1,902)</u> | <u>(290)</u> | <u>(3,894)</u> | <u>(7,169)</u> |
| Income (loss) before income taxes | 2,278 | (10,035) | (17,261) | (76,603) |
| Income taxes (credits) | (2,052) | 1 | 312 | 865 |
| Net income (loss) | \$ 4,330 | \$ (10,036) | \$ (17,573) | \$ (77,468) |
| Net income (loss) per share | | | | |
| Basic | \$ 0.04 | \$ (0.10) | \$ (0.17) | \$ (0.75) |
| Diluted | \$ 0.04 | \$ (0.10) | \$ (0.17) | \$ (0.75) |
| Shares used in computing net income (loss) per share | | | | |
| Basic | 105,163 | 103,917 | 104,522 | 103,586 |
| Diluted | 109,454 | 103,917 | 104,522 | 103,586 |

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

| | December 31, | |
|---------------------------------------------|-------------------|-------------------|
| | 2010 | 2009 |
| ASSETS | | |
| Current assets | | |
| Cash and cash equivalents | \$ 45,743 | \$ 45,020 |
| Restricted cash | — | 4,918 |
| Accounts receivable, net | 57,888 | 19,094 |
| Inventories, net | 109,653 | 114,558 |
| Prepaid expenses and other current assets | 15,346 | 10,016 |
| Total current assets | <u>228,630</u> | <u>193,606</u> |
| Property, plant and equipment, net | 38,594 | 40,868 |
| Long-term restricted cash | 107 | 2,245 |
| Other assets | 13,541 | 13,884 |
| | <u>\$ 280,872</u> | <u>\$ 250,603</u> |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |

| | | |
|----------------------------------------|-------------------|-------------------|
| Current liabilities | | |
| Accounts payable | \$ 36,709 | \$ 9,680 |
| Accrued compensation | 10,597 | 9,267 |
| Warranty | 2,556 | 638 |
| Income taxes | — | 1,499 |
| Deferred revenue | 13,859 | 5,127 |
| Other current liabilities | 4,408 | 3,546 |
| Total current liabilities | 68,129 | 29,757 |
| Long-term deferred revenue | 2,417 | 563 |
| Other long-term liabilities | 4,759 | 3,884 |
| Stockholders' equity | | |
| Preferred stock | — | — |
| Common stock | 106 | 104 |
| Additional paid-in capital | 493,967 | 488,321 |
| Treasury stock | (1,218) | (1,218) |
| Accumulated deficit | (293,520) | (275,947) |
| Accumulated other comprehensive income | 6,232 | 5,139 |
| | 205,567 | 216,399 |
| | <u>\$ 280,872</u> | <u>\$ 250,603</u> |

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Axcelis Technologies, Inc.
Consolidated Statements of Cash Flow
In thousands
(Unaudited)

| | Twelve months ended | |
|------------------------------------------------------------------------------|----------------------------|------------------|
| | December 31, | |
| | 2010 | 2009 |
| Cash flows from operating activities | | |
| Net loss | \$ (17,573) | \$ (77,468) |
| Adjustments to reconcile net loss to net cash used for operating activities: | | |
| Undistributed loss of SEN | — | 3,238 |
| Depreciation and amortization | 7,045 | 7,436 |
| Gain on sale of SEN | — | (1,080) |
| Deferred income taxes | (1,409) | (765) |
| Accretion of premium on convertible debt | — | 133 |
| Stock-based compensation expense | 4,088 | 4,651 |
| Provision for excess inventory | 2,015 | 9,818 |
| Changes in operating assets & liabilities | | |
| Accounts receivable | (38,652) | 8,572 |
| Inventories | 3,549 | 26,445 |
| Prepaid expenses and other current assets | (3,469) | 8,131 |
| Accounts payable & other current liabilities | 32,276 | (11,038) |
| Deferred revenue | 10,601 | (8,695) |
| Income taxes | (1,522) | 1,154 |
| Other assets and liabilities | (2,841) | (4,474) |
| Net cash used for operating activities | (5,892) | (33,942) |
| Cash flows from investing activities | | |
| Expenditures for property, plant, and equipment | (1,403) | (463) |
| Decrease in restricted cash | 7,056 | 1,491 |
| Proceeds from sale of SEN | — | 132,847 |
| Payments related to sale of SEN | — | (10,590) |
| Net cash provided by investing activities | 5,653 | 123,285 |
| Cash flows from financing activities | | |
| Repayment of convertible debt | — | (83,344) |
| Financing fees and other expenses | (523) | — |
| Proceeds from exercise of stock options | 553 | 45 |
| Proceeds from Employee Stock Purchase Plan | 569 | 184 |
| Net cash provided by (used for) financing activities | 599 | (83,115) |
| Effect of exchange rate changes on cash | 363 | 1,098 |
| Net increase in cash and cash equivalents | 723 | 7,326 |
| Cash and cash equivalents at beginning of period | 45,020 | 37,694 |
| Cash and cash equivalents at end of period | <u>\$ 45,743</u> | <u>\$ 45,020</u> |

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