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): October 31, 2013

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:

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

Item 1.01 Entry into a Material Definitive Agreement

Axcelis Technologies, Inc. ("Axcelis" or the "Company"), entered into a Loan and Security Agreement with Silicon Valley Bank ("SVB") dated as of October 31, 2013, (the "Line of Credit"). Under the Line of Credit, the Company has the ability to borrow up to \$10 million on a revolving basis during its two year term. The Company's ability to borrow under the Line of Credit is limited to 80% of the then current amount of qualified accounts receivable. The Company expects to use this credit facility for working capital and for general corporate purposes. The Company did not draw on the Line of Credit at the effective date, although a portion of the availability is being used to support outstanding letters of credit in the amount of \$1,475,000 in lieu of cash collateralization.

The obligations under the credit facility are guaranteed by five domestic subsidiaries of Axcelis, and are secured by (i) substantially all of the personal property of the Company and (ii) all of the capital stock of Axcelis Technologies (Israel), Inc. and up to 66% of the capital stock of certain of their foreign subsidiaries.

The principal amount outstanding under the credit facility will bear interest at a rate equal to the prime rate plus 1.00%. Interest is payable monthly. In addition, the Company will incur a monthly fee on any unused portion of the credit facility equal to 0.375% per annum. At maturity all outstanding principal and unpaid interest is immediately due and payable.

The credit facility limits Axcelis and its subsidiaries' ability to, among other things, dispose of assets, engage in a new line of business, have a material change in its executive management, have a change of control, acquire another business, incur additional indebtedness, incur liens, pay dividends and make other distributions, make investments, make payments on subordinated debt and engage in transactions with affiliates other than transactions in the ordinary course of business on terms no less favorable than would be obtained in an arms-length transaction, all subject to specified exceptions.

In addition, under the credit facility, Axcelis must comply with the following financial covenants:

(a) <u>Adjusted Quick Ratio</u>. Axcelis must maintain, on a consolidated basis, a ratio of (*x*) certain liquid assets *to* (*y*) certain current liabilities minus deferred revenue of at least 1.5 to 1.0, tested at month-end; and

(b) <u>Adjusted Net Income</u>. For the quarter ended December 31, 2013, Axcelis' Adjusted Net Income (as defined in the Line of Credit) must exceed \$1.00 and as of the following quarter-ends, Axcelis must report trailing six month Adjusted Net Income at or above \$2,500,000.

The credit facility provides for events of default customary for credit facilities of this type, including, but not limited to, non-payment, breach of covenants, material adverse change to the business or impairment of the collateral, insolvency, or defaults on other debt. Upon an event of default and during its continuance, the interest rate will automatically increase 3.5% above the otherwise applicable interest rate.

In addition, upon an event of default, SVB may elect a number of remedies including, but not limited to, stopping the advance of money to the Company and declaring all obligations (including principal, interest and expenses) immediately due and payable, which shall occur automatically if Axcelis becomes insolvent.

Axcelis is subject to a \$100,000 early termination fee if it terminates the Line of Credit prior to the maturity date or SVB terminates the Line of Credit due to an event of default.

Item 2.02 Results of Operations and Financial Condition

On November 6, 2013, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended September 30, 2013. 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

Press Release dated November 6, 2013. Filed herewith.

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 6, 2013 Axcelis Technologies, Inc.

By: /s/ KEVIN J. BREWER

Kevin J. Brewer Executive Vice President and Chief Financial Officer

axcelis

News Release

AXCELIS ANNOUNCES FINANCIAL RESULTS FOR THIRD QUARTER 2013

BEVERLY, Mass. — November 6, 2013—Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for the quarter ended September 30, 2013. Highlights for the quarter were:

- · System sales were \$20.2 million, a 22% increase over the second quarter of 2013, and a 59% increase over the first quarter.
- · System bookings were up 60% and System backlog was up 35% from the second quarter 2013.
- · The Company recognized revenue on its first Purion M medium current implanter.

The Company reported third quarter revenue of \$48.8 million, compared to \$47.5 million for the second quarter of 2013. Operating loss for the quarter was \$2.8 million, compared to \$3.4 million for the second quarter. Net loss for the quarter was \$4.8 million, or (\$0.04) per share. This compares to a net loss for the second quarter of 2013 of \$4.0 million, or (\$0.04) per share. Cash, cash equivalents and restricted cash were \$50.7 million at September 30, 2013 compared with \$34.7 million at June 30, 2013.

Chairman and CEO Mary Puma said, "The Purion platform continues to gain traction, our balance sheet is healthy, and Axcelis is well positioned to capitalize on the industry upturn. We expect to return to profitability in the fourth quarter. We also expect that during the current upturn we will return to our last quarterly peak revenues and maintain profitability through the cycle."

Third Quarter 2013 Conference Call

The Company will host a conference call today at 5:00 pm ET to discuss results for the third quarter of 2013. An audio webcast will be available on the Investor page of Axcelis' website at www.axcelis.com, or by dialing 1.888.680.0878 (1.617.213.4855 outside North America). Participants calling into the conference call will be requested to provide the passcode: 47494360. A replay of the webcast will be available for 30 days following the conference call.

Safe Harbor Statement

This press release and the conference call contain 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, 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, has been providing innovative, high-productivity solutions for the semiconductor industry for over 35 years. Axcelis is dedicated to developing enabling process applications through the design, manufacture and complete life cycle support of ion implantation, one of the most critical and enabling steps in the IC manufacturing process. The Company's Internet address is: www.axcelis.com.

Company Contacts

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

| | Three months ended September 30, | | | Nine months ended September 30, | | | | |
|----------|-------------------------------------|--------|----|---------------------------------|----|---------|----|---------|
| | 2013 | | | 2012 | | 2013 | | 2012 |
| Revenue | | | | _ | | _ | | |
| Product | \$ 4 | 42,934 | \$ | 37,093 | \$ | 118,151 | \$ | 136,096 |
| Services | | 5,897 | | 7,547 | | 18,907 | | 22,664 |

| Total revenue | 48,831 | 44,640 | 137,058 | 158,760 |
|------------------------------------------------------------|---------------|---------------|-------------|----------------|
| Cost of revenue | | | | |
| Product | 27,339 | 24,809 | 74,976 | 84,692 |
| Services | 4,516 | 5,464 | 15,427 | 16,377 |
| Total cost of revenue | 31,855 | 30,273 | 90,403 | 101,069 |
| Gross profit | 16,976 | 14,367 | 46,655 | 57,691 |
| Gross prom | 10,970 | 14,50/ | 40,055 | 57,091 |
| Operating expenses | | | | |
| Research and development | 8,148 | 9,851 | 25,857 | 31,999 |
| Sales and marketing | 5,330 | 5,470 | 16,128 | 18,284 |
| General and administrative | 6,164 | 6,325 | 19,165 | 20,611 |
| Gain on sale of dry strip assets and intellectual property | _ | _ | (1,167) | _ |
| Restructuring charges | 112 | 578 | 2,334 | 3,612 |
| Total operating expenses | 19,754 | 22,224 | 62,317 | 74,506 |
| I are from anarations | (2.770) | (7.057) | (15,662) | (16.015) |
| Loss from operations | (2,778) | (7,857) | (15,662) | (16,815) |
| Other income (expense) | | | | |
| Interest income | 3 | 9 | 8 | 27 |
| Interest expense | (193) | _ | (308) | _ |
| Other, net | (1,252) | (627) | (671) | (999) |
| Total other income (expense) | (1,442) | (618) | (971) | (972) |
| Loss before income taxes | (4,220) | (8,475) | (16,633) | (17,787) |
| Loss before income taxes | (4,220) | (0,473) | (10,033) | (17,707) |
| Income taxes | 530 | 243 | 1,125 | 1,429 |
| Net loss | \$ (4,750) | \$ (8,718) | \$ (17,758) | \$ (19,216) |
| | | | | |
| Net loss per share | | | | |
| Basic and Diluted | \$ (0.04) | \$ (80.0) | \$ (0.16) | \$ (0.18) |
| Shares used in computing net loss per share | | | | |
| Basic and diluted weighted average common shares | 109,074 | 107,855 | 108,573 | 107,521 |
| | | | | |

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

| | September 30, | | December 31, 2012 | |
|-------------------------------------------|-------------------|---------|----------------------|---------|
| ASSETS | | | | |
| Current assets | | | | |
| Cash and cash equivalents | \$ | 48,317 | \$ | 44,986 |
| Accounts receivable, net | | 29,321 | | 24,843 |
| Inventories, net | | 94,316 | | 100,234 |
| Restricted cash | | 1,583 | | 106 |
| Prepaid expenses and other current assets | | 5,066 | | 5,056 |
| Total current assets | | 178,603 | | 175,225 |
| | | | | |
| Property, plant and equipment, net | | 32,311 | | 34,413 |
| Restricted cash, long-term | | 825 | | _ |
| Other assets | | 15,542 | | 12,520 |
| Total assets | \$ | 227,281 | \$ | 222,158 |
| | | | | |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | | | |
| Current liabilities | | | | |
| Accounts payable | \$ | 16,075 | \$ | 10,166 |
| Accrued compensation | | 7,309 | | 7,283 |
| Warranty | | 1,461 | | 1,700 |
| Income taxes | | 262 | | 278 |
| Deferred revenue | | 3,911 | | 6,423 |
| Current portion of long-term debt | | 185 | | _ |
| Other current liabilities | | 4,250 | | 3,932 |
| Total current liabilities | | 33,453 | | 29,782 |
| | | | | |
| Long-term debt | | 14,815 | | _ |
| Long-term deferred revenue | | 154 | | 456 |
| Other long-term liabilities | | 6,129 | | 5,844 |
| | | | | |

| Commitments and contingencies | | |
|------------------------------------------------------------------------------------------------------|------------|------------|
| Stockholders' equity | | |
| Preferred stock, \$0.001 par value, 30,000 shares authorized; none issued or outstanding | _ | _ |
| Common stock, \$0.001 par value, 300,000 shares authorized; 109,586 shares issued and 109,466 shares | | |
| outstanding at September 30, 2013;108,293 shares issued and 108,173 shares outstanding at | | |
| December 31, 2012 | 110 | 108 |
| Additional paid-in capital | 508,976 | 504,643 |
| Treasury stock, at cost, 120 shares at September 30, 2013 and December 31, 2012 | (1,218) | (1,218) |
| Accumulated deficit | (340,235) | (322,477) |
| Accumulated other comprehensive income | 5,097 | 5,020 |
| Total stockholders' equity | 172,730 | 186,076 |
| Total liabilities and stockholders' equity | \$ 227,281 | \$ 222,158 |

54,551

Nine months ended

36,082

Total liabilities

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

| | September 30, | | |
|------------------------------------------------------------------------------|----------------|----|----------|
| | 2013 | | 2012 |
| Cash flows from operating activities | | | |
| Net loss | \$ (17,758) | \$ | (19,216) |
| Adjustments to reconcile net loss to net cash used for operating activities: | | | |
| Depreciation and amortization | 3,948 | | 5,419 |
| Gain on sale of dry strip assets and intellectual property | (1,167) | | _ |
| Deferred taxes | 272 | | 998 |
| Stock-based compensation expense | 3,105 | | 3,411 |
| Provision for excess inventory | 2,451 | | 678 |
| Changes in operating assets & liabilities | | | |
| Accounts receivable | (4,359) | | 10,143 |
| Inventories | 3,455 | | (3,496) |
| Prepaid expenses and other current assets | (429) | | 4,490 |
| Accounts payable and other current liabilities | 6,276 | | (11,601) |
| Deferred revenue | (2,816) | | (5,089) |
| Income taxes | (14) | | (135) |
| Other assets and liabilities | (3,813) | | 3,025 |
| Net cash used for operating activities | (10,849) | | (11,373) |
| Cash flows from investing activities | | | |
| Proceeds from sale of dry strip assets and intellectual property | 1,200 | | _ |
| Expenditures for property, plant, and equipment | (484) | | (536) |
| (Increase) decrease in restricted cash | (1,477) | | 1 |
| Net cash used for investing activities | (761) | | (535) |
| Cash flows from financing activities | | | |
| Increase in restricted cash | (825) | | _ |
| Financing fees and other expenses | (473) | | _ |
| Proceeds from exercise of stock options | 1,113 | | 863 |
| Proceeds from Employee Stock Purchase Plan | 197 | | 179 |
| Proceeds from issuance of Term Loan | 15,000 | | _ |
| Net cash provided by financing activities | 15,012 | | 1,042 |
| Effect of exchange rate changes on cash | (71) | | (791) |
| Net increase (decrease) in cash and cash equivalents | 3,331 | | (11,657) |
| Cash and cash equivalents at beginning of period | 44,986 | | 46,877 |
| Cash and cash equivalents at end of period | \$ 48,317 | \$ | 35,220 |
| | | | |