# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, D.C. 20549**

# FORM 10-Q

**(Mark One)**

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the quarterly period ended March 31, 2016**

**Or**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from to**

**Commission file number 000-30941**

# AXCELIS TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

| | |
|---|---|
| **Delaware** | **34-1818596** |
| (State or other jurisdiction of incorporation or organization) | (IRS Employer Identification No.) |

**108 Cherry Hill Drive**
**Beverly, Massachusetts 01915**
(Address of principal executive offices, including zip code)

**(978) 787-4000**
(Registrant’s telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

| | |
|---|---|
| Large accelerated filer ☐ | Accelerated filer ☒ |
| Non-accelerated filer ☐ (Do not check if a smaller reporting company) | Smaller reporting company ☐ |

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) Yes ☐ No ☒

As of May 2, 2016 there were 116,341,664 shares of the registrant’s common stock outstanding.

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**PART 1—FINANCIAL INFORMATION**

**Item 1. Financial Statements.**

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

| | Three months ended March 31, | |
|---|---|---|
| | 2016 | 2015 |
| Revenue | | |
| Product | $ 62,175 | $ 67,530 |
| Services | 5,346 | 5,753 |
| Total revenue | 67,521 | 73,283 |
| Cost of revenue | | |
| Product | 40,263 | 45,185 |
| Services | 3,842 | 4,718 |
| Total cost of revenue | 44,105 | 49,903 |
| | | |
| Gross profit | 23,416 | 23,380 |
| | | |
| Operating expenses | | |
| Research and development | 8,636 | 8,199 |
| Sales and marketing | 5,960 | 5,628 |
| General and administrative | 6,042 | 6,101 |
| Restructuring charges | 282 | 10 |
| Total operating expenses | 20,920 | 19,938 |
| | | |
| Income from operations | 2,496 | 3,442 |
| | | |
| Other (expense) income | | |
| Interest income | 54 | 3 |
| Interest expense | (1,047) | (1,043) |
| Other, net | (59) | (433) |
| Total other (expense) income | (1,052) | (1,473) |
| | | |
| Income before income taxes | 1,444 | 1,969 |
| | | |
| Income tax (benefit) provision | (504) | 101 |
| | | |
| Net income | $ 1,948 | $ 1,868 |
| | | |
| Net earnings per share | | |
| Basic | $ 0.02 | $ 0.02 |
| Diluted | $ 0.02 | $ 0.02 |
| | | |
| Shares used in computing net earnings per share | | |
| Basic weighted average common shares | 116,152 | 113,152 |
| Diluted weighted average common shares | 122,078 | 118,720 |

See accompanying Notes to these Consolidated Financial Statements

**Axcelis Technologies, Inc.**
**Consolidated Statements of Comprehensive Income**
**(In thousands)**
**(Unaudited)**

| | Three months ended March 31, | |
|---|---|---|
| | **2016** | **2015** |
| Net income | $ 1,948 | $ 1,868 |
| Other comprehensive income (loss): | | |
| Foreign currency translation adjustments | 1,049 | (1,010) |
| Amortization of actuarial losses from pension plan | 26 | 19 |
| Net current-period other comprehensive income (loss) | 1,075 | (991) |
| Comprehensive income | $ 3,023 | $ 877 |

See accompanying Notes to these Consolidated Financial Statements

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**Axcelis Technologies, Inc.**
**Consolidated Balance Sheets**
**(In thousands, except per share amounts)**
**(Unaudited)**

| | March 31, 2016 | December 31, 2015 |
|---|---|---|
| **ASSETS** | | |
| Current assets | | |
| Cash and cash equivalents | $ 67,571 | $ 78,889 |
| Accounts receivable, net | 47,471 | 36,868 |
| Inventories, net | 115,165 | 115,904 |
| Prepaid expenses and other current assets | 6,106 | 4,792 |
| Total current assets | 236,313 | 236,453 |
| Property, plant and equipment, net | 30,997 | 30,031 |
| Long-term restricted cash | 6,863 | 6,936 |
| Other assets | 19,161 | 14,860 |
| Total assets | $ 293,334 | $ 288,280 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities | | |
| Accounts payable | $ 21,700 | $ 19,849 |
| Accrued compensation | 8,477 | 9,059 |
| Warranty | 3,288 | 3,363 |
| Income taxes | 177 | 143 |
| Deferred revenue | 8,119 | 7,863 |
| Other current liabilities | 4,153 | 4,091 |
| Total current liabilities | 45,914 | 44,368 |
| Sale leaseback obligation | 47,586 | 47,586 |
| Long-term deferred revenue | 667 | 679 |
| Other long-term liabilities | 4,852 | 5,387 |
| Total liabilities | 99,019 | 98,020 |
| Commitments and contingencies (Note 12) | | |
| 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; 116,357 shares issued and 116,237 shares outstanding at March 31, 2016; 116,101 shares issued and 115,981 shares outstanding at December 31, 2015 | 116 | 116 |
| Additional paid-in capital | 530,034 | 529,002 |
| Treasury stock, at cost, 120 shares at March 31, 2016 and December 31, 2015 | (1,218) | (1,218) |
| Accumulated deficit | (334,261) | (336,209) |
| Accumulated other comprehensive loss | (356) | (1,431) |
| Total stockholders' equity | 194,315 | 190,260 |
| Total liabilities and stockholders' equity | $ 293,334 | $ 288,280 |

See accompanying Notes to these Consolidated Financial Statements

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

| | Three months ended March 31, 2016 | Three months ended March 31, 2015 |
|---|---|---|
| **Cash flows from operating activities** | | |
| Net income | $ 1,948 | $ 1,868 |
| Adjustments to reconcile net income to net cash (used in) provided by operating activities: | | |
| Depreciation and amortization | 918 | 1,142 |
| Deferred taxes | (50) | 134 |
| Stock-based compensation expense | 838 | 1,126 |
| Provision for excess inventory | 549 | 242 |
| Changes in operating assets & liabilities | | |
| Accounts receivable | (10,287) | (355) |
| Inventories | 1,143 | (6,963) |
| Prepaid expenses and other current assets | (1,216) | (1,085) |
| Accounts payable and other current liabilities | 1,082 | 11,466 |
| Deferred revenue | 226 | 1,455 |
| Income taxes | 30 | 132 |
| Other assets and liabilities | (5,364) | (422) |
| Net cash (used in) provided by operating activities | (10,183) | 8,740 |
| **Cash flows used in investing activities** | | |
| Expenditures for property, plant, and equipment | (1,275) | (320) |
| Net cash used in investing activities | (1,275) | (320) |
| **Cash flows from financing activities** | | |
| Decrease in restricted cash | 73 | 758 |
| Financing fees and other expenses | — | (847) |
| Principal payments on term loan | — | (14,530) |
| Principal payments on sale leaseback obligation | — | (392) |
| Proceeds from sale leaseback obligation | — | 48,940 |
| Proceeds from exercise of stock options | 194 | 937 |
| Net cash provided by financing activities | 267 | 34,866 |
| Effect of exchange rate changes on cash | (127) | 509 |
| Net (decrease) increase in cash and cash equivalents | (11,318) | 43,795 |
| Cash and cash equivalents at beginning of period | 78,889 | 30,753 |
| Cash and cash equivalents at end of period | $ 67,571 | $ 74,548 |
| Supplemental disclosure of total cash, cash equivalents and restricted cash: | | |
| Cash and cash equivalents at end of period | $ 67,571 | $ 74,548 |
| Restricted cash at end of period | 6,863 | 67 |
| Total cash, cash equivalents and restricted cash at end of period | $ 74,434 | $ 74,615 |

See accompanying Notes to these Consolidated Financial Statements

**Axcelis Technologies, Inc.**
**Notes to Consolidated Financial Statements (Unaudited)**

## Note 1. Nature of Business

Axcelis Technologies, Inc. ("Axcelis" or the "Company") was incorporated in Delaware in 1995, and is a worldwide producer of ion implantation and other processing equipment used in the fabrication of semiconductor chips in the United States, Europe and Asia. In addition, the Company provides extensive aftermarket service and support, including spare parts, equipment upgrades, used equipment and maintenance services to the semiconductor industry.

The accompanying unaudited consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments which are of a normal recurring nature and considered necessary for a fair presentation of these financial statements have been included. Operating results for the interim periods presented are not necessarily indicative of the results that may be expected for other interim periods or for the year as a whole.

The balance sheet at December 31, 2015 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. For further information, refer to the consolidated financial statements and footnotes thereto included in Axcelis Technologies, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015.

## Note 2. Stock-Based Compensation

The Company maintains the Axcelis Technologies, Inc. 2012 Equity Incentive Plan (the "2012 Equity Plan"), which became effective on May 2, 2012, and permits the issuance of options, restricted stock, restricted stock units and performance awards to selected employees, directors and consultants of the Company. The Company's 2000 Stock Plan (the "2000 Stock Plan"), expired on May 1, 2012 and no new grants may be made under that plan after that date. However, unexpired awards granted under the 2000 Stock Plan prior to the expiration remain outstanding and subject to the terms of the 2000 Stock Plan. The Company also maintains the Axcelis Technologies, Inc. Employee Stock Purchase Plan (the "ESPP"), an Internal Revenue Code Section 423 plan.

The 2012 Equity Plan and the ESPP are more fully described in Note 14 to the consolidated financial statements in the Company's 2015 Annual Report on Form 10-K.

The Company recognized stock-based compensation expense of $0.8 million and $1.1 million for the three months ended March 31, 2016 and 2015, respectively. These amounts include compensation expense related to restricted stock units and non-qualified stock options.

**Note 3. Computation of Net Earnings per Share**

Basic earnings per share is computed by dividing net income available to common stockholders (the numerator) by the weighted-average number of common shares outstanding (the denominator) for the period. The computation of diluted earnings per share is similar to basic earnings per share, except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potentially dilutive common shares had been issued, calculated using the treasury stock method.

The components of net earnings per share are as follows:

| | Three months ended March 31, 2016 | Three months ended March 31, 2015 |
|---|---|---|
| | (in thousands, except per share data) | |
| Net income available to common stockholders | $ 1,948 | $ 1,868 |
| Weighted average common shares outstanding used in computing basic net earnings per share | 116,152 | 113,152 |
| Incremental options and RSUs | 5,926 | 5,568 |
| Weighted average common shares outstanding used in computing diluted net earnings per share | 122,078 | 118,720 |
| Net earnings per share | | |
| Basic | $ 0.02 | $ 0.02 |
| Diluted | $ 0.02 | $ 0.02 |

**Note 4. Accumulated Other Comprehensive Income (Loss)**

The following table displays the changes in accumulated other comprehensive income (loss), by component for the three months ended March 31, 2016:

| | Foreign currency | Defined benefit pension plan | Total |
|---|---|---|---|
| | | (in thousands) | |
| Balance at December 31, 2015 | $ (744) | $ (687) | $ (1,431) |
| Other comprehensive income and pension reclassification (1) | 1,049 | 26 | 1,075 |
| Balance at March 31, 2016 | $ 305 | $ (661) | $ (356) |

(1) Pension reclassification presented before taxes as the tax effect was not material to the consolidated financial statements.

**Note 5. Inventories, net**

The components of inventories are as follows:

| | March 31, 2016 | December 31, 2015 |
|---|---|---|
| | (in thousands) | |
| Raw materials | $ 79,695 | $ 78,566 |
| Work in process | 28,047 | 29,219 |
| Finished goods (completed systems) | 7,423 | 8,119 |
| | $ 115,165 | $ 115,904 |

When recorded, inventory reserves are intended to reduce the carrying value of inventories to their net realizable value. The Company establishes inventory reserves when conditions exist that indicate inventory may be in excess of anticipated demand or is obsolete based upon assumptions about future demand for the Company’s products or market conditions. The Company regularly evaluates the ability to realize the value of inventories based on a combination of factors including the following: forecasted sales or usage, estimated product end of life dates, estimated current and future market value and new product introductions. Purchasing and usage alternatives are also explored to mitigate inventory exposure. As of March 31, 2016 and December 31, 2015, inventories are stated net of inventory reserves of $9.8 million and $10.5 million respectively.

**Note 6. Product Warranty**

The Company generally offers a one year warranty for all of its systems, the terms and conditions of which vary depending upon the product sold. For all systems sold, the Company accrues a liability for the estimated cost of standard warranty at the time of system shipment and defers the portion of systems revenue attributable to the fair value of non-standard warranty. Costs for non-standard warranty are expensed as incurred. Factors that affect the Company's warranty liability include the number of installed units, historical and anticipated product failure rates, material usage and service labor costs. The Company periodically assesses the adequacy of its recorded liability and adjusts the amount as necessary.

The changes in the Company's product warranty liability are as follows:

| | Three months ended March 31, 2016 | Three months ended March 31, 2015 |
|---|---|---|
| | (in thousands) | |
| Balance at January 1 (beginning of year) | $ 3,555 | $ 1,526 |
| Warranties issued during the period | 921 | 1,080 |
| Settlements made during the period | (1,306) | (566) |
| Changes in estimate of liability for pre-existing warranties during the period | 365 | 123 |
| Balance at March 31 (end of period) | $ 3,535 | $ 2,163 |
| | | |
| Amount classified as current | $ 3,288 | $ 1,909 |
| Amount classified within other long-term liabilities | 247 | 254 |
| Total warranty liability | $ 3,535 | $ 2,163 |

**Note 7. Restructuring Charges**

In the three months ended March 31, 2016, due to changes in customer service contracts resulting from a consolidation in our customer base, the Company had severance and other costs related to a reduction in force. The related activity is as follows:

| | (in thousands) |
|---|---|
| Balance at December 31, 2015 | $ — |
| Severance and related costs | 282 |
| Other adjustments | — |
| Cash payments | — |
| Balance at March 31, 2016 | $ 282 |

**Note 8. Fair Value Measurements**

Certain of the assets and liabilities on the Company's balance sheets are reported at their "fair value". Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

**(a) Fair Value Hierarchy**

The accounting guidance for fair value measurement requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard establishes a fair value hierarchy based on the level of independent, objective evidence surrounding the inputs used to measure fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is as follows:

Level 1 - applies to assets or liabilities for which there are quoted prices in active markets for identical assets or liabilities.

Level 2 - applies to assets or liabilities for which there are inputs other than quoted prices that are observable for the asset or liability, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which significant inputs are observable or can be derived principally from, or corroborated by, observable market data.

Level 3 - applies to assets or liabilities for which there are unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

**(b) Fair Value Measurements**

The Company's money market accounts are included in cash and cash equivalents in the consolidated balance sheets, and are considered a level 1 investment as they are valued at quoted market prices in active markets. The Company's sale leaseback obligation relating to the sale of our corporate headquarters is carried at amortized cost, which approximates fair value based on an implied borrowing rate of 10.65%. The underlying cash flow associated with our lease payments is being applied to both an interest and principal component using the effective interest method over the associated lease term. The liability is categorized as level 3 within the fair value hierarchy.

The following table sets forth the Company's assets and liabilities by level within the fair value hierarchy:

| | March 31, 2016 Fair Value Measurements | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| | (in thousands) | | | |
| Assets | | | | |
| Cash equivalents: | | | | |
| Money market accounts | $ 51,279 | $ — | $ — | $ 51,279 |
| Liabilities | | | | |
| Sale leaseback obligation | $ — | $ — | $ 47,586 | $ 47,586 |

| | December 31, 2015 Fair Value Measurements | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| | (in thousands) | | | |
| Assets | | | | |
| Cash equivalents: | | | | |
| Money market accounts | $ 65,327 | $ — | $ — | $ 65,327 |
| Liabilities | | | | |
| Sale leaseback obligation | $ — | $ — | $ 47,586 | $ 47,586 |

**(c) Other Financial Instruments**

The carrying amounts reflected in the consolidated balance sheets for cash and cash equivalents (which are comprised primarily of deposit accounts), accounts receivable, prepaid expenses and other current and non-current assets, accounts payable and accrued expenses approximate fair value due to their short-term maturities.

**Note 9. Financing Arrangements**

**Sale Leaseback Obligation**

On January 30, 2015, the Company sold its corporate headquarters facility to Beverly Property Owner LLC, an affiliate of Middleton Partners, based in Northbrook, Illinois, for the purchase price of $48.9 million. As part of the sale, the Company also entered into a 22-year lease agreement with Beverly Properties. The sale leaseback is accounted for as a financing arrangement for financial reporting and, as such, the Company has recorded a financing obligation of $47.6 million as of March 31, 2016. The associated lease payments include both an interest component and payment of principal, with the underlying liability being extinguished at the end of the original lease term. The Company posted a collateralized security deposit of $5.9 million in the form of an irrevocable letter of credit at the time of the closing. This letter of credit is cash collateralized and is classified as restricted cash as of March 31, 2016.

**Note 10. Income Taxes**

Income tax expense relates principally to operating results of foreign entities in jurisdictions, primarily in Europe and Asia, where the Company earns taxable income. The Company has significant net operating losses in the United States and certain other tax jurisdictions and, as a result, does not pay significant income taxes in those jurisdictions.

At December 31, 2015, the Company had $124.2 million of deferred tax assets worldwide relating to net operating loss carryforwards, tax credit carryforwards and other temporary differences, which are available to reduce income taxes in future years. The Company maintains a 100% domestic valuation allowance reducing the carrying value of the deferred tax assets in the United States to zero. The Company will continue to maintain a full valuation allowance for those tax assets until sustainable future levels of profitability are evident.

During the first quarter of 2016, the statute of limitations associated with a tax position previously taken by the Company expired. This previously recorded tax reserve of $0.6 million and related accrued interest of $0.3 million was reversed during the three months ended March 31, 2016.

**Note 11. Concentration of Risk**

For the three months ended March 31, 2016, three customers accounted for approximately 20.8%, 13.4% and 13.2% of consolidated revenue, respectively. For the three months ended March 31, 2015, one customer accounted for approximately 36.5% of consolidated revenue.

At March 31, 2016, two customers accounted for 20.4% and 10.3% of consolidated gross accounts receivable, respectively. As of December 31, 2015, three customers accounted for 22.9%, 12.7% and 11.6% of consolidated accounts receivable, respectively.

**Note 12. Contingencies**

**(a) Litigation**

The Company is, from time to time, a party to litigation that arises in the normal course of its business operations. The Company is not presently a party to any litigation that it believes might have a material adverse effect on its business operations.

**(b) Indemnifications**

The Company's system sales agreements typically include provisions under which the Company agrees to take certain actions, provide certain remedies and defend its customers against third-party claims of intellectual property infringement under specified conditions and to indemnify customers against any damage and costs awarded in connection with such claims. The Company has not incurred any material costs as a result of such indemnifications and has not accrued any liabilities related to such obligations in the accompanying consolidated financial statements.

**Note 13. Recent Accounting Guidance**

Accounting Standards or Updates Not Yet Effective

In May 2014, the FASB issued ASU No. 2014-09, *"Revenue from Contracts with Customers,"* which provides guidance for revenue recognition. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. On July 9, 2015, the FASB voted to defer for one year the effective date, which is now for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period with early adoption permitted as of January 1, 2017. In April 2016, the FASB issued ASU 2016-10, *"Revenue from Contracts with Customers (Topic 606)"* which further clarifies performance obligations in a contract with a customer. The effective date of this ASU is for annual reporting periods beginning after December 15, 2017. We are currently assessing the potential impact the adoption of these standards will have on our financial statements.

In July 2015, the FASB issued ASU No. 2015-11, *"Simplifying the Measurement of Inventory,"* which changes the inventory measurement principles for entities using the first-in, first-out (FIFO) or average cost methods. For entities utilizing one of these methods, the inventory measurement principle will change from lower of cost or market to the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the reasonably predictable costs of completion, disposal and transportation. The amendments are effective for annual and interim periods beginning after December 15, 2016. We are currently assessing the potential impact the adoption of this standard will have on our financial statements.

In November 2015, the FASB issued ASU No. 2015-17, "*Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes."* The amendments in this Update require that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. The amendments in this Update apply to all entities that present a classified statement of financial position. For public business entities, the amendments in this Update are effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods. We are currently assessing the potential impact the adoption of this standard will have on our financial statements.

In February 2016, the FASB issued ASU No. 2016-02 *"Leases"*. The ASU requires lessees to recognize the assets and liabilities on their balance sheet for the rights and obligations created by most leases and continue to recognize expenses on their income statement over the lease term. It will also require disclosures designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. The guidance is effective for annual reporting periods beginning after December 15, 2018, and interim periods within those years. Early adoption is permitted for all entities. We are currently evaluating the impact of ASU 2016-02 on the consolidated financial statements and disclosures.

In March 2016, the FASB issued ASU No. 2016-09 *"Compensation — Stock Compensation"*, which changes the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. For public business entities, the amendments in this Update are effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted for all entities and any entity that elects early adoption must adopt all of the amendments in the same period. We are currently evaluating the impact of ASU 2016-09 on the consolidated financial statements and disclosures.

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

*Certain statements in "Management's Discussion and Analysis of Financial Condition and Results of Operations" are forward-looking statements that involve risks and uncertainties. Words such as may, will, should, would, anticipates, expects, intends, plans, believes, seeks, estimates and similar expressions identify such forward-looking statements. The forward-looking statements contained herein are based on current expectations and entail various risks and uncertainties that could cause actual results to differ materially from those expressed in such forward-looking statements. Factors that might cause such a difference include, among other things, those set forth under "Liquidity and Capital Resources" and under "Risk Factors" in Part II, Item 1A to our annual report on Form 10-K for the year ended December 31, 2015, which discussion is incorporated herein by reference. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's analysis only as of the date hereof. We assume no obligation to update these forward-looking statements to reflect actual results or changes in factors or assumptions affecting forward-looking statements, except as may be required by law.*

### Overview

Axcelis is a worldwide producer of ion implantation and other processing equipment used in the fabrication of semiconductor chips in the United States, Europe and Asia. In addition, the Company provides extensive aftermarket service and support, including spare parts, equipment upgrades and maintenance services to the semiconductor industry worldwide. Consolidation and partnering within the semiconductor manufacturing industry has resulted in a small number of customers representing a substantial portion of our business. Our net revenue from our ten largest customers accounted for 79.6% of total revenue for the three months ended March 31, 2016.

Our product development and manufacturing activities occur primarily in the United States. Axcelis' equipment and service products are highly technical and are sold primarily through a direct sales force in the United States, Europe and Asia.

Demand for semiconductor manufacturing equipment and services has historically been subject to cyclical industry conditions reflecting our customers' responses to changes in the nature and timing of technological advances in fabrication processes, supply and demand for chips, and global economic and market conditions.

Separately from overall market demand, Axcelis' results are also impacted by our customers' decisions to purchase our products rather than our competitors' systems. Since 2014, our financial results reflect increasing sales of our innovative Purion ion implantation systems, and our continued investment in research and development programs related to our Purion ion implantation products. We expect to continue to grow Purion system sales and maintain control of our cost structure.

In light of these conditions, Axcelis' results can vary significantly year-over-year, as well as quarter-over-quarter.

### Critical Accounting Estimates

Management's discussion and analysis of our financial condition and results of operations included herein and in our Annual Report on Form 10-K for the year ended December 31, 2015 are based upon Axcelis' consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates and assumptions. Management's estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Management has not identified any need to make any material change in, and has not changed, any of our critical accounting estimates and judgments as described in Management's Discussion and Analysis of Financial Conditions and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2015.

**Results of Operations**

The following table sets forth our results of operations as a percentage of total revenue:

| | Three months ended March 31, | |
|---|---|---|
| | 2016 | 2015 |
| Revenue: | | |
| Product | 92.1% | 92.1% |
| Services | 7.9 | 7.9 |
| Total revenue | 100.0 | 100.0 |
| Cost of revenue: | | |
| Product | 59.6 | 61.7 |
| Services | 5.7 | 6.4 |
| Total cost of revenue | 65.3 | 68.1 |
| Gross profit | 34.7 | 31.9 |
| Operating expenses: | | |
| Research and development | 12.8 | 11.2 |
| Sales and marketing | 8.8 | 7.7 |
| General and administrative | 8.9 | 8.3 |
| Restructuring charges | 0.4 | — |
| Total operating expenses | 30.9 | 27.2 |
| Income from operations | 3.8 | 4.7 |
| Other (expense) income: | | |
| Interest income | 0.1 | — |
| Interest expense | (1.6) | (1.4) |
| Other, net | (0.1) | (0.6) |
| Total other (expense) income | (1.6) | (2.0) |
| Income before income taxes | 2.2 | 2.7 |
| Income tax (benefit) provision | (0.7) | 0.1 |
| Net income | 2.9% | 2.6% |

**Revenue**

The following table sets forth our revenue.

| | Three months ended March 31, | | Period-to-Period change | |
|---|---|---|---|---|
| | 2016 | 2015 | $ | % |
| | (dollars in thousands) | | | |
| Revenue: | | | | |
| Product | $ 62,175 | $ 67,530 | $ (5,355) | (7.9)% |
| *Percentage of revenue* | *92.1 %* | *92.1 %* | | |
| Services | 5,346 | 5,753 | (407) | (7.1)% |
| *Percentage of revenue* | *7.9 %* | *7.9 %* | | |
| Total revenue | $ 67,521 | $ 73,283 | $ (5,762) | (7.9)% |

*Three Months Ended March 31, 2016 Compared with Three Months Ended March 31, 2015*

*Product*

Product revenue which includes system sales, sales of spare parts, product upgrades and used systems was $62.2 million, or 92.1% of revenue during the three months ended March 31, 2016, compared with $67.5 million, or 92.1% of revenue for the three months ended March 31, 2015. The $5.4 million decrease in product revenue for the three months ended March 31, 2016 was primarily driven by a decrease in the number of Purion systems sold compared to the three months ended March 31, 2015.

A portion of our revenue from system sales is deferred until installation and other services related to future deliverables are performed. The total amount of deferred revenue at March 31, 2016 and December 31, 2015 was $8.8 million and $8.5 million, respectively. The increase is due to the timing of the acceptance of deferred system sales.

*Services*

Services revenue, which includes the labor component of maintenance and service contracts and fees for service hours provided by on-site service personnel, was $5.3 million, or 7.9% of revenue for the three months ended March 31, 2016, compared with $5.8 million, or 7.9%, of revenue for the three months ended March 31, 2015. Although services revenue typically increases with the expansion of the installed base of systems, it can fluctuate from period to period based on capacity utilization at customers' manufacturing facilities, which affects the need for equipment service.

**Revenue Categories used by Management**

As an alternative to the line item revenue categories discussed above, management also uses revenue categorizations which look at revenue by systems and aftermarket as described below.

*Three Months Ended March 31, 2016 Compared with Three Months Ended March 31, 2015*

*Systems*

Included in total revenue of $67.5 million during the three months ended March 31, 2016 is revenue from sales of new systems of $37.0 million, or 54.8% of total revenue, compared with $42.5 million, or 58.0%, of total revenue for the three months ended March 31, 2015. The decrease was due to lower unit sales of our Purion systems in the three months ended March 31, 2016 compared to the prior year period.

*Aftermarket*

We refer to the business of selling spare parts, product upgrades and used systems, combined with the sale of maintenance labor and service contracts and service hours, as the "aftermarket" business. Included in total revenue of $67.5 million during the three months ended March 31, 2016 is revenue from our aftermarket business of $30.5 million, compared to $30.8 million for the three months ended March 31, 2015. Aftermarket revenue generally increases with the expansion of the installed base of systems, but can fluctuate from period to period based on capacity utilization at customers' manufacturing facilities which affects the sale of spare parts and demand for equipment service.

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**Gross Profit / Gross Margin**

The following table sets forth our gross profit / gross margin.

| | Three months ended March 31, | | Period-to-Period change | |
|---|---|---|---|---|
| | 2016 | 2015 | $ | % |
| | (dollars in thousands) | | | |
| Gross Profit: | | | | |
| Product | $ 21,912 | $ 22,345 | $ (433) | (1.9)% |
| *Product gross margin* | *35.2 %* | *33.1 %* | | |
| Services | 1,504 | 1,035 | 469 | 45.3% |
| *Services gross margin* | *28.1 %* | *18.0 %* | | |
| Total gross profit | $ 23,416 | $ 23,380 | $ 36 | 0.2% |
| Gross margin | *34.7 %* | *31.9 %* | | |

*Three Months Ended March 31, 2016 Compared with Three Months Ended March 31, 2015*

*Product*

Gross margin from product revenue was 35.2% for the three months ended March 31, 2016, compared to 33.1% for the three months ended March 31, 2015. The increase in gross margin of 2.1 percentage points resulted from the net effect of higher gross margins on systems sales partially offset by lower gross margins on parts and upgrade revenue.

*Services*

Gross margin from services revenue was 28.1% for the three months ended March 31, 2016, compared to 18.0% for the three months ended March 31, 2015. The increase in gross margin is attributable to changes in the mix of service contracts and lower overall service costs.

**Operating Expenses**

The following table sets forth our operating expenses:

| | Three months ended March 31, | | Period-to-Period change | |
|---|---|---|---|---|
| | 2016 | 2015 | $ | % |
| | (dollars in thousands) | | | |
| Research and development | $ 8,636 | $ 8,199 | $ 437 | 5.3% |
| *Percentage of revenue* | *12.8 %* | *11.2 %* | | |
| Sales and marketing | 5,960 | 5,628 | 332 | 5.9% |
| *Percentage of revenue* | *8.8 %* | *7.7 %* | | |
| General and administrative | 6,042 | 6,101 | (59) | (1.0)% |
| *Percentage of revenue* | *8.9 %* | *8.3 %* | | |
| Restructuring charges | 282 | 10 | 272 | 2,720.0% |
| *Percentage of revenue* | *0.4 %* | *— %* | | |
| Total operating expenses | $ 20,920 | $ 19,938 | $ 982 | 4.9% |
| *Percentage of revenue* | *30.9 %* | *27.2 %* | | |

Our operating expenses consist primarily of personnel costs, including salaries, commissions, bonuses, share-based compensation and related benefits and taxes; project material costs related to the design and development of new products and enhancement of existing products; and professional fees, travel and depreciation expenses. Personnel costs of $11.9 million, are our largest expense, representing 57.7% of our total operating expenses for the three months ended March 31, 2016, as compared to $11.3 million, or 56.5% of total operating expenses for the three months ended March 31, 2015.

**Research and Development**

| | Three months ended March 31, | | Period-to-period change | |
|---|---|---|---|---|
| | 2016 | 2015 | $ | % |
| | (dollars in thousands) | | | |
| Research and development | $ 8,636 | $ 8,199 | $ 437 | 5.3% |
| *Percentage of revenue* | *12.8 %* | *11.2 %* | | |

Our ability to remain competitive depends largely on continuously developing innovative technology, with new and enhanced features and systems, and introducing them at competitive prices on a timely basis. Accordingly, based on our strategic plan, we establish annual R&D budgets to fund programs that we expect will drive competitive advantages.

*Three Months Ended March 31, 2016 Compared with Three Months Ended March 31, 2015*

Research and development expense was $8.6 million during the three months ended March 31, 2016; an increase of $0.4 million, or 5.3%, compared with $8.2 million during the three months ended March 31, 2015. The increase was due to higher personnel costs.

**Sales and Marketing**

| | Three months ended March 31, | | Period-to-period change | |
|---|---|---|---|---|
| | 2016 | 2015 | $ | % |
| | (dollars in thousands) | | | |
| Sales and marketing | $ 5,960 | $ 5,628 | $ 332 | 5.9% |
| *Percentage of revenue* | *8.8 %* | *7.7 %* | | |

Our sales and marketing expenses result primarily from the sale of our equipment and services through our direct sales force.

*Three Months Ended March 31, 2016 Compared with Three Months Ended March 31, 2015*

Sales and marketing expense was $6.0 million during the three months ended March 31, 2016; an increase of $0.3 million, or 5.9%, compared with $5.6 million during the three months ended March 31, 2015, primarily due to increases in personnel costs, new tool evaluations and freight expenses.

**General and Administrative**

| | Three months ended March 31, | | Period-to-period change | |
|---|---|---|---|---|
| | 2016 | 2015 | $ | % |
| | (dollars in thousands) | | | |
| General and administrative | $ 6,042 | $ 6,101 | $ (59) | (1.0)% |
| *Percentage of revenue* | *8.9 %* | *8.3 %* | | |

Our general and administrative expenses result primarily from the costs associated with our executive, finance, information technology, legal and human resource functions.

*Three Months Ended March 31, 2016 Compared with Three Months Ended March 31, 2015*

General and administrative expense was $6.0 million during the three months ended March 31, 2016; a decrease of less than $0.1 million, or 1.0%, relatively flat when compared with $6.1 million during the three months ended March 31, 2015.

**Restructuring Charges**

| | Three months ended March 31, | | | | Period-to-period change | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | $ | | % | |
| | (dollars in thousands) | | | | | | | |
| Restructuring charges | $ | 282 | $ | 10 | $ | 272 | | 2,720.0% |
| *Percentage of revenue* | | *0.4 %* | | *—%* | | | | |

*Three Months Ended March 31, 2016 Compared with Three Months Ended March 31, 2015*

In the three months ended March 31, 2016, due to changes in customer service contracts resulting from a consolidation in our customer base, we had severance and other costs related to a reduction in force. We recorded a minor adjustment to restructuring expense during the three months ended March 31, 2015.

**Other (Expense) Income**

| | Three months ended March 31, | | | | Period-to-period change | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | $ | | % | |
| | (dollars in thousands) | | | | | | | |
| Other (expense) income, net | $ | (1,052) | $ | (1,473) | $ | (421) | | (28.6)% |
| *Percentage of revenue* | | *1.6 %* | | *2.0 %* | | | | |

*Three Months Ended March 31, 2016 Compared with Three Months Ended March 31, 2015*

Other expense was $1.1 million for the three months ended March 31, 2016 compared with other expense of $1.5 million for the three months ended March 31, 2015. Other (expense) income consists primarily of interest expense related to our financing arrangements, including the lease of our corporate headquarters, foreign exchange gains and losses attributable to fluctuations of the U.S. dollar against the local currencies of certain of the countries in which we operate, interest earned on our invested cash balances and bank fees associated with our financing arrangements. The decrease in other expense was primarily driven by the reversal of accrued interest associated with the reversal of a tax reserve.

During the three months ended March 31, 2016 and 2015, respectively, with the exception of the lease agreement entered into by the Company relating to the sale leaseback transaction in the first quarter of 2015, we had no significant off-balance-sheet risks such as exchange contracts, option contracts or other foreign hedging arrangements.

**Income Tax (Benefit) Provision**

| | Three months ended March 31, | | | | Period-to-period change | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | $ | | % | |
| | (dollars in thousands) | | | | | | | |
| Income tax (benefit) provision | $ | (504) | $ | 101 | $ | (605) | | (599.0)% |
| *Percentage of revenue* | | *(0.7 )%* | | *0.1 %* | | | | |

We incur income tax expense relating principally to operating results of foreign entities in Europe and Asia, where we earn taxable income. We have significant net operating loss carryforwards in the United States and certain European tax jurisdictions and, as a result, we do not currently pay significant income taxes in those jurisdictions. Additionally, we do not recognize the tax benefit for such losses in the United States and certain European taxing jurisdictions, and will not do so until we have sufficient income such that these tax benefits can be utilized. The Company will continue to maintain a full valuation allowance for these tax assets until sustainable future levels of profitability are evident.

During the first quarter of 2016, the statute of limitations associated with a tax position previously taken by the Company expired. This previously recorded tax reserve of $0.6 million and related accrued interest of $0.3 million were reversed during the three months ended March 31, 2016.

**Liquidity and Capital Resources**

Our liquidity is affected by many factors. Some of these relate specifically to the operations of our business, for example, the rate of sale of our products, and others relate to the uncertainties of global economies, including the availability of credit and the condition of the overall semiconductor equipment industry. Our established cost structure, other than cost of goods sold, does not vary significantly with changes in volume. We experience fluctuations in operating results and cash flows depending on these changes in revenue levels.

During the three months ended March 31, 2016, the Company used $10.2 million of cash from operating activities. This was predominately driven by increases in accounts receivable and other assets and liabilities. In comparison, during the three months ended March 31, 2015, the Company generated $8.7 million of cash from operating activities.

Investing activities for the three months ended March 31, 2016 and 2015 included $1.3 million and $0.3 million, respectively, used for capital expenditures.

Financing activities for the three months ended March 31, 2016 provided net cash of $0.3 million, primarily relating to the exercise of stock options. In comparison, financing activities for the three months ended March 31, 2015 provided net cash of $34.9 million, primarily due to a net cash inflow of $48.5 million from the sale and leaseback of our corporate headquarters building in Beverly, Massachusetts. This cash inflow from the sale and leaseback was reduced by $0.8 million of related financing costs and the $14.5 million discharge of a term loan secured by a mortgage on the property. Cash provided by financing activities in the first quarter of 2015 also included $0.9 million received relating to the exercise of stock options and a $0.8 million decrease in our restricted cash balance.

We believe that based on our current market, revenue, expense and cash flow forecasts, our existing cash and cash equivalents will be sufficient to satisfy our anticipated cash requirements for at least the next twelve months. We currently have no credit facility but the Company believes it would be able to borrow on reasonable terms if needed.

Management believes that maintaining a strong cash balance is appropriate to fund a potential ramp in business. Should demand for our products decline in future periods, we believe we can align spending levels to provide sufficient liquidity to support operations.

**Commitments and Contingencies**

Significant commitments and contingencies at March 31, 2016 are consistent with those discussed in Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and Note 17 to the consolidated financial statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

**Item 3. Quantitative and Qualitative Disclosures about Market Risk.**

As of March 31, 2016, there have been no material changes to the quantitative information about market risk disclosed in Item 7A to our Annual Report on Form 10-K for the year ended December 31, 2015.

**Item 4. Controls and Procedures.**

**Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) as of the end of the period covered by this report (the “Evaluation Date”). Based on this evaluation, our principal executive officer and principal financial officer concluded that, as of the Evaluation Date, these disclosure controls and procedures are effective.

**Changes in Internal Control over Financial Reporting**

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) identified in connection with the evaluation of our internal control that occurred during the three months ended March 31, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART II—OTHER INFORMATION

**Item 1. Legal Proceedings.**

The Company is, from time to time, a party to litigation that arises in the normal course of its business operations. The Company is not presently a party to any litigation that it believes might have a material adverse effect on its business operations.

**Item 1A. Risk Factors.**

As of March 31, 2016, there have been no material changes to the risk factors described in Item 1A to our Annual Report on Form 10-K for the year ended December 31, 2015.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.**

None.

**Item 3. Defaults Upon Senior Securities.**

None.

**Item 4. Mine Safety Disclosures.**

Not Applicable.

**Item 5. Other Information.**

None.

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**Item 6. Exhibits.**

The following exhibits are filed herewith:

| Exhibit No | Description |
|---|---|
| 3.1 | Amended and Restated Certificate of Incorporation of the Company adopted May 6, 2009. Incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the Commission on May 11, 2009. |
| 3.2 | Bylaws of the Company, as amended as of May 13, 2014. Incorporated by reference to Exhibit 3.2 of the Company's Form 8-K, filed with the Commission on May 19, 2014. |
| 31.1 | Certification of the Principal Executive Officer under Exchange Act Rule 13a-14(a)/15d-14(a) (Section 302 of the Sarbanes-Oxley Act), dated May 5, 2016. Filed herewith. |
| 31.2 | Certification of the Principal Financial Officer under Exchange Act Rule 13a-14(a)/15d-14(a) (Section 302 of the Sarbanes-Oxley Act), dated May 5, 2016. Filed herewith. |
| 32.1 | Certification of the Principal Executive Officer pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code (Section 906 of the Sarbanes-Oxley Act), dated May 5, 2016. Filed herewith. |
| 32.2 | Certification of the Principal Financial Officer pursuant to Section 1350 of Chapter 63 of title 18 of the United States Code (Section 906 of the Sarbanes-Oxley Act), dated May 5, 2016. Filed herewith. |
| 101 | The following materials from the Company's Form 10-Q for the quarter ended March 31, 2016, formatted in eXtensible Business Reporting Language (XBRL): (i) Consolidated Statements of Operations, (ii) Consolidated Statements of Comprehensive Income (Loss), (iii) Consolidated Balance Sheets, (iv) Consolidated Statements of Cash Flows and (v) Notes to Consolidated Financial Statements (Unaudited). Filed herewith. |

## SIGNATURES

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, thereunto duly authorized.

| | |
|---|---|
| | AXCELIS TECHNOLOGIES, INC. |
| DATED: May 5, 2016 | By: /s/ KEVIN J. BREWER |
| | Kevin J. Brewer<br>*Executive Vice President and Chief Financial Officer*<br>*Duly Authorized Officer and Principal Financial Officer* |