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): May 2, 2018

Axcelis Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware000-3094134-1818596(State or other jurisdiction
of incorporation)(Commission
File Number)(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)
- 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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2). Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

Item 2.02 Results of Operations and Financial Condition

On May 2, 2018, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for its quarter ended March 31, 2018. 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.

99.1 Press Release dated May 2, 2018. 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: May 2, 2018 Axcelis Technologies, Inc.

By: /s/ KEVIN J. BREWER

Kevin J. Brewer Executive Vice President and Chief Financial Officer

News Release



AXCELIS ANNOUNCES FINANCIAL RESULTS FOR FIRST QUARTER 2018

Q1 Initiatives Open Significant Additional Market Opportunities

BEVERLY, Mass. — May 2, 2018—Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for the first quarter ended March 31, 2018.

The Company reported first quarter revenue of \$122.2 million, compared to \$116.4 million for the fourth quarter of 2017. Operating profit for the quarter was \$18.5 million, compared to \$10.8 million for the fourth quarter. Net income for the quarter was \$13.9 million, or \$0.41 per diluted share, compared to net income for the fourth quarter of 2017 of \$91.7 million, or \$2.68 per diluted share. First quarter net income is after a non-cash tax expense of \$0.10 per share. Fourth quarter net income was increased by a tax benefit of \$81.6 million due principally to the release of a tax valuation allowance and related impacts. Cash, cash equivalents and restricted cash were \$148.5 million at March 31, 2018, compared to \$140.9 million on December 31, 2017.

President and CEO Mary Puma commented, "During the quarter, we entered into a strategic agreement for distribution and support with SCREEN Semiconductor Solutions to bring the Purion platform to the Japanese market. In addition, we shipped our first Purion H to a new foundry logic customer for use in their most advanced logic process. The Japanese market combined with the advanced logic market provides Axcelis access to an additional \$300 million in potential revenue opportunity. We are very pleased with our first quarter results. Demand for the Purion platform was strong across all industry segments, allowing us to capitalize on a broad and diverse customer base."

Business Outlook

For the second quarter ending June 30, 2018, Axcelis expects revenues of between \$114 and \$118 million. Gross margin in the second quarter is expected to be around 38%. Second quarter operating profit is forecasted to be approximately \$15.5-16.5 million. Earnings per share is expected to be between \$0.34 and \$0.36, which is after an expected non-cash tax expense of \$0.10 per share.

First Quarter 2018 Conference Call

The Company will host a conference call today at 5:00 pm ET to discuss the Company's results for the first quarter. The call will be available to interested listeners via an audio webcast that can be accessed through the Investors page of Axcelis' website at www.axcelis.com, or by dialing 866.588.8911 (707.294.1561 outside North America). Participants calling into the conference call will be requested to provide the company name, Axcelis Technologies, and pass code: 7599288. Webcast replays will be available for 30 days following the call.

Safe Harbor Statement

This press release and the conference call contain forward-looking statements under the Private Securities Litigation Reform Act safe harbor provisions. These statements, which include our expectations for spending in our industry and 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 that could cause actual results to differ materially from those in the forward-looking statements, many of which are outside the control of the Company, including that customer decisions to place orders or our product shipments may not occur when we expect, that orders may not be converted to revenue in any particular quarter, or at all, whether demand will continue for the semiconductor equipment we produce or, if not, whether we can successfully meet changing market requirements, and whether we will be able to maintain continuity of business relationships with and purchases by major customers. Increased competitive pressure on sales and pricing, increases in material and other production costs that cannot be recouped in product pricing and instability caused by changing global economic, political or financial conditions could also could cause actual results to differ materially from those in our forward-looking statements. 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 (Nasdaq: ACLS), headquartered in Beverly, Mass., has been providing innovative, high-productivity solutions for the semiconductor industry for over 40 years. Axcelis is dedicated to developing enabling process applications through the design, manufacture and complete life cycle support of ion implantation systems, one of the most critical and enabling steps in the IC manufacturing process. Learn more about Axcelis at www.axcelis.com.

Company Contacts

Investor Relations: Doug Lawson 978.787.9552

Editorial/Media: Maureen Hart 978.787.4266

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

		Three months ended March 31,		
		2018		2017
Revenue:			_	
Product	\$	116,022	\$	81,978
Services		6,163		4,915
Total revenue		122,185		86,893
Cost of revenue:				
Product		68,374		46,797
Services		6,655		5,382
Total cost of revenue		75,029		52,179
Gross profit		47,156		34,714
Operating expenses:				
Research and development		12,233		9,895
Sales and marketing		8,411		7,049
General and administrative		8,010		7,057
Total operating expenses		28,654		24,001
Income from operations		18,502		10,713
Other (expense) income:				
Interest income		410		69
Interest expense		(1,337)		(1,111)
Other, net		(102)		(154)
Total other expense		(1,029)		(1,196)
Income before income taxes		17,473		9,517
Income tax provision		3,558		11
Net income	\$	13,915	\$	9,506
Net income per share:				
Basic	\$	0.43	\$	0.32
Diluted	\$	0.41	\$	0.29
Shares used in computing net income per share:			÷	
Basic weighted average common shares		32,094		29,772
Diluted weighted average common shares		34,123	_	32,255
Draice in Eighted average common shares		J 4 ,123	_	32,233

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

	March 31, 2018		December 31, 2017	
ASSETS		_		_
Current assets:				
Cash and cash equivalents	\$	140,957	\$	133,407
Short-term restricted cash		770		750
Accounts receivable, net		75,588		75,302
Inventories, net		135,005		120,544
Prepaid expenses and other current assets		9,277		9,772
Total current assets		361,597		339,775
Property, plant and equipment, net		36,203		36,168
Long-term restricted cash		6,744		6,723
Deferred income taxes		80,697		83,148
Other assets		19,903		22,404
Total assets	\$	505,144	\$	488,218
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	43,438	\$	32,642
Accrued compensation		7,685		20,955
Warranty		4,583		4,112
Income taxes		389		273
Deferred revenue		15,507		16,181
Other current liabilities		5,482		5,124
Total current liabilities		77,084		79,287
Sale leaseback obligation		47,724		47,714
Long-term deferred revenue		3,015		1,964
Other long-term liabilities		5,794		5,643
Total liabilities		133,617	_	134,608
Commitments and contingencies				
Stockholders' equity:				
Common stock, \$0.001 par value, 75,000 shares authorized; 32,142 shares issued and outstanding at				
March 31, 2018; 32,048 shares issued and outstanding at December 31, 2017		32		32

Additional paid-in capital	557,498		556,147
Accumulated deficit	(189,230)		(204,745)
Accumulated other comprehensive income	3,227		2,176
Total stockholders' equity	371,527	'	353,610
Total liabilities and stockholders' equity	\$ 505,144	\$	488,218