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 2, 2012

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

01915 (Zip Code)

(Address of principal executive offices)

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))

Item 2.02 Results of Operations and Financial Condition

On February 2, 2012, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the fourth quarter and full year ended December 31, 2011. 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 2, 2012. Filed herewith.

2

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 2, 2012 Axcelis Technologies, Inc.

By: /s/ JAY ZAGER

Jay Zager

Executive Vice President and Chief Financial Officer





AXCELIS ANNOUNCES FINANCIAL RESULTS FOR FOURTH QUARTER

AND FULL YEAR 2011

BEVERLY, Mass. — February 2, 2012—Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for the fourth quarter and full year ended December 31, 2011. The Company reported fourth quarter revenue of \$60.4 million, compared to \$72.5 million for the third quarter of 2011. Net loss for the quarter was \$2.1 million, or \$0.02 per diluted share, which includes a \$900 thousand or \$0.01 per share charge related to a tax audit in Europe. This compares to net income for the third quarter of 2011 of \$1.2 million, or \$0.01 per share. Cash and cash equivalents, were \$47.0 million at December 31, 2011.

For the full year 2011, the Company reported revenue of \$319.4 million compared with \$275.2 million in 2010, a 16% increase. Net income for the year was \$5.1 million, or \$0.05 per share. In addition, the Company generated \$1.1 million of cash for the year. In 2010, the Company reported a net loss of \$17.6 million, or \$0.17 per share, and utilized \$6.3 million of cash.

Commenting on the Company's performance, Chairman and CEO Mary Puma said, "Operating results for the fourth quarter were in line with expectations. To best position the Company moving forward, we have taken proactive steps to focus our strategy, significantly reduce our cost structure and optimize our financial performance. These improvements will benefit us as the market recovers."

Fourth Quarter and Full Year 2011 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 2011. 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. 888.680.0860 (1.617.213.4852 outside North America). Participants calling into the conference

1

call will be requested to provide the company name, Axcelis Technologies, and pass code: 34113857. Webcast replays will be available from 8 pm ET on February 2, 2012 until 11:59 pm on March 3, 2012.

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

Company Contacts:

Revenue Product

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2

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

	Three Months ended December 31,				elve Months ended December 31,					
=	2011	2011 2010		 2011		2010				
\$	52,	,037 \$	85,638	\$ 287,324	\$	242,771				

Services	8,374	7,765	32,0	92	32,441
	60,411	 93,403	319,4	16	275,212
Cost of revenue	,	·			
Product	31,408	56,189	181,2	41	168,047
Services	6,380	5,721	23,4	38	21,327
	37,788	 61,910	204,6	79	189,374
Gross profit	22,623	31,493	114,7	37	85,838
Operating expenses					
Research and development	12,140	11,042	47,1	76	39,524
Sales and marketing	6,524	7,188	29,2	55	27,549
General and administrative	5,245	9,083	31,1	74	32,132
	 23,909	27,313	107,6	05	99,205
Income (loss) from operations	(1,286)	4,180	7,1	32	(13,367)
Other income (expense)					
Interest income	18	27		42	96
Other-net	342	(1,929)	2	97	(3,990)
	 360	(1,902)	3	39	(3,894)
Income (loss) before income taxes	(926)	2,278	7,4	71	(17,261)
Income taxes (benefits)	1,187	(2,052)	2,3	94	312
Net income (loss)	\$ (2,113)	\$ 4,330	\$ 5,0	77	\$ (17,573)
			-		
Net income (loss) per share					
Basic	\$ (0.02)	\$ 0.04	\$ 0.	05	\$ (0.17)
Diluted	\$ (0.02)	\$ 0.04	\$ 0.	05	\$ (0.17)
Shares used in computing net income (loss) per share					
Basic	106,476	105,163	106,2	2.4	104,522
Diluted	106,476	109,454	100,2		104,522
Diffuted	100,470	109,454	109,0	50	104,322
	3				
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Axcelis Technologies, Inc. Consolidated Balance Sheet In thousands (Unaudited)

		Decem	ber 31,	r 31,	
		2011		2010	
ASSETS					
Current assets					
Cash and cash equivalents	\$	46,877	\$	45,743	
Accounts receivable, net		35,071		57,888	
Inventories, net		120,023		109,653	
Prepaid expenses and other current assets		10,062		15,346	
Total current assets		212,033		228,630	
Property, plant and equipment, net		37,204		38,594	
Long-term restricted cash		104		107	
Other assets		19,904		13,541	
	\$	269,245	\$	280,872	
A VADA VEVES AND STOCKING DEPOSITION TO					
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities	.		_	22 - 22	
Accounts payable	\$	19,551	\$	36,709	
Accrued compensation		8,285		10,597	
Warranty		3,556		2,556	
Income taxes		495		_	
Deferred revenue		10,786		13,859	
Other current liabilities		4,799		4,408	
Total current liabilities		47,472		68,129	
Long-term deferred revenue		1,488		2,417	
Other long-term liabilities		5,730		4,759	
Stockholders' equity					
Preferred stock					
1 reteited stock				_	

Common stock	107	106
Additional paid-in capital	499,332	493,967
Treasury stock	(1,218)	(1,218)
Accumulated deficit	(288,443)	(293,520)
Accumulated other comprehensive income	4,777	6,232
	214,555	205,567
	\$ 269,245	\$ 280,872

4

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

	Twelve months ended December 31,			d
		2011		2010
Cash flows from operating activities				
Net income (loss)	\$	5,077	\$	(17,573)
Adjustments to reconcile net income (loss) to net cash provided by (used for) operating activities:				
Depreciation and amortization		8,497		7,045
Deferred income taxes		613		(1,409)
Stock-based compensation expense		4,687		4,088
Provision for excess inventory		1,015		2,015
Changes in operating assets & liabilities		1,015		2,013
Accounts receivable		22,692		(38,652)
Inventories		(11,870)		3,549
Prepaid expenses and other current assets		3,049		(3,469)
Accounts payable & other current liabilities		(17,940)		32,276
Deferred revenue		(4,006)		10,601
Income taxes		507		(1,522)
Other assets and liabilities		(8,788)		(2,841)
Net cash provided by (used for) operating activities		3,533		(5,892)
Cash flows from investing activities		5,555		(3,032)
Expenditures for property, plant, and equipment		(2,124)		(1,403)
Decrease in restricted cash		3		7,056
Net cash provided by (used for) investing activities		(2,121)		5,653
Cash flows from financing activities		(2,121)		3,033
Financing fees and other expenses		(199)		(523)
Proceeds from exercise of stock options		288		553
Proceeds from Employee Stock Purchase Plan		502		569
Net cash provided by financing activities		591		599
Effect of exchange rate changes on cash		(869)		363
Net increase in cash and cash equivalents		1,134		723
Cash and cash equivalents at beginning of period		45,743		45,020
Cash and cash equivalents at end of period	\$	46,877	\$	45,743
Cash and Cash equivalents at end of period	Ψ	40,077	Ψ	73,773