## 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): January 31, 2007

#### Axcelis Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware000-3094134-1818596(State or other jurisdiction<br/>of incorporation)(Commission<br/>File Number)(IRS Employer<br/>Identification No.)

108 Cherry Hill Drive, Beverly, Massachusetts

**01915** (Zip Code)

(Address of principal executive offices)

(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 2.02 Results of Operations and Financial Condition

On January 31, 2007, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended December 31, 2006. The Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference herein.

The information under this Item in this Current Report on Form 8-K and Exhibit 99.1 attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, regardless of any general incorporation language in such filing.

#### Item 9.01 Financial Statements and Exhibits

(c) Exhibits

Exhibit No. Description 99.1 Press Release dated January 31, 2007

#### **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: January 31, 2007 Axcelis Technologies, Inc.

By: /s/ STEPHEN G. BASSETT

Stephen G. Bassett Executive Vice President and Chief Financial Officer

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Exhibit No. Exhibit Index

99.1 Press Release dated January 31, 2007.

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### AXCELIS ANNOUNCES FINANCIAL RESULTS FOR FOURTH QUARTER AND FULL YEAR 2006

Company reports strong results across the board and significant increase in system orders

**BEVERLY, Mass.** — **January 31, 2007** — Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for the fourth quarter and full year ended December 31, 2006. The Company reported revenues of \$123.3 million, compared to \$122.8 million for the third quarter of 2006. Net income for the fourth quarter was \$15.6 million, or \$0.15 per share, compared to net income for the third quarter of 2006 of \$12.5 million, or \$0.12 per share. In the corresponding quarter for the previous year, the Company reported revenues of \$92.9 million, and net loss of \$1.3 million, or \$0.01 per share, which included restructuring and related costs of \$1.7 million, or \$0.02 per diluted share.

For the full year 2006, the Company reported revenues of \$461.7 million compared with \$372.5 million in 2005. Net income for the year was \$40.8 million, or \$0.40 per share. In 2005, the Company reported a net loss of \$3.9 million, or \$0.04 per share, which included relocation and restructuring charges of \$11.4 million, or \$0.11 per share.

Commenting on the Company's performance, Chairman and CEO Mary Puma said, "Axcelis delivered strong results across the board, and achieved a 66% quarter over quarter increase in system orders. Our operating results for 2006 exceeded our expectations, reflecting the strength of our core businesses and our early penetrations with our new Optima platform. Our actions in 2006 have laid the cornerstones for continued growth, which will include compelling market share gains from the Optima HD high current product line."

#### Fourth Quarter Detail

#### **Shipments and Margins**

Shipments before provision for deferred revenue for the fourth quarter totaled \$103.8 million. This compares to \$128.1 million in the third quarter of 2006.

Geographically, Axcelis' systems shipments were to: Asia, 36%; North America, 38%; and Europe, 26%.

The ion implantation business accounted for 63% of total shipments in the fourth quarter while other products (dry strip, curing and RTP) accounted for 37%.

Service revenue (service labor, spare parts and consumables) was \$43.2 million for the quarter, compared to \$42.1 million in the third quarter of 2006.

Gross margin for the fourth quarter was 41.6%, compared to 43.4% in the preceding quarter.

#### **Orders and Backlog**

Orders (new systems bookings and service) received for the fourth quarter totaled \$140.9 million, compared to \$101.1 million for the third quarter of 2006. New systems bookings, excluding service, amounted to \$97.7 million compared to \$59 million for the preceding quarter.

Backlog plus deferred systems revenue at quarter end was \$124.8 million. Backlog consists of systems only (i.e., excluding service contracts) that are generally scheduled to ship within six months.

#### **Balance Sheet**

Cash, cash equivalents and marketable securities increased by \$22.0 million to \$215.8 million at December 31, 2006. The Company ended the quarter with working capital of \$284.9 million.

#### SEN Corporation, an SHI and Axcelis Company ("SEN")

Axcelis owns 50% of SEN, a Japanese company that is licensed to make and sell certain Axcelis ion implanters in Japan. SEN's operating results for the quarters ended December 31, 2006, and September 30, 2006, are as follows (in millions):

	Three Months Ended December 31, 2006		Three Months Ended September 30, 2006		
SEN Revenue	\$ 93.	3 \$	45.3		
SEN System Shipments	73.	7	62.6		
SEN System Orders	59.	7	48.1		
Royalties Due Axcelis	2	<u>-</u>	2.2		
Axcelis' Share of SEN Net Income	8	5	2.4		

#### **Business Outlook**

Stephen Bassett, Axcelis executive vice president and CFO, commented, "Our anticipated ramp of Optima implanter shipments will drive revenue growth in the latter half of 2007, resulting in an overall increase in revenues for the year. Given timing of revenue recognition, our first quarter 2007 forecast does not reflect this upward trend."

Axcelis' financial outlook for the first quarter of 2007 includes revenues in the range of \$90.0 million to \$100.0 million. Gross margins in the first quarter are expected to be in the range of 42% to 43%. The Company forecasts first quarter earnings per share in the range of \$0.02 to \$0.06 per share.

Axcelis assumes no responsibility to update guidance. Axcelis will only confirm or update guidance via a press release.

#### Fourth Quarter 2006 Conference Call

The Company will be hosting a conference call today, Wednesday, January 31, 2007, beginning at 5:00 pm ET. The purpose of the call is to discuss fourth quarter and full year 2006 results and to provide guidance for the first quarter of 2007.

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 1-800-479-1628 (1-719-457-2729 outside North America). Participants calling into the conference call will be requested to provide the company name: Axcelis Technologies, the conference leader: Maureen Hart, and pass code: #4728559. A webcast replay will be available from 8:00 pm ET on January 31, 2007 until 5:00 pm ET March 2, 2007.

#### 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 Technologies, Inc.

Axcelis Technologies, Inc., 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, rapid thermal processing, and cleaning and curing systems. Axcelis also licenses its 50% owned joint venture, SEN Corporation, an SHI and Axcelis Company, to manufacture and sell certain implant products in Japan. The company's Internet address is: www.axcelis.com.



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

	Three months ended December 31,				Twelve mont December			31,
	_	2006	_	2005	_	2006	_	2005
Revenue								
Systems	\$	77,627	\$	50,364	\$	276,311	\$	206,087
Services		43,193		40,920		176,199		157,644
Royalties, primarily from SEN		2,519		1,660		9,207		8,809
		123,339	'	92,944		461,717		372,540
Cost of Revenue		72,075		54,953		270,203		218,109
Gross profit		51,264		37,991		191,514		154,431
Operating expenses								
Research & development		18,384		19,743		72,384		70,908
Sales and marketing		11,617		10,261		45,536		44,826
General and administrative		12,362		10,635		46,620		45,631
Amortization of intangible assets		656		612		2,551		2,448
Restructuring charges		535		1,070		682		6,497
		43,554		42,321		167,773		170,310
Income (loss) from operations		7,710		(4,330)		23,741		(15,879)

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Other income (expense)					
Equity income of SEN		8,532	4,391	19,266	15,751
Interest income		2,567	1,660	8,383	5,459
Interest expense		(2,428)	(1,663)	(9,085)	(6,634)
Other-net		(359)	(677)	478	(679)
		8,312	3,711	19,042	13,897
Income (loss) before income taxes		16,022	(619)	42,783	(1,982)
Income taxes		461	716	2,013	1,873
Net income (loss)	\$	15,561	\$ (1,335)	\$ 40,770	\$ (3,855)
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Net income (loss) per share					
Basic	\$	0.15	\$ (0.01)	\$ 0.40	\$ (0.04)
Diluted	\$	0.15	\$ (0.01)	\$ 0.40	\$ (0.04)
Shares used in computing net income (loss) per share					
Basic		101,221	100,435	101,058	100,301
Diluted		101,874	100,435	101,361	100,301



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

	December 31, 2006	Decembe 2005	
Assets			
Current assets			
Cash and cash equivalents	\$ 140,451		1,417
Marketable securities	63,200		3,797
Restricted cash	11,019		8,037
Accounts receivable, net	73,635		9,379
Inventories, net	160,107		9,972
Prepaid expenses and other current assets	26,639		2,767
Total current assets	475,051	39	5,369
Property, plant & equipment, net	66,678		1,443
Investment in SEN	126,688		8,815
Goodwill	46,773		6,773
Intangible assets	13,549		6,100
Restricted cash, long-term portion	1,137		3,195
Other assets	24,117	19	9,748
	\$ 753,993	\$ 66	1,443
Liabilities and stockholders' equity			
Current liabilities			
Accounts payable	\$ 37,312	\$ 25	5,556
Accrued compensation	26,996	18	8,437
Warranty	5,229	!	5,739
Income taxes	3,906	;	3,021
Deferred revenue	28,811	30	0,140
Other current liabilities	13,670	1	1,333
Current portion, long term debt	74,217		_
Total current liabilities	190,141	9,	4,226
Long-term debt	76,887	12	5,000
Long-term deferred revenue	5,054	1	1,177
Other long-term liabilities	4,349		4,999
Commitments and contingencies	<del>-</del>		
Stockholders' equity			
Preferred stock	<del>-</del>		_
Common stock	101		101
Additional paid-in capital	469,967	460	6,454
Deferred compensation	<del>-</del>	(!	(5,385)
Treasury stock	(1,218)	(	(1,218)
Retained earnings (deficit)	9,583		1,187)
Accumulated other comprehensive loss	(871)	(:	(2,724)
	477,562	420	6,041
	\$ 753,993	\$ 66	1,443

