

FLYNN MATTHEW P

Form 4

December 10, 2010

**FORM 4****UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

Check this box  
if no longer  
subject to  
Section 16.  
Form 4 or  
Form 5  
obligations  
may continue.  
*See* Instruction  
1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF  
SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
30(h) of the Investment Company Act of 1940

## OMB APPROVAL

OMB  
Number: 3235-0287  
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2005  
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response... 0.5

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
FLYNN MATTHEW P

2. Issuer Name **and** Ticker or Trading  
Symbol  
AXCELIS TECHNOLOGIES INC  
[ACLS]

5. Relationship of Reporting Person(s) to  
Issuer

(Check all applicable)

(Last) (First) (Middle)

3. Date of Earliest Transaction  
(Month/Day/Year)  
12/09/2010

\_\_\_\_ Director \_\_\_\_ 10% Owner  
\_\_\_\_X\_\_\_\_ Officer (give title \_\_\_\_ Other (specify  
below) below)  
EVP, Customer Operations

C/O AXCELIS TECHNOLOGIES,  
INC., 108 CHERRY HILL DRIVE

(Street)

4. If Amendment, Date Original  
Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check  
Applicable Line)  
\_\_\_\_X\_\_\_\_ Form filed by One Reporting Person  
\_\_\_\_ Form filed by More than One Reporting  
Person

BEVERLY, MA 01915

(City) (State) (Zip)

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price		
Common Stock	12/09/2010		M		15,000	A	\$ 1.16	122,135	D
Common Stock	12/09/2010		S		3,400	D	\$ 3.1101	118,735	D
Common Stock	12/09/2010		S		11,600	D	\$ 3.11	107,135 <sup>(1)</sup>	D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

**Persons who respond to the collection of  
information contained in this form are not  
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SEC 1474  
(9-02)

**displays a currently valid OMB control number.**

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Security (Instr. 3 and 4)			
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Axcelis non-qualified stock option (right to buy)	\$ 1.16	12/09/2010		M		15,000		11/16/2010 <sup>(2)</sup>	11/15/2019	Common Stock	1

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
FLYNN MATTHEW P C/O AXCELIS TECHNOLOGIES, INC. 108 CHERRY HILL DRIVE BEVERLY, MA 01915			EVP, Customer Operations	

## Signatures

Lynnette C. Fallon, as attorney in fact for Matthew P. Flynn

12/09/2010

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

\* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Of the shares held as of December 9, 2010, 16,909 were issuable on vesting of restricted stock units granted the executive under the 2000 Stock Plan and are subject to forfeiture. A portion of these shares will be withheld by the Company on vesting to satisfy tax withholding requirements.

(2) This option is a portion of an option granted on November 16, 2009, which is exercisable as to 25% of the total shares granted on each of the first four anniversaries of the date of grant.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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