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

**OMB APPROVAL** 3235-0287 Estimated average burden hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person*  FLYNN MATTHEW P						2. Issuer Name and Ticker or Trading Symbol AXCELIS TECHNOLOGIES INC [ ACLS ]							f Reporting Poable) (give title	erson(s) to Issu 10% Ov Other (s	vner	
(Last) (First) (Middle) C/O AXCELIS TECHNOLOGIES, INC. 108 CHERRY HILL DRIVE						3. Date of Earliest Transaction (Month/Day/Year) 11/17/2008							X Officer (give title Other (specify below)  EVP, Customer Operations			
(Street) BEVERLY MA 01915 (City) (State) (Zip)					4. If Amendment, Date of Original Filed (Month/Day/Year)							Individual or Joint/Group Filing (Check Applicable ine)  X Form filed by One Reporting Person Form filed by More than One Reporting Person				
	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned															
1. Title of Security (Instr. 3)  2. Transa Date (Month/D					Execu Day/Year) if any		ied n Date, ay/Yea	Transaction Disposed Code (Instr.		ties Acquired (A) or I Of (D) (Instr. 3, 4 and		5. Amoun Securities Beneficia Owned Fo	Form ly (D) (	orm: Direct o) or Indirect (Instr. 4)	7. Nature of ndirect Seneficial Ownership	
								Code V	Amount	(A) oi (D)	Price	Transaction (Instr. 3 and			(Instr. 4)	
	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.		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 Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		(Instr. 4)	(3)		
Stock option (right to buy)	\$0.7	11/17/2008		A <sup>(1)</sup>		150,000		11/17/2012 <sup>(2)</sup>	11/17/2018	Common Stock	150,000	\$0	150,000	D		

## **Explanation of Responses:**

- ${\bf 1.}~Granted~Pursuant~to~the~Axcelis~Technologies,~Inc.~2000~Stock~Plan.\\$
- 2. Exercisable as to 25% of the total shares on each of 11/17/2009, 11/17/2011 and 11/17/2012, provided that the common stock closes at or above \$4.00 per share for 20 consecutive trading days on one or more occasions prior to exercise.

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

11/18/2008

\*\* Signature of Reporting Person

Date

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

- \* 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).

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

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.