

AXCELIS TECHNOLOGIES INC  
 Form 4  
 November 07, 2008

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

OMB APPROVAL  
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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

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
**PUMA MARY G**  
  
 (Last) (First) (Middle)  
**C/O AXCELIS TECHNOLOGIES, INC., 108 CHERRY HILL DRIVE**  
 (Street)  
**BEVERLY, MA 01915**  
 (City) (State) (Zip)

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

3. Date of Earliest Transaction (Month/Day/Year)  
**11/07/2008**

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

5. Relationship of Reporting Person(s) to Issuer  
 (Check all applicable)  
 Director  10% Owner  
 Officer (give title below)  Other (specify below)  
**Chairman, President and CEO**

6. Individual or Joint/Group Filing (Check Applicable Line)  
 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. 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	11/07/2008		P		40,000	A		\$ 0.6498 (2)	326,820 (1)	D	
Common Stock									20,000	I	Held by spouse

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

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SEC 1474 (9-02)

**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 Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Owned Following Reporting Transaction (Instr. 6)
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
PUMA MARY G C/O AXCELIS TECHNOLOGIES, INC. 108 CHERRY HILL DRIVE BEVERLY, MA 01915	X		Chairman, President and CEO	

## Signatures

Lynnette C. Fallon, as attorney in fact for Mary G. Puma  
 Signature: \_\_\_\_\_ Date: 11/07/2008

## 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 November 7, 2008, 188,038 were issuable on vesting of restricted stock units granted the executive under the
- (1) 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) Represents the weighted average price paid of a range of prices from \$0.63 to \$0.69. On request of the SEC, the issuer or a security holder, the filer will provide full information regarding the number of shares purchased at each separate price.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.