

<p>FORM 4</p> <p><input type="checkbox"/> Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).</p>	<p>UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549</p> <p>STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP</p> <p>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</p>	<p>OMB APPROVAL</p> <hr/> <p>OMB Number: 3235-0287 Expires: January 31, 2005 Estimated average burden hours per response: 0.5</p>
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<p>1. Name and Address of Reporting Person* Puma, Mary</p> <p>(Last) (First) (Middle) c/o Axcelis Technologies, Inc. 55 Cherry Hill Drive</p> <p>(Street) Beverly, MA 01915</p> <p>(City) (State) (Zip)</p>	<p>2. Issuer Name and Ticker or Trading Symbol Axcelis Technologies, Inc. ACLS</p>	<p>4. Statement for Month/Day/Year December 20, 2002</p>	<p>6. Relationship of Reporting Person(s) to Issuer (Check all applicable)</p> <p><input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)</p> <p>Description President and CEO</p> <p>7. Individual or Joint/Group Filing (Check Applicable Line)</p> <p><input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person</p>
<p>3. I.R.S. Identification Number of Reporting Person, if an entity (voluntary)</p>		<p>5. If Amendment, Date of Original (Month/Day/Year)</p>	

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/D	Price			

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(DE) and Expiration Date(ED) (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 Beneficially Owned Following Reported Transaction(s) (Instr.4)	10. Ownership Form of Derivative Securities: Direct (D) or Indirect (I) (Instr.4)	11. Nature of Indirect Beneficial Ownership (Instr.4)	
				Code	V	A	D	DE	ED						Title
Stock options (right to buy)	\$5.85	12/20/2002		A(1)		100,000		(2)	6/21/2012	Common Stock	100,000	\$	100,000	D	

Explanation of Responses:

(1) Granted pursuant to the Axcelis Technologies, Inc. 2000 Stock Plan.
 (2) Exercisable as to 25% of the total shares on each of 6/21/03, 6/21/04, 6/21/05 and 6/21/06.

By: /s/ Lynnette C. Fallon, Attorney-in-fact on behalf of Mary G. Puma 12/20/02
 ** 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.
 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.