

<p>FORM 5</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><input type="checkbox"/> Form 3 Holdings Reported</p> <p><input type="checkbox"/> Form 4 Transactions Reported</p>	<p>UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549</p> <p>ANNUAL 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(f) of the Investment Company Act of 1940</p>	<p>OMB APPROVAL</p> <hr/> <p>OMB Number: 3235-0362 Expires: January 31, 2005 Estimated average burden hours per response. . . . 1.0</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>3. I.R.S. Identification Number of Reporting Person, if an entity (voluntary)</p>	<p>4. Statement for Month/Year 12/2002</p> <p>5. If Amendment, Date of Original (Month/Year)</p>	<p>6. Relationship of Reporting Person(s) to Issuer (Check all applicable)</p> <p><input 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 Chief Executive Officer</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>
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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 at end of Issuer's Fiscal Year (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
Common Stock	12/31/2002		J(1)	439 / D / \$5.87	0	I	Axcelis 401(k) Plan
Common Stock				// \$	57,263.12	D	

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 at End of Year 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)
					A or D	DE / ED	Title / Amount or Number of Shares				

Explanation of Responses:

(1) Shares held in Axcelis 401(k) plan were automatically sold on 12/31/2002 in accordance with the terms of the plan.

By: /s/ Lynnette C. Fallon Date: 02/03/2003
 Attorney-in-Fact for Mary G. Puma

** Signature of Reporting Person

SEC 2270 (09-02)

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.