I

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

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940 OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
hours per response: 0.5

1 I Nume and Address of Reporting Leson			2. Issuer Name and Ticker or Trading Symbol <u>AXCELIS TECHNOLOGIES INC</u> [ACLS]		ationship of Reporting Pe k all applicable) Director	rson(s) to Issuer 10% Owner
(Last) 108 CHERRY	(First) (Middle) ERRY HILL DRIVE		3. Date of Earliest Transaction (Month/Day/Year) 03/15/2012	x	Officer (give title below) EVP, Prod. Dev., E	Other (specify below)
(Street) BEVERLY	МА	01915	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line) X	vidual or Joint/Group Filin Form filed by One Re Form filed by More that	porting Person
(City)	(State)	(Zip)			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)			Securities Beneficially	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	Transaction(s) (Instr. 3 and 4)		(instit 4)
Common Stock	03/15/2012		Α		116,363 ⁽¹⁾	Α	\$ <mark>0</mark>	157,677 ⁽²⁾	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. Transa Code (8)		of I		6. Date Exerc Expiration Da (Month/Day/V	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) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)	
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

Explanation of Responses:

1. These shares are issuable on vesting of restricted stock units granted under the Company's 2000 Stock Plan. 100% of these restricted stock units will vest on either March 15, 2013 or March 15, 2014 or will forfeit on March 15, 2013, based on the Company's achievement of performance goals under the 2012 Axcelis Management Incentive Plan.

2. Of the shares held as of March 15, 2012, 116,363 were issuable on vesting of restricted stock units granted the executive under the 2000 Stock Plan and are subject to forfeiture.

Lynnette C. Fallon, as attorney 03/16/2012

in fact for William J. Bintz

** 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.