

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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* <u>Bintz William J</u>	2. Date of Event Requiring Statement (Month/Day/Year) 09/17/2007	3. Issuer Name and Ticker or Trading Symbol <u>AXCELIS TECHNOLOGIES INC [ACLS]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> Officer (give title below) <u>Senior VP, Marketing</u>	5. If Amendment, Date of Original Filed (Month/Day/Year) 09/17/2007
(Last) (First) (Middle) <u>108 CHERRY HILL DRIVE</u>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person
(Street) <u>BEVERLY MA 01915</u>			
(City) (State) (Zip)			

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
<u>Common Stock</u>	<u>17,365⁽¹⁾</u>	<u>D</u>	

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date				
<u>Right to Buy (Stock Option)</u>	<u>01/03/2010⁽²⁾</u>	<u>01/03/2016</u>	<u>Common Stock</u>	<u>17,000</u>	<u>4.78</u>	<u>D</u>
<u>Right to Buy (Stock Option)</u>	<u>05/15/2011⁽³⁾</u>	<u>05/15/2017</u>	<u>Common Stock</u>	<u>5,000</u>	<u>6.39</u>	<u>D</u>

Explanation of Responses:

- Of the shares held as of 9/17/2007, 16,000 were issuable on vesting of restricted stock units granted to the executive under the Company's 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.
- Exercisable as to 25% of the shares on each of 01/03/2007, 01/03/2008, 01/03/2009 and 01/03/2010.
- Exercisable as to 25% of the shares on each of 05/15/2008, 05/15/2009, 05/15/2010 and 05/15/2011.

Lynette C. Fallon, as attorney 12/14/2007
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 5 (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.

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