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(h)

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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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 * NETTLES PATRICK H						2. Issuer Name and Ticker or Trading Symbol AXCELIS TECHNOLOGIES INC [ACLS]								cable) or	g Pers	son(s) to Iss 10% Ov	vner
	CELIS TEC	CHNOLOGIES,	(Middle)		3. Date of Earliest Transaction (Month/Day/Year) 07/15/2011								Officer below)	(give title		Other (s below)	specify
108 CHERRY HILL DRIVE					4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable Line)				
(Street) BEVERLY MA 01915			01915										X Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City)	(S	tate)	(Zip)														
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																	
1. Title of Security (Instr. 3) 2. Transac Date (Month/Date)					Execution Dat			, Transaction Disposed Of Code (Instr. 5)			ies Acquired (A) or Of (D) (Instr. 3, 4 and		Securitie Benefici Owned F	5. Amount of Securities Beneficially Owned Following Reported		: Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
							Code	v	Amount	(A) or (D)	Price	Transact (Instr. 3	ction(s)			(111341.4)	
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)	ative Conversion Date Execution Date, rity or Exercise (Month/Day/Year) if any			Code	Transaction Code (Instr.				6. Date Exercisable and Expiration Date (Month/Day/Year)			d Amounties g s Security nd 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 Exercisal		Expiration Date	Title	Amount or Number of Shares					
Stock option (right to buy)	\$1.6	07/15/2011		A ⁽¹⁾		40,000		01/12/202	12 (07/15/2021	Common Stock	40,000	\$0	40,000)	D	

Explanation of Responses:

1. Granted pursuant to the Axcelis Technologies, Inc. 2000 Stock Plan.

<u>Lynnette C. Fallon, as attorney</u> <u>in fact for Patrick H. Nettles</u>

07/18/2011

** Signature of Reporting Person

Date

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

- * 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.