FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPRO	DVAL					
OMB Number:	3235-0287					
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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 an		2. Issuer Name and Ticker or Trading Symbol AXCELIS TECHNOLOGIES INC [ACLS]									Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner									
(Last) (First) (Middle) 108 CHERRY HILL DRIVE					3. Date of Earliest Transaction (Month/Day/Year) 07/15/2008												er (give title			specify
(Street) BEVERLY MA 01915 (City) (State) (Zip)						4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person					
		Tabl	e I - Nor	n-Deriv	ative	Sec	curitie	s Acc	quired,	Dis	posed o	f, or	Bene	eficia	ally O	wne	d			
1. Title of Security (Instr. 3) 2. Transa Date (Month/D					Day/Year) Ex		2A. Deemed Execution Date, if any (Month/Day/Year)		Transaction Disposed Code (Instr. 5)			ities Acquired (A) d Of (D) (Instr. 3, 4			4 and Secur Bene Owne		cially Following	Fori (D)	ownership m: Direct or Indirect Instr. 4)	7. Nature of Indirect Beneficial Ownership
						Code	v	Amount	((A) or (D) Price		e Reported Transaction(s) (Instr. 3 and 4)		ction(s)			(Instr. 4)			
Common	Stock	5/2008				A		20,49	2 A		\$0	(1)	69,185			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. Deeme Execution if any (Month/Da	Date, Transa Code (5. Nu of Deriv Secu Acqu (A) or Dispo of (D) (Instr	rative rities ired r osed)	6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)			8. Price Derivat Securit (Instr. !	tive ty 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	Owner Form Direct or Ind (I) (In	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisal		Expiration Date	Title	Amo or Nun of Sha	nber	er						

Explanation of Responses:

 $1.\ These \ shares \ are \ restricted \ stock \ granted \ under \ the \ 2000 \ Stock \ Plan \ and \ will \ vest \ on \ January \ 15, \ 2009.$

<u>Lynnette C. Fallon, as attorney</u> <u>in fact for R. John Fletcher</u>

07/16/2008

** Signature of Reporting Person D

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.