FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

	OMB APPRO	VAL							
	OMB Number:	3235-0287							
l	Estimated average burden								
l	hours per response:	0.5							

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 and Address of Reporting Person*							2. Issuer Name and Ticker or Trading Symbol AXCELIS TECHNOLOGIES INC [ACLS]									5. Relationship of Reporting Person(s) to Issuer (Check all applicable)						
ZAGER JAY							AACELIS TECHNOLOGIES INC [ACLS]									Director		:	.0% C	wner		
							Date of Earliest Transaction (Month/Day/Year)										Officer (give title below)		Other elow)	(specify		
(Last) (First) (Middle) 108 CHERRY HILL DRIVE							01/18/2013									CFO and EVP						
						If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable							
(Street) BEVERI	Y MA 01915		01915										Lin	e) <mark>X</mark>	Form filed by One Reporting Person							
(City) (State) (Zip)														Form filed by More than One Reporting Person				orting				
		Tabl	e I - No	n-Deriv	ative	Sec	curitie	s Acc	quired,	Dis	posed o	f, or	Ben	eficia	ly C	Owned	d					
1. Title of Security (Instr. 3) 2. Transact Date (Month/Day) E	xecution any	Deemed cution Date, ny nth/Day/Year)		3. Transaction Code (Instr. 8)		rities Acquired (A) ed Of (D) (Instr. 3, 4			1 and 5) Sed Bei		ially Following	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	- 1	Transaction(s) (Instr. 3 and 4)				(3 4)		
Common Stock 01/18/2						2013		F		4,743	D ⁽¹⁾ \$1		\$1.27	(2) 178,035 ⁽³⁾		,035(3)	D					
		Та									sed of, onvertib				Ow	ned						
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deem Execution if any (Month/Da	n Date,	4. Transac Code (I 8)				6. Date Expiration (Month/E	on Dat		7. Title and Amount of Securities Underlying Derivative Security (Instrand 4) Amount or Numbor of Title Shares		ount		rative crity S	9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	(D) rect	11. Nature of Indirect Beneficial Ownership (Instr. 4)		

Explanation of Responses:

- 1. Shares withheld by the Company equal to tax liability of the executive officer incident to the vesting of restricted stock units issued in accordance with Rule 16b-3.
- 2. Represents the closing price of the common stock on January 18, 2013.
- 3. Of the shares held as of January 18, 2013, 152,272 were issuable on vesting of restricted stock units granted the executive under the 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.

<u>Lynnette C. Fallon, as attorney</u> <u>01/21/2013</u> <u>in fact for Jay Zager</u>

** 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.