AXCELIS TECHNOLOGIES INC

Form SC 13G

February 13, 2018

```
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
SCHEDULE 13G
Under the Securities Exchange Act of 1934
(Amendment No. _____) *
Axcelis Technologies, Inc.
(Name of Issuer)
Common
(Title of Class of Securities)
054540208
(CUSIP Number)
December 31, 2017
(Date of Event Which Requires Filing of this Statement)
Check the appropriate box to designate the rule pursuant to
which this Schedule is filed:
[X]
     Rule 13d-1(b)
[ ] Rule 13d-1(c)
      Rule 13d-1(d)
[ ]
```

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 054540208

- Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a)
 - (b) [X]

0

	3.	SEC Use	Only						
	4. Citizenship or Place of Organization A Delaware Corporation								
Number of Shares	of	5.	Sole Voting Power 0 shares						
Benefic Owned by	У		6.	Shared Voting Power 0					
Each Re			7.	Sole Dispositive Power 0 shares					
reison v				8.	Share	d Disposi	itive	Power	
9.Aggregate Amount Beneficially Owned by Each Reporting Person 0 shares									
	Check if the Aggregate Amount in Row (9) Excludes Certain es (See Instructions)								
11. 12.		of Class Reportin	_			t in Row tions)		0.00% IA	
Item 1.									
(a) (b)			er's Prin 108 Che:	Axcelis Technologies, Inc. r's Principal Executive Offices 108 Cherry Hill Drive Beverly, MA 01915					
Item 2.									
	(a)	Name of	Person I	Filing:	Donald	Smith &	Co.,	Inc.	
	(b)	152 West	of Princ 57th St , NY 100						
	(c)	Citizens	ship:	A Delav	ware Co	rporation	n		
	(d)	Title o	f Class (of Secui	rities:	Common			
(e)		CUSIP Number: 054540208							

Item 3. This statement is filed pursuant to Section 240.13d-1(b), and the person filing is an investment advisor registered in accordance with Section 240.13d-1(b)(1)(ii)(E);

Item 4. Ownership.

Provide the following information regarding the aggregate number and

percentage of the class of securities of the issuer identified in Item 1.

- Amount beneficially owned: 0 (a)
- (b) Percent of class: 0.00%
- (c) Number of shares as to which the person has: (i) SOLE POWER TO VOTE: 0
- (ii) SHARED POWER TO VOTE: SEE ITEM 6 OF COVER PAGE
- (iii) SOLE POWER TO DISPOSE: 0
- SHARED POWER TO DISPOSE: SEE ITEM 6 OF COVER PAGE (iv)

Item 5. Ownership of Five Percent or Less is If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [XX].

- Item 6. Ownership of More than Five Percent on Behalf of Another Person: NOT APPLICABLE
- Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company NOT APPLICABLE
- Item 8. Identification and Classification of Members of the Group See EXHIBIT A
- Item 9. Notice of Dissolution of Group NOT APPLICABLE
- Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

February 8, 2018 Date Donald G. Smith_____

President_____ Title

SCHEDULE 13G - TO BE INCLUDED IN

STATEMENTS

FILED PURSUANT TO RULE 13d-1(b) or 13d-2(b) RULE 13d-1(f)(1) EXHIBIT A:

Donald Smith & Co., Inc. IA

SCHEDULE 13G - TO BE INCLUDED IN STATEMENTS

FILED PURSUANT TO RULE 13d-1(b) or 13d-2(b) RULE 13d-1(f)(1) AGREEMENT

The undersigned persons, on February 8, 2018, agree and consent to the joint filing on their behalf of this Schedule 13G in connection with their beneficial ownership of the Common Stock of Axcelis Technologies, Inc. at December 31, 2017.

Donald Smith & Co., Inc.

By /s/ Donald G. Smith
Donald G.Smith
President
Duly authorized by and on behalf of
Donald Smith & Co., Inc.