

Form 144

FORM 144

NOTICE OF PROPOSED SALE OF SECURITIES  
PURSUANT TO RULE 144 UNDER THE SECURITIES ACT OF 1933

## 144: Filer Information

Filer CIK 0001073329  
Filer CCC XXXXXXXXX  
Is this a LIVE or TEST Filing?  LIVE  TEST

### Submission Contact Information

Name  
Phone  
E-Mail Address

## 144: Issuer Information

Name of Issuer AXCELIS TECHNOLOGIES INC  
SEC File Number 000-30941  
Address of Issuer 108 CHERRY HILL DRIVE  
BEVERLY  
MASSACHUSETTS  
01915  
Phone 978-787-4000  
Name of Person for Whose Account the Securities are To Be Sold KEITHLEY JOSEPH P

See the definition of "person" in paragraph (a) of Rule 144. Information is to be given not only as to the person for whose account the securities are to be sold but also as to all other persons included in that definition. In addition, information shall be given as to sales by all persons whose sales are required by paragraph (e) of Rule 144 to be aggregated with sales for the account of the person filing this notice.

Relationship to Issuer Control Person

## 144: Securities Information

| Title of the Class of Securities To Be Sold | Name and Address of the Broker  | Number of Shares or Other Units To Be Sold | Aggregate Market Value | Number of Shares or Other Units Outstanding | Approximate Date of Sale | Name the Securities Exchange |
|---|---|--|------------------------|---|--------------------------|------------------------------|
| Common Stock                                | Fidelity Brokerage Services LLC<br>245 Summer Street<br>Boston MA 02110 | 2875                                       | 505252.50              | 32817464                                    | 08/07/2023               | NASDAQ                       |

Furnish the following information with respect to the acquisition of the securities to be sold and with respect to the payment of all or any part of the purchase price or other consideration therefor:

## 144: Securities To Be Sold

| Title of the Class | Date you Acquired | Nature of Acquisition Transaction | Name of Person from | Is this | Date Donor Acquired | Amount of Securities Acquired | Date of Payment | Nature of Payment * |
|--------------------|-------------------|-----------------------------------|---------------------|---------|---------------------|-------------------------------|-----------------|---------------------|
|--------------------|-------------------|-----------------------------------|---------------------|---------|---------------------|-------------------------------|-----------------|---------------------|

|              |            | <b>Whom<br/>Acquired</b> | <b>a<br/>Gift?</b>    |                          |                     |
|--------------|------------|--------------------------|-----------------------|--------------------------|---------------------|
| Common Stock | 05/16/2023 | Stock Award              | Joseph P.<br>Keithley | <input type="checkbox"/> | 2689 05/16/2023 N/A |
| Common Stock | 05/24/2012 | Stock Award              | Joseph P.<br>Keithley | <input type="checkbox"/> | 1250 05/24/2012 N/A |

\* If the securities were purchased and full payment therefor was not made in cash at the time of purchase, explain in the table or in a note thereto the nature of the consideration given. If the consideration consisted of any note or other obligation, or if payment was made in installments describe the arrangement and state when the note or other obligation was discharged in full or the last installment paid.

Furnish the following information as to all securities of the issuer sold during the past 3 months by the person for whose account the securities are to be sold.

## 144: Securities Sold During The Past 3 Months

| <b>Name and Address of Seller</b>  | <b>Title of Securities Sold</b> | <b>Date of Sale</b> | <b>Amount of Securities Sold</b> | <b>Gross Proceeds</b> |
|--|---------------------------------|---------------------|----------------------------------|-----------------------|
| JOSEPH P. KEITHLEY 1985 TRUST<br>C/O AXCELIS TECHNOLOGIES, INC.<br>108 CHERRY HILL DRIVE<br>BEVERLY MA 01915 | Common Stock                    | 05/15/2023          | 3000                             | 378142.46             |
| JOSEPH P. KEITHLEY 1985 TRUST<br>C/O AXCELIS TECHNOLOGIES, INC.<br>108 CHERRY HILL DRIVE<br>BEVERLY MA 01915 | Common Stock                    | 05/16/2023          | 1000                             | 130973.95             |
| JOSEPH P. KEITHLEY 1985 TRUST<br>C/O AXCELIS TECHNOLOGIES, INC.<br>108 CHERRY HILL DRIVE<br>BEVERLY MA 01915 | Common Stock                    | 05/17/2023          | 1000                             | 134473.92             |
| JOSEPH P. KEITHLEY 1985 TRUST<br>C/O AXCELIS TECHNOLOGIES, INC.<br>108 CHERRY HILL DRIVE<br>BEVERLY MA 01915 | Common Stock                    | 05/18/2023          | 2000                             | 284801.12             |
| JOSEPH P. KEITHLEY 1985 TRUST<br>C/O AXCELIS TECHNOLOGIES, INC.<br>108 CHERRY HILL DRIVE<br>BEVERLY MA 01915 | Common Stock                    | 05/25/2023          | 1000                             | 152181.28             |
| JOSEPH P. KEITHLEY 1985 TRUST<br>C/O AXCELIS TECHNOLOGIES, INC.<br>108 CHERRY HILL DRIVE<br>BEVERLY MA 01915 | Common Stock                    | 06/06/2023          | 1000                             | 163473.69             |
| JOSEPH P. KEITHLEY 1985 TRUST<br>C/O AXCELIS TECHNOLOGIES, INC.<br>108 CHERRY HILL DRIVE<br>BEVERLY MA 01915 | Common Stock                    | 06/07/2023          | 1000                             | 172973.61             |
| JOSEPH P. KEITHLEY 1985 TRUST<br>C/O AXCELIS TECHNOLOGIES, INC.<br>108 CHERRY HILL DRIVE<br>BEVERLY MA 01915 | Common Stock                    | 06/12/2023          | 500                              | 90861.77              |

## 144: Remarks and Signature

Remarks shares sold for JOSEPH P. KEITHLEY 1985 TRUST, JOSEPH P. KEITHLEY TRUSTEE  
Date of Notice 08/07/2023

**ATTENTION:**

The person for whose account the securities to which this notice relates are to be sold hereby represents by signing this notice that he does not know any material adverse information in regard to the current and prospective operations of the Issuer of the securities to be sold which has not been publicly disclosed. If such person has adopted a written trading plan or given trading instructions to satisfy Rule 10b5-1 under the Exchange Act, by signing the form and indicating the date that the plan was adopted or the instruction given, that person makes such representation as of the plan adoption or instruction date.

Signature            /s/ Myra King, as a duly authorized representative of Fidelity Brokerage Services LLC, as attorney-in-fact for  
                              JOSEPH P. KEITHLEY

***ATTENTION: Intentional misstatements or omission of facts constitute Federal Criminal Violations (See 18 U.S.C. 1001)***