

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 0001158015
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 MARY PUMA

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 Officer

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	Morgan Stanley Smith Barney LLC Executive Financial Services 1 New York Plaza 38th Floor New York NY 10004	21701	3766766.27	32711130	06/07/2023	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 Whom Acquired	Is this a Gift?	Date Donor Acquired	Amount of Securities Acquired	Date of Payment	Nature of Payment *
Common	02/28/2020	Restricted stock vesting under a registered plan	Issuer	<input type="checkbox"/>		21701	02/28/2020	Not Applicable

* 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

Name and Address of Seller	Title of Securities Sold	Date of Sale	Amount of Securities Sold	Gross Proceeds
Mary Puma 108 Cherry Hill Drive Beverly MA 01915	Common	05/25/2023	19722	2994297.00
Mary Puma 108 Cherry Hill Drive Beverly MA 01915	Common	05/18/2023	8578	1213950.00
Mary Puma 108 Cherry Hill Drive Beverly MA 01915	Common	05/11/2023	21705	2713125.00

144: Remarks and Signature

Remarks

Date of Notice

06/07/2023

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/ Mary Puma

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