

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**SCHEDULE 14A**

**Proxy Statement Pursuant to Section 14(a) of  
the Securities Exchange Act of 1934 (Amendment No.    )**

Filed by the Registrant  x

Filed by a Party other than the Registrant  o

Check the appropriate box:

- o Preliminary Proxy Statement
- o **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- o Definitive Proxy Statement
- x Definitive Additional Materials
- o Soliciting Material under §240.14a-12

**Axcelis Technologies, Inc**

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- x No fee required.
- o Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
  - (1) Title of each class of securities to which transaction applies:  
\_\_\_\_\_
  - (2) Aggregate number of securities to which transaction applies:  
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\_\_\_\_\_
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\_\_\_\_\_
  - (5) Total fee paid:  
\_\_\_\_\_
- o Fee paid previously with preliminary materials.
- o Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
  - (1) Amount Previously Paid:  
\_\_\_\_\_
  - (2) Form, Schedule or Registration Statement No.:  
\_\_\_\_\_
  - (3) Filing Party:  
\_\_\_\_\_
  - (4) Date Filed:  
\_\_\_\_\_

**Explanatory Note**

In order to facilitate the receipt of proxy votes for the Annual Meeting of Stockholders of Axcelis Technologies, Inc. (the "Company") to be held May 4, 2016, the Company has prepared the following supplemental material to be used in the solicitation process prior to the Annual Meeting:

- Reverse Split Talking Points for Management Investor Conversations
- Slides on the Proposed Reverse Split to be posted on the Investors webpage at Axcelis.com
- Communication to Employees of the Company

## REVERSE SPLIT TALKING POINTS

- **Proposal.** At the 2016 annual meeting, stockholders will vote on a proposal to amend Axcelis' Certificate of Incorporation to effect a "reverse stock split" of Axcelis common stock in which every four outstanding shares would be combined into one share.
- **No Impact on Value.** The value of your Axcelis shares immediately after the reverse split is implemented is expected to remain the same as it was immediately before the implementation.
  - Stockholders will own fewer shares of ACLS common stock after the reverse stock split. However, because the number of shares outstanding will also be reduced, the price for each share of ACLS is expected to increase proportionately since the total equity value remains the same.
  - The reverse stock split will not affect any stockholder's percentage ownership interest or proportionate voting power (although fractions of a post-split share will be paid out in cash).
- **Rationale.** We believe it is in the interest of our stockholders and Axcelis to have a number of shares outstanding that is comparable to that of other widely owned public semiconductor equipment companies in our revenue range and aggregate market cap.
  - If Axcelis' shares outstanding were reduced by 75%, to approximately 30 million shares, our capital structure would align well to our peer companies. We expect a stock split to ultimately result in an increase in our institutional shareholder base, as well as provide finer resolution in our earnings per share.
- **Approval Requirement.** The proposal will be considered approved if 75% of the outstanding shares of common stock entitled to vote at the meeting are cast in favor of the proposal.
- **Implementing an Approved Reverse Split.** If the stockholders approve the reverse split, the Board of Directors may, in its discretion, effect the reverse stock split at any time before our 2017 annual meeting of stockholders.
  - The Board will consider stock market dynamics and company performance in determining when to implement the reverse split, if approved.
  - From a financial reporting perspective, it will be easiest if the reverse split is effected at the end of a quarter. Accordingly, the earliest that the reverse split is likely to be effected is June 30, 2016.

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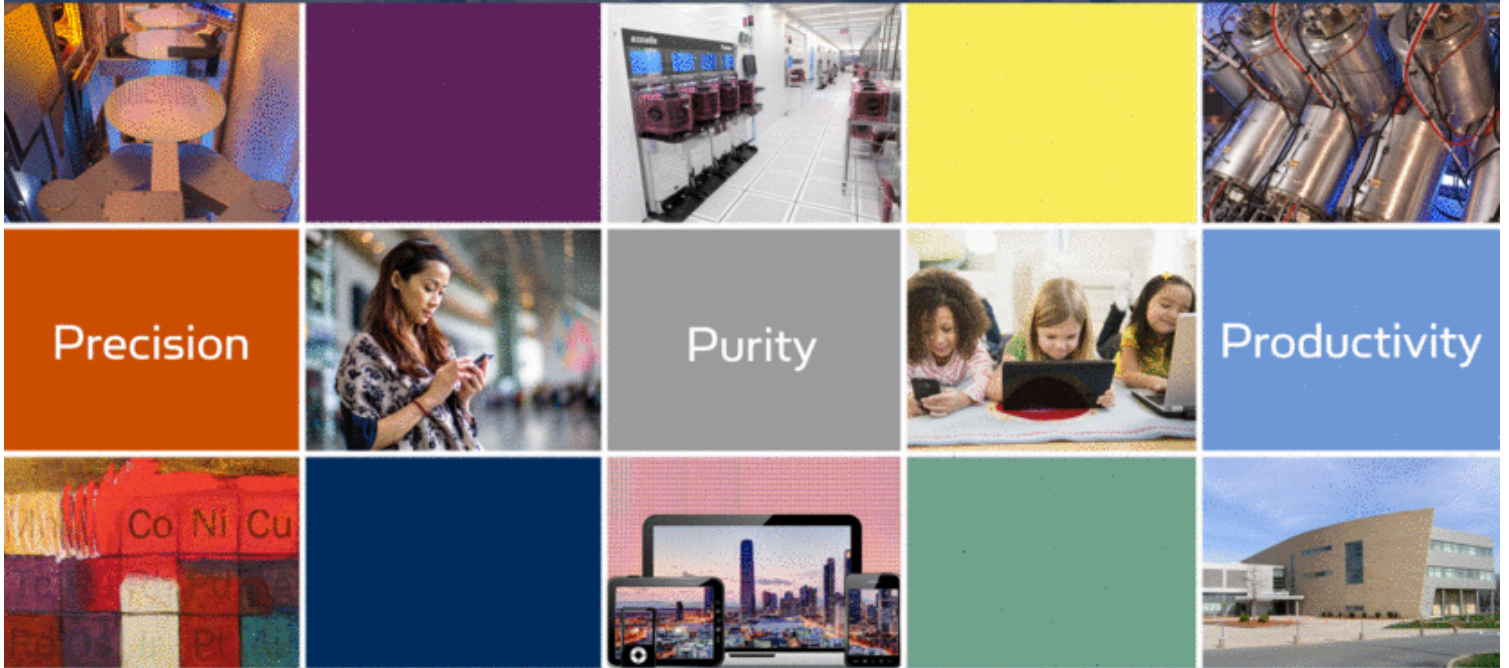
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- The Board can decide not to implement the reverse split.
- **Voting.**
  - We have engaged Georgeson to solicit proxies for us. You may get a call from them. They may be able to take your vote over the phone if you call them at **800-790-6795**.
  - If you receive a package in the mail or an email with a **control number**, you can vote by phone or on the intranet. The instructions will be on the proxy card you receive, and will vary depending on whether you are a record holder or a street name holder

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# Axcelis Technologies, Inc.



Precision

Purity

Productivity

2016 Reverse Split Information  
April 2016



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## **Safe Harbor Statement**

This presentation contains forward-looking statements about the outcome of a proposed reverse stock split, which are forward-looking statements under the SEC's safe harbor provision. These forward-looking statements are based on management's current expectations, and are subject to the risks inherent in our business and in the stock market. Our business risks are described in detail in our Form 10-K annual report and other SEC filings. Other than matters relating to our business, a variety of factors impact the trading price of ACLS common stock, including general conditions in the semiconductor industry; changes in financial estimates by securities analysts; volatility in the stock or other financial markets; currency fluctuations; and general domestic and international economic and political conditions. The outcome of the reverse stock split may differ materially from our current expectations. We do not assume any obligation to update these forward-looking statements.

## **Proposed 2016 Reverse Stock Split**

- At the 2016 annual meeting, stockholders will vote on a proposal to amend Axcelis' Certificate of Incorporation to effect a "reverse stock split" of Axcelis common stock in which every four outstanding shares would be combined into one share
- The reverse split proposal requires an affirmative vote of 75% of the outstanding shares of common stock
  - You must take action to provide the Company or your broker with instructions on how you want to vote
    - A failure to vote is counted the same as a negative vote
  - E-delivery investors may have received an email from your broker with a link to a voting site. Please click the link and vote!
  - Other investors should have received a package in the mail with a control number on a proxy card. Please use the number to vote by phone or on the intranet as instructed on the card. Instructions will vary depending on whether you are a record holder or a street name holder
  - We have engaged Georgeson to solicit proxies for us. You may get a call from them. They may be able to take your vote over the phone if you call them at 800-790-6795

## Rationale for 2016 Reverse Stock Split Proposal

- The number of shares of ACLS (~116M) is high compared to peers. Implementing a 1 for 4 reverse stock split would bring our share count in line with our peer group
  - Our share count is primarily a result of the shares issued in the spin out from Eaton Corporation in 2000
- When the reverse split is implemented, the value of the Company will be divided by a smaller number of shares outstanding, so the price for each share of ACLS is expected to increase approximately 4x
- Each stockholder's proportionate share of the Company, driving the value of the stockholder's investment, will remain the same as before the reverse split
- The higher trading price and lower shares outstanding from the reverse split are expected to:
  - Increase institutional shareholder base
  - Finer resolution in EPS



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## **Implementing the 2016 Reverse Stock Split**

- If the stockholders approve the reverse split, the Board of Directors may, in its discretion, effect the reverse stock split at any time before our 2017 annual meeting of stockholders
- The Board will consider stock market dynamics and company performance in determining when to implement the reverse split, if approved
- From a financial reporting perspective, it will be easiest if the reverse split is effected at the end of a quarter. So, the earliest that the reverse split is likely to be effected is June 30, 2016
- The approved timing of the reverse split will be announced several weeks in advance of the implementation
- After the reverse split, you will receive a mailing from Computershare, our transfer agent or from your broker, confirming your post-split shares. Fractions of a post-split share will be paid out in cash
  - Holders of stock certificates will need to send in their certificates or supply an affidavit of loss and a bond

## Example of Impact of Proposed 2016 Reverse Split

- The charts below show the effect of the 1:4 reverse split on an example stockholder position and on the Company as a whole, using prices and share numbers for the record date:

Actual Record Date (3/11/2016) Values -- Pre Reverse Split	Number of Shares	Price Per Share	Total Value
Whole Company	116,177,535	\$ 2.77	\$ 321,811,772
Example Stockholder Position in ACLS	5,000	\$ 2.77	\$ 13,850

If 4:1 Reverse Split Occurred on Record Date -- Post Reverse Split	Number of Shares	Price Per Share	Total Value
Whole Company	29,044,384	\$ 11.08	\$ 321,811,772
Example Stockholder Position in ACLS	1,250	\$ 11.08	\$ 13,850

- In this example, after the 1:4 reverse split, the share amounts are 25% of the pre-split amounts, and the price per share is 4x the pre-split value, but the value of the Company, and of a stockholder position, is unchanged.

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Date: April 2016  
To: Employee (L2 and Up)  
From:  
Re: Voting for the Proposed Reverse Stock Split

If you were a stockholder of Axcelis on March 11, 2016 and received our proxy statement for the 2016 annual meeting of stockholders, you know that one of the proposals is a reverse stock split.

The reverse split proposal requires an affirmative vote of 75% of the outstanding shares of common stock to pass, so we are seeking to ensure that all stockholders understand the proposal and vote their shares.

### Rationale for the Reverse Split

The number of outstanding shares of Axcelis common stock (~116M) is high compared to our peers. Our share count is primarily a result of the shares issued in our spin-out from Eaton Corporation in 2000.

Implementing a 1 for 4 reverse stock split would bring our share count in line with our peer group. When the reverse split is implemented, the value of the Company will be divided by a smaller number of shares outstanding, so the price for each share of ACLS is expected to increase approximately 4x. The higher trading price and lower shares outstanding from the reverse split are expected to:

- Increase institutional shareholder base, increasing trading volume and stability
- Offer a finer resolution in earnings per share

### No Expected Impact on Investment Value

The charts below show the effect of the 1:4 reverse split on an example stockholder position and on the Company as a whole, using prices and share numbers for the record date for the annual meeting:



**Actual Record Date  
(3/11/2016) Values – Pre  
Reverse Split**

	<b>Number of Shares</b>	<b>Price Per Share</b>	<b>Total Value</b>
Whole Company	116,177,535	\$ 2.77	\$ 321,811,772
Example Stockholder Position in ACLS	5,000	\$ 2.77	\$ 13,850

**If 4:1 Reverse Split Occurred  
on Record Date – Post  
Reverse Split**

	<b>Number of Shares</b>	<b>Price Per Share</b>	<b>Total Value</b>
Whole Company	29,044,384	\$ 11.08	\$ 321,811,772
Example Stockholder Position in ACLS	1,250	\$ 11.08	\$ 13,850

In this example, after the 1:4 reverse split, the share amounts are 25% of the pre-split amounts, and the price per share is 4x the pre-split value, but the value of the Company, and of a stockholder position, is unchanged.

### How to Vote

You must take action to provide the Company or your broker with instructions on how you want to vote. A failure to vote is counted the same as a negative vote. Please know that:

- Every vote counts; even small stockholders should take the time to vote.
- Voting on line takes less than a minute.
- If you have signed up for E-delivery, you may have received an email from your broker with a link to a voting site. Please click the link and vote! You can also go to your broker's website to find the link.
- Others should have received a package in the mail with a control number on a proxy card. Please use the number to vote by phone or on the intranet as instructed on the card. Instructions will vary depending on whether you are a record holder or a street name holder.
- We have engaged Georgeson to solicit proxies for us. You may get a call from them. They may be able to take your vote over the phone if you call them at 800-790-6795.

### If the Reverse Split is Approved

If the stockholders approve the reverse split, the Board of Directors may, in its discretion, effect the reverse stock split at any time before our 2017 annual meeting of stockholders. The Board will consider stock market dynamics and company performance in determining when to implement the reverse split.

From a financial reporting perspective, it will be easiest if the reverse split is effected at the end of a quarter. So, the earliest that the reverse split is likely to be effected is June 30, 2016.

The approved timing of the reverse split will be announced several weeks in advance of the implementation. After the reverse split, you will receive a mailing from Computershare, our transfer agent or from your broker, confirming your post-split shares. Fractions of a post-split share will be paid out in cash.

### We hope you will join us in supporting the proposed 2016 reverse split!

This memo contains forward-looking statements about the outcome of a proposed reverse stock split, which are forward-looking statements under the SEC's safe harbor provision. These forward-looking statements are based on management's current expectations, and are subject to the risks inherent in our business and in the stock market. Our business risks are described in detail in our Form 10-K annual report and other SEC filings. Other than matters relating to our business, a variety of factors impact the trading price of Axcelis common stock, including general conditions in the semiconductor industry; changes in financial estimates by securities analysts; volatility in the stock or other financial markets; currency fluctuations; and general domestic and international economic and political conditions. The outcome of the reverse stock split may differ materially

from our current expectations. We do not assume any obligation to update these forward-looking statements.