

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

**Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): **May 6, 2009**

Axcelis Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

000-30941
(Commission
File Number)

34-1818596
(IRS Employer
Identification No.)

108 Cherry Hill Drive, Beverly, Massachusetts
(Address of principal executive offices)

01915
(Zip Code)

Registrant's telephone number, including area code: **(978) 787-4000**

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition

On May 11, 2009, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended March 31, 2009. The Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference herein.

Item 5.02(e). Compensatory Arrangements of Certain Officers

On May 6, 2009, the Compensation Committee of the Company's Board of Directors approved a temporary reduction in the base compensation of Mary G. Puma, the Company's Chairman and Chief Executive Officer, to an annual rate of \$400,000 for 2009 and 2010. This action was in response to a letter from Ms. Puma offering to agree to a 20% salary reduction during 2009 and 2010 as a modification to the Amended and Restated Employment Agreement between Ms. Puma and the Company dated November 6, 2007. This temporary reduction will have no impact on the amount of any separation pay due to Ms. Puma under either her employment agreement or the Change of Control Agreement between Ms. Puma and the Company. ; A copy of Ms. Puma's letter is filed with this Form 8-K as Exhibit 10.1.

Item 5.03. Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year

At the 2009 annual meeting of shareholders held on May 6, 2009, the Company's shareholders approved an Amended and Restated Certificate of Incorporation providing for the phase out of the Company's classified Board of Directors. The one-year director term provisions shall apply to directors elected at annual meetings commencing in 2010. The Amended and Restated Certificate of Incorporation also incorporates the existing provisions of the Certificate of Designations adopted on June 30, 2000. It is filed as Exhibit 3.1 to this Form 8-K, and a copy marked to show the amendments is filed as Exhibit 3.2.

Item 9.01. Financial Statements and Exhibits

(c) Exhibits

3.1 Amended and Restated Certificate of Incorporation of the registrant, as adopted May 6, 2009. Filed herewith.

- 3.2 Amendments to Restated Certificate of Incorporation and Certificate of Designations of the registrant adopted May 6, 2009. Filed herewith.
- 10.1 Letter from Mary G. Puma to the Board of Directors dated May 1, 2009. Filed herewith.
- 99.1 Press Release dated May 11, 2009. Filed herewith.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: May 11, 2009

Axcelis Technologies, Inc.

By: /s/ STEPHEN G. BASSETT

Stephen G. Bassett
Executive Vice President
and Chief Financial Officer

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

AXCELIS TECHNOLOGIES, INC.

FIRST. The name of the corporation is Axcelis Technologies, Inc. The name under which the corporation was originally incorporated is Eaton Semiconductor Equipment Inc. The Corporation's original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on December 21, 1995.

SECOND. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with the applicable provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware.

THIRD. The Restated Certificate of Incorporation of the Corporation is amended and restated to read in full as follows:

1. Name. The name of the Corporation is Axcelis Technologies, Inc.
2. Registered Office and Agent. The address of its registered office in the State of Delaware is 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.
3. Purpose. The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "DGCL").
4. Capitalization.
 - 4.1. *Authorized Capitalization*. The total number of all shares of capital stock which the Corporation shall have the authority to issue is 330,000,000 shares consisting of: (i) 300,000,000 shares of Common Stock, par value of \$0.001 per share; and (ii) 30,000,000 shares of Preferred Stock, par value of \$0.001 per share.
 - 4.2. *Preferred Stock*. The Corporation's Board of Directors is hereby expressly authorized to provide by resolution or resolutions from time to time for the issue of the Preferred Stock in one or more series, the shares of each of which series may have such voting powers, full or limited, or no voting powers, and such designations, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereon, as shall be permitted under the DGCL and as shall be stated in the resolution or resolutions providing for the issue of such stock adopted by the Board of Directors pursuant to the authority expressly vested in the Board of Directors hereby.

4.3. *Series A Participating Preferred Stock*.

- (a) *Designation and Amount*. 3,000,000 of the authorized shares of Preferred Stock are designated Series A Participating Preferred Stock (the "Series A Preferred Stock") with the following relative rights, preferences, and limitations.
- (b) *Dividends and Distributions*.
 - (1) Subject to the rights of the holders of any shares of any class of preferred stock ranking prior and superior to the Series A Preferred Stock with respect to dividends, the holders of shares of Series A Preferred Stock, in preference to the holders of Common Stock and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the first day of March, June, September and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$1.00 or (b) subject to the provision for adjustment hereinafter set forth, 100 times the aggregate per share amount of all cash dividends, and 100 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.
 - (2) The Corporation shall declare a dividend or distribution on the Series A Preferred Stock as provided in Section 4.3(b)(1) immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment

Date, a dividend of \$1.00 per share on the Series A Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(3) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not more than 60 days prior to the date fixed for the payment thereof.

(c) *Voting Rights.* The holders of shares of Series A Preferred Stock shall have the following voting rights:

- (1) Each share of Series A Preferred Stock shall entitle the holder thereof to one vote on all matters submitted to a vote of the stockholders of the Corporation. The holders of fractional Series A Preferred Stock shall not be entitled to any vote on any matter submitted to a vote of the shareholders of the Corporation.
 - (2) The holders of Series A Preferred Stock shall be entitled to elect two directors of the Corporation whenever dividends payable on any series of Series A Preferred Stock shall be in default as qualified therein. For purposes of the holders of Series A Preferred Stock exercising such right, the provisions of the Corporation's By-Laws and other provisions of law shall apply, as if the Series A Preferred Stock were the only class of shares of the Corporation outstanding.
 - (3) Except as otherwise provided herein or by law, the holders of shares of Series A Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.
 - (4) Except as set forth herein or as otherwise provided by law, holders of Series A Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.
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(d) *Certain Restrictions.*

- (1) Whenever quarterly dividends or other dividends or distributions payable on the Series A Preferred Stock as provided in Section 4.3(b) are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Preferred Stock outstanding shall have been paid in full, the Corporation shall not:
 - (i) declare or pay dividends, or make any other distributions, on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock;
 - (ii) declare or pay dividends, or make any other distributions, on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except dividends paid ratably on the Series A Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;
 - (iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such junior stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Preferred Stock; or
 - (iv) redeem or purchase or otherwise acquire for consideration any shares of Series A Preferred Stock, or any shares of stock ranking on a parity with the Series A Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.
- (2) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under Section 4.3(d)(1), purchase or otherwise acquire such shares at such time and in such manner.

(e) *Reacquired Shares.* Any shares of Series A Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part

of a new series of Preferred Stock subject to the conditions and restrictions on issuance set forth herein or as otherwise required by law.

(f) *Liquidation Dissolution or Winding Up.* Upon any liquidation, dissolution or winding up of the Corporation, no distribution shall be made (1) to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock unless, prior thereto, the holders of shares of Series A Preferred Stock shall have received \$100 per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, provided that the holders of shares of Series A Preferred Stock shall be entitled to receive an aggregate amount per share, subject to the provision for adjustment hereinafter set forth, equal to 100 times the aggregate amount to be distributed per share to holders of shares of Common Stock, or (2) to the holders of shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except distributions made ratably on the Series A Preferred Stock and all such parity stock in proportion to the total amounts to which the holders of all such shares are entitled upon such liquidation, dissolution or winding up. In the

event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

- (g) *Consolidation, Merger, etc.* In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series A Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 100 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the

number of shares of Common Stock that were outstanding immediately prior to such event.

- (h) *No Redemption.* The shares of Series A Preferred Stock shall not be redeemable except as provided in that certain Rights Agreement dated as of June 30, 2000 between Axcelis Technologies, Inc. and Equiserve Trust Company NA.
- (i) *Rank.* The Series A Preferred Stock shall rank, with respect to the payment of dividends and the distribution of assets, on a parity with any other series of Serial Preferred Shares and shall rank junior to any series of any other class of preferred stock of the Corporation which by its terms is senior to the Serial Preferred Shares.
- (j) *Amendment.* Subject to the provisions of Section 14, this Amended and Restated Certificate of Incorporation may not be amended, altered or repealed in any manner which would affect adversely the voting powers, rights or preferences of the holders of the Series A Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least two-thirds of the then outstanding shares of Series A Preferred Stock, voting together as a single class.

5. Period of Existence. The period of existence of the Corporation shall be perpetual.

6. Board of Directors.

6.1. *Number of Directors.* The number of members of the Board of Directors will be fixed from time to time by resolution adopted by the affirmative vote of a majority of the entire Board of Directors but (subject to vacancies) in no event may there be fewer than three directors nor more than 15 directors.

6.2. *Election.* At each annual meeting of shareholders, beginning with the first annual meeting of shareholders held after the date of the adoption of this Amended and Restated Certificate of Incorporation by the shareholders of the Corporation (the "First One Year Term Election"), all directors whose terms end at such annual meeting shall be elected for terms expiring at the next annual meeting of shareholders. Accordingly, the respective terms of all directors in office on the effective date of this Amended and Restated Certificate of Incorporation shall not be shortened as a result of the foregoing sentence. All directors shall serve until their respective successors shall be elected and qualified, subject to prior death, resignation, retirement or removal. In no event will a decrease in the number of directors shorten the term of any incumbent director. Notwithstanding the foregoing, and except as otherwise required by law, whenever the holders of any one or more series of Preferred Stock shall have the right, voting separately as a class, to elect one or more directors of the Corporation, the election, terms of office and other features of such directorships shall be governed by the terms of the vote establishing such series.

6.3. *Vacancies.* Except as otherwise determined by the Board of Directors in establishing a series of Preferred Stock as to directors elected by holders of such series, any vacancy in the Board of Directors, including a vacancy resulting from the enlargement of the Board of Directors, shall be filled by the directors then in office,

though less than a quorum. A director who is elected to fill a vacancy shall be elected for a term expiring at the next annual meeting of shareholders.

6.4. *Removal.* Except as otherwise determined by the Board of Directors in establishing a series of Preferred Stock as to directors elected by holders of such series, at any special meeting of the shareholders called at least in part for the purpose, any director or directors may be removed from office only (a) for cause by the affirmative vote of at least a majority of the voting power of all of the then outstanding shares of stock entitled to vote generally in the election of directors or (b) with respect to directors elected at or after the First One Year Term Election, without cause by the affirmative vote of the holders of at least seventy-five percent (75%) of the voting power of all of the then outstanding shares of stock entitled to vote generally in the election of directors. The provisions of this subsection shall be the exclusive method for the removal of directors.

7. Amendments to Certificate of Incorporation. The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Amended and Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

8. Amendments to By-laws. In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to adopt, amend or repeal the By-laws of the Corporation.

9. Meetings of Stockholders. Meetings of stockholders may be held within or without the State of Delaware as the By-laws may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from

time to time by the Board of Directors or in the By-laws of the Corporation. Elections of directors need not be by written ballot unless the By-laws of the Corporation shall so provide.

10. Liability of Directors; Indemnification.

10.1. The personal liability of the directors of the Corporation is hereby eliminated to the fullest extent permitted by Section 102(b)(7) of the DGCL, as the same may be amended and supplemented. Without limiting the generality of the foregoing, no director shall be personally liable to the Corporation or any of its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

10.2. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "proceeding") by reason of the fact that such person, or a person for whom he or she is the legal

representative, is or was a director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or non-profit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses reasonably incurred by such person. The Corporation shall be required to indemnify a person in connection with a proceeding initiated by such person only if the proceeding was authorized by the Board of Directors of the Corporation. The rights to indemnification and advancement of expenses conferred by this Article shall be presumed to have been relied upon by directors and officers of the Corporation in serving or continuing to serve the Corporation and shall be enforceable as contract rights. Said rights shall not be exclusive of any other rights to which those seeking indemnification may otherwise be entitled. The Corporation may enter into contracts to provide such persons with specific rights to indemnification, which contracts may confer rights and protections to the maximum extent permitted by the DGCL. The Corporation may create trust funds, grant security interests, obtain letters of credit, or use other means to ensure payment of such amounts as may be necessary to perform the obligations provided for in this Article or in any such contract. Any repeal or modification of this Article 10 by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or modification with respect to acts or omissions occurring prior to such repeal or modification.

11. Other Considerations. In addition to any other considerations which the Board of Directors, any committee thereof or any individual director lawfully may take into account in determining whether to take or refrain from taking corporate action on any matter, including making or declining to make any recommendations to the stockholders of the Corporation, the Board of Directors, any committee thereof or any individual director may in its, his or her discretion consider the long term as well as the short term best interests of the Corporation (including the possibility that these interests may best be served by the continued independence of the Corporation), taking into account and weighing as deemed appropriate the effects of such action on employees, suppliers, distributors and customers of the Corporation and its subsidiaries and the effect upon communities in which the offices or facilities of the Corporation and its subsidiaries are located and any other factors considered pertinent. This Article 11 shall be deemed to grant discretionary authority to the Board of Directors, any committee thereof and each individual director, and shall not be deemed to provide to any specific constituency any right to be considered.

12. Special Meetings of Stockholders. The stockholders of the Corporation shall have no authority to call a special meeting of the stockholders, subject to the rights of the holders of any class or series of capital stock having a preference over the Common Stock as to dividends or upon liquidation.

13. Action Without a Meeting. No action required to be taken or which may be taken at any annual or special meeting of stockholders of the Corporation may be taken without a meeting; and the power of the stockholders to consent in writing, without a meeting, to the taking of any action is specifically denied.

14. Additional Vote Required. Notwithstanding any other provisions of this Amended and Restated Certificate of Incorporation or any provision of law which might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of the holders of any particular class or series of stock required by law or this Amended and Restated Certificate of Incorporation, the affirmative vote of the holders of at least 75% of the aggregate of the then outstanding shares of Common Stock and of any series of Preferred Stock the terms of which provide for voting on the matter together with the Common Stock as a single class shall be required to alter, amend, supplement or repeal, or to adopt any provision inconsistent with the purpose or intent of, Sections 4, 6.4(b), 12, 13 or 14 of this Article THIRD.

FOURTH: The foregoing amendment and restatement of the Certificate of Incorporation has been approved by the Board of Directors of the Corporation.

IN WITNESS WHEREOF Axcelis Technologies, Inc. has caused this Amended and Restated Certificate of Incorporation to be signed and attested this 6th day of May, 2009.

Attest:

AXCELIS TECHNOLOGIES, INC

By: /s/ Lynnette C. Fallon
Title: Secretary

By: /s/ Mary G. Puma
Title: Chairman, CEO and President

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

AXCELIS TECHNOLOGIES, INC.

FIRST. The name of the corporation is Axcelis Technologies, Inc. The name under which the corporation was originally incorporated is Eaton Semiconductor Equipment Inc. The Corporation's original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on December 21, 1995.

SECOND. This **Amended and Restated** Certificate of Incorporation was duly adopted in accordance with the applicable provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware.

THIRD. The ~~original~~**Restated** Certificate of Incorporation of the Corporation is amended and restated to read in full as follows:

1. **Name.** The name of the Corporation is Axcelis Technologies, Inc.
2. **Registered Office and Agent.** The address of its registered office in the State of Delaware is 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.
3. **Purpose.** The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "DGCL").

4. **Capitalization.**

4.1. a-Authorized Capitalization. The total number of all shares of capital stock which the Corporation shall have the authority to issue is 330,000,000 shares consisting of: (i) 300,000,000 shares of Common Stock, par value of \$0.001 per share; and (ii) 30,000,000 shares of Preferred Stock, par value of \$0.001 per share.

4.2. b-Preferred Stock. The Corporation's Board of Directors is hereby expressly authorized to provide by resolution or resolutions from time to time for the issue of the Preferred Stock in one or more series, the shares of each of which series may have such voting powers, full or limited, or no voting powers, and such designations, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereon, as shall be permitted under the DGCL and as shall be stated in the resolution or resolutions providing for the issue of such stock adopted by the Board of Directors pursuant to the authority expressly vested in the Board of Directors hereby.

e. Reclassification. Upon the effective date of this Restated Certificate of Incorporation (the "Effective Time"), each issued share of the capital stock of the Corporation theretofore designated as "Common Stock," par value \$1.00 per share ("Old Common Stock"), shall, without any action on the part of the holder thereof, be reclassified so that each existing share of Old Common Stock shall become one share of Common Stock, par value \$0.001 per share. Each holder of a

certificate or certificates which immediately prior to the Effective Time represented outstanding shares of Old Common Stock ("Old Certificates"), shall be entitled to receive upon surrender of such Old Certificates to the Corporation or its stock transfer agent for cancellation, a certificate or certificates ("New Certificates") representing the number of shares of Common Stock, par value \$0.001 per share, into which and for which shares of Old Common Stock formerly represented by such Old Certificates so surrendered are reclassified. From and after the Effective Time, Old Certificates shall represent only the right to receive New Certificates pursuant to the provisions hereof.

4.3. Series A Participating Preferred Stock.

(a) Designation and Amount. 3,000,000 of the authorized shares of Preferred Stock are designated Series A Participating Preferred Stock (the "Series A Preferred Stock") with the following relative rights, preferences, and limitations.

(b) Dividends and Distributions.

- (1) Subject to the rights of the holders of any shares of any class of preferred stock ranking prior and superior to the Series A Preferred Stock with respect to dividends, the holders of shares of Series A Preferred Stock, in preference to the holders of Common Stock and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the first day of March, June, September and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$1.00 or (b) subject to the provision for adjustment hereinafter set forth, 100 times the aggregate per share amount of all cash dividends, and 100 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.**

- (2) The Corporation shall declare a dividend or distribution on the Series A Preferred Stock as provided in Section 4.3(b)(1) immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, in the event no dividend or distribution shall have
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been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$1.00 per share on the Series A Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

- (3) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not more than 60 days prior to the date fixed for the payment thereof.

(c) Voting Rights. The holders of shares of Series A Preferred Stock shall have the following voting rights:

- (1) Each share of Series A Preferred Stock shall entitle the holder thereof to one vote on all matters submitted to a vote of the stockholders of the Corporation. The holders of fractional Series A Preferred Stock shall not be entitled to any vote on any matter submitted to a vote of the shareholders of the Corporation.
- (2) The holders of Series A Preferred Stock shall be entitled to elect two directors of the Corporation whenever dividends payable on any series of Series A Preferred Stock shall be in default as qualified therein. For purposes of the holders of Series A Preferred Stock exercising such right, the provisions of the Corporation's By-Laws and other provisions of law shall apply, as if the Series A Preferred Stock were the only class of shares of the Corporation outstanding.
- (3) Except as otherwise provided herein or by law, the holders of shares of Series A Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.
- (4) Except as set forth herein or as otherwise provided by law, holders of Series A Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.
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(d) Certain Restrictions.

- (1) Whenever quarterly dividends or other dividends or distributions payable on the Series A Preferred Stock as provided in Section 4.3(b) are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Preferred Stock outstanding shall have been paid in full, the Corporation shall not:
- (i) declare or pay dividends, or make any other distributions, on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock;
- (ii) declare or pay dividends, or make any other distributions, on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except dividends paid ratably on the Series A Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;
- (iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such junior stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Preferred Stock; or
- (iv) redeem or purchase or otherwise acquire for consideration any shares of Series A Preferred Stock, or any shares of stock ranking on a parity with the Series A Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.
- (2) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under Section 4.3(d)(1), purchase or otherwise acquire such shares at such time and in such manner.

- (e) Reacquired Shares. Any shares of Series A Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued

shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock subject to the conditions and restrictions on issuance set forth herein or as otherwise required by law.

- (f) Liquidation Dissolution or Winding Up. Upon any liquidation, dissolution or winding up of the Corporation, no distribution shall be made (1) to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock unless, prior thereto, the holders of shares of Series A Preferred Stock shall have received \$100 per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of

such payment, provided that the holders of shares of Series A Preferred Stock shall be entitled to receive an aggregate amount per share, subject to the provision for adjustment hereinafter set forth, equal to 100 times the aggregate amount to be distributed per share to holders of shares of Common Stock, or (2) to the holders of shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except distributions made ratably on the Series A Preferred Stock and all such parity stock in proportion to the total amounts to which the holders of all such shares are entitled upon such liquidation, dissolution or winding up. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

- (g) Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series A Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 100 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

- (h) No Redemption. The shares of Series A Preferred Stock shall not be redeemable except as provided in that certain Rights Agreement dated as of June 30, 2000 between Axcelis Technologies, Inc. and Equiserve Trust Company NA.

- (i) Rank. The Series A Preferred Stock shall rank, with respect to the payment of dividends and the distribution of assets, on a parity with any other series of Serial Preferred Shares and shall rank junior to any series of any other class of preferred stock of the Corporation which by its terms is senior to the Serial Preferred Shares.

- (j) Amendment. Subject to the provisions of Section 14, this Amended and Restated Certificate of Incorporation may not be amended, altered or repealed in any manner which would affect adversely the voting powers, rights or preferences of the holders of the Series A Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least two-thirds of the then outstanding shares of Series A Preferred Stock, voting together as a single class.

5. Period of Existence. The period of existence of the Corporation shall be perpetual.

6. Board of Directors.

6.1. Number of Directors. a.—The number of members of the Board of Directors will be fixed from time to time by resolution adopted by the affirmative vote of a majority of the entire Board of Directors but (subject to vacancies) in no event may there be ~~less~~fewer than three directors nor more than 15 directors.

b. The Directors shall be divided into three classes, each consisting of one third of such directors, as nearly as possible. Promptly following the Effective Time, in 2000, the sole stockholder shall designate that one class of directors shall be elected for a one-year term, one class for a two-year term and one class for a three-year term. Commencing with the stockholders meeting in 2001, and at each succeeding annual stockholders meeting, successors to the class of directors whose term expires at such annual stockholders meeting shall be elected for a three-year term. If the number of such directors is changed, an increase or decrease in such directors shall be apportioned among the classes so as to maintain the number of directors comprising each class as nearly equal as possible, and any additional directors of any class shall hold office for a term which shall coincide with the remaining term of such class. A director shall hold office until the annual stockholders meeting for the year in which such director's term expires and until a successor shall be elected and shall qualify, subject, however, to prior death, resignation, retirement, disqualification, or removal from office.

c. Except as otherwise required by law, any vacancy on the board of directors that results from an increase in the number of directors shall be filled only by a majority of the board of directors then in office, provided that a quorum is present, and any other vacancy occurring in the board of directors shall be filled by a majority of the directors then in office, even if less than a quorum, or by a sole remaining director. Any director elected to fill a vacancy not resulting from an increase in the number of directors shall have the same remaining term as that of his or her predecessor. A director may be removed only for cause by the stockholders. d at an annual or special meeting of stockholders, the election, term of office, filling of vacancies and other features of such directorships shall be governed by the terms of this Restated Certificate of Incorporation applicable thereto and such directors so elected shall not be divided into classes pursuant to this Article 6, in each case unless expressly provided by such terms.

6.2. Election. At each annual meeting of shareholders, beginning with the first annual meeting of shareholders held after the date of the adoption of this Amended and Restated Certificate of Incorporation by the shareholders of the Corporation (the “First One Year Term Election”), all directors whose terms end at such annual meeting shall be elected for terms expiring at the next annual meeting of shareholders. Accordingly, the respective terms of all directors in office on the effective date of this Amended and Restated Certificate of Incorporation shall not be shortened as a result of the foregoing sentence. All directors shall serve until their respective successors shall be elected and qualified, subject to prior death, resignation, retirement or removal. In no event will a decrease in the number of directors shorten the term of any incumbent director. Notwithstanding the foregoing, **and except as otherwise required by law,** whenever the holders of any one or more classes or series of stock issued by the Corporation ~~Preferred Stock~~ shall have the right, voting separately ~~by~~ **as a class or series,** to elect **one or more** directors **of the Corporation, the election, terms of office and other features of such directorships shall be governed by the terms of the vote establishing such series.**

6.3. Vacancies. Except as otherwise determined by the Board of Directors in establishing a series of Preferred Stock as to directors elected by holders of such series, any vacancy in the Board of Directors, including a vacancy resulting from the enlargement of the Board of Directors, shall be filled by the directors then in office, though less than a quorum. A director who is elected to fill a vacancy shall be elected for a term expiring at the next annual meeting of shareholders.

6.4. Removal. Except as otherwise determined by the Board of Directors in establishing a series of Preferred Stock as to directors elected by holders of such series, at any special meeting of the shareholders called at least in part for the purpose, any director or directors may be removed from office only (a) for cause by the affirmative vote of at least a majority of the voting power of all of the then outstanding shares of stock entitled to vote generally in the election of directors or (b) with respect to directors elected at or after the First One Year Term Election, without cause by the affirmative vote of the holders of at least seventy-five percent (75%) of the voting power of all of the then outstanding shares of stock entitled to vote generally in the election of directors. The provisions of this subsection shall be the exclusive method for the removal of directors.

7. Amendments to Certificate of Incorporation. The Corporation reserves the right to amend, alter, change or repeal any provision contained in this **Amended and** Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

8. Amendments to By-laws. In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to adopt, amend or repeal the By-laws of the Corporation.

9. Meetings of Stockholders. Meetings of stockholders may be held within or without the State of Delaware as the By-laws may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the By-laws of the Corporation. Elections of directors need not be by written ballot unless the By-laws of the Corporation shall so provide.

10. Liability of Directors; Indemnification.

10.1. a-The personal liability of the directors of the Corporation is hereby eliminated to the fullest extent permitted by Section 102(b)(7) of the DGCL, as the same may be amended and supplemented. Without limiting the generality of the foregoing, no director shall be personally liable to the Corporation or any of its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director’s duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

10.2. b-The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a “proceeding”) by reason of the fact that such person, or a person for whom he or she is the legal representative, is or was a director,

officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or non-profit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses reasonably incurred by such person. The Corporation shall be required to indemnify a person in connection with a proceeding initiated by such person only if the proceeding was authorized by the Board of Directors of the Corporation. The rights to indemnification and advancement of expenses conferred by this Article shall be presumed to have been relied upon by directors and officers of the Corporation in serving or continuing to serve the Corporation and shall be enforceable as contract rights. Said rights shall not be exclusive of any other rights to which those seeking indemnification may otherwise be entitled. The Corporation may enter into contracts to provide such persons with specific rights to indemnification, which contracts may confer rights and protections to the maximum extent permitted by the DGCL. The Corporation may create trust funds, grant security interests, obtain letters of credit, or use other means to ensure payment of such amounts as may be necessary to perform the obligations provided for in this Article or in any such contract. e- Any repeal or modification of this Article 10 by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or modification with respect to acts or omissions occurring prior to such repeal or modification.

11. Other Considerations. In addition to any other considerations which the Board of Directors, any committee thereof or any individual director lawfully may take into account in determining whether to take or refrain from taking corporate action on any matter, including making or declining to make any recommendations to the stockholders of the Corporation, the Board of Directors, any committee thereof or any individual director may in its, his or her discretion consider the long term as well as the short term best interests of the Corporation (including the possibility that these interests may best be served by the continued independence of the Corporation), taking into account and weighing as deemed appropriate the effects of such action on employees, suppliers, distributors and customers of the Corporation and its subsidiaries and the effect upon communities in which the offices or facilities of the Corporation and its subsidiaries are located and any other factors considered pertinent. This Article 11 shall be deemed to grant discretionary authority to the Board of Directors, any committee thereof and each individual director, and shall not be deemed to provide to any specific constituency any right to be considered.

12. Special Meetings of Stockholders. ~~Effective as of the time at which Eaton Corporation, an Ohio corporation, and its affiliates shall cease to be the beneficial owners of an aggregate of at least a majority of the then outstanding shares of Common Stock of the Corporation (the “Change of Majority~~

Ownership Date”), the ~~The~~ stockholders of the Corporation shall have no authority to call a special meeting of the stockholders, subject to the rights of the holders of any class or series of capital stock having a preference over the Common Stock as to dividends or upon liquidation.

13. Action Without a Meeting. ~~Effective as of the Change of Majority Ownership Date, no~~ No action required to be taken or which may be taken at any annual or special meeting of stockholders of the Corporation may be taken without a meeting; and the power of the stockholders to consent in writing, without a meeting, to the taking of any action is specifically denied.

14. Additional Vote Required. Notwithstanding any other provisions of this Amended and Restated Certificate of Incorporation or any provision of law which might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of the holders of any particular class or series of stock required by law or this Amended and Restated Certificate of Incorporation, the

affirmative vote of the holders of at least 75% of the aggregate of the then outstanding shares of Common Stock and of any series of Preferred Stock the terms of which provide for voting on the matter together with the Common Stock as a single class shall be required to alter, amend, supplement or repeal, or to adopt any provision inconsistent with the purpose or intent of, ~~Articles Sections 4, 6.4(b), 12, 13 or 14 of this Restated Certificate of Incorporation.~~ Article THIRD.

FOURTH: The foregoing amendment and restatement of the Certificate of Incorporation has been approved by the Board of Directors of the Corporation.

IN WITNESS WHEREOF Axcelis Technologies, Inc. has caused this Amended and Restated Certificate of Incorporation to be signed and attested this ~~146th~~ day of ~~June~~ May, 2000, 2009.

* * * * *

CERTIFICATE OF DESIGNATIONS

of

SERIES A PARTICIPATING PREFERRED STOCK

of

AXCELIS TECHNOLOGIES, INC.

(Pursuant to Section 151 of the Delaware General Corporation Law)

Axcelis Technologies, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (hereinafter called the “Corporation”), hereby certifies that the following resolution was adopted by the Board of Directors of the Corporation as required by Section 151 of the General Corporation Law by the unanimous written consent of the Board of Directors dated as of June 30, 2000.

RESOLVED, that, pursuant to the authority granted to and vested in the Board of Directors of this Corporation (hereinafter called the “Board of Directors” or the “Board”) in accordance with the provisions of the Restated Certificate of Incorporation, the Board of Directors hereby creates a series of Preferred Stock, par value \$0.001 per share (the “Preferred Stock”), of the Corporation and hereby states the designation and number of shares and fixes the relative rights, preferences, and limitations thereof as follows:

1. Designation and Amount. The shares of such series shall be designated as “Series A Participating Preferred Stock” (the “Series A Preferred Stock”) and the number of shares constituting the Series A Preferred Stock shall be 3,000,000.

2. Dividends and Distributions.

A. Subject to the rights of the holders of any shares of any class of preferred stock ranking prior and superior to the Series A Preferred Stock with respect to dividends, the holders of shares of Series A Preferred Stock, in preference to the holders of Common Stock, par value \$0.001 per share (the “Common Stock”), of the Corporation, and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the first day of March, June, September and

December in each year (each such date being referred to herein as a “Quarterly Dividend Payment Date”), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$1.00 or (b) subject to the provision for adjustment hereinafter set forth, 100 times the aggregate per share amount of all cash dividends, and 100 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

- ~~B. The Corporation shall declare a dividend or distribution on the Series A Preferred Stock as provided in paragraph (A) of this Section immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$1.00 per share on the Series A Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.~~
- ~~C. Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Preferred Stock in an amount less than the total amount of such dividends at the time accrued and~~
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~~payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not more than 60 days prior to the date fixed for the payment thereof.~~

~~3. Voting Rights. The holders of shares of Series A Preferred Stock shall have the following voting rights:~~

- ~~A. Each share of Series A Preferred Stock shall entitle the holder thereof to one vote on all matters submitted to a vote of the stockholders of the Corporation. The holders of fractional Series A Preferred Stock shall not be entitled to any vote on any matter submitted to a vote of the shareholders of the Corporation.~~
- ~~B. The holders of Series A Preferred Stock shall be entitled to elect two directors of the Corporation whenever dividends payable on any series of Series A Preferred Stock shall be in default as qualified therein. For purposes of the holders of Series A Preferred Stock exercising such right, the provisions of the Corporation's By-Laws and other provisions of law shall apply, as if the Series A Preferred Stock were the only class of shares of the Corporation outstanding.~~
- ~~C. Except as otherwise provided herein, in the Restated Certificate of Incorporation, in any other Certificate of Amendment creating a series of Preferred Stock or any similar stock, or by law, the holders of shares of Series A Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.~~
- ~~D. Except as set forth herein, in the Restated Certificate of Incorporation of the Corporation, or as otherwise provided by law, holders of Series A Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.~~

~~4. Certain Restrictions.~~

- ~~A. Whenever quarterly dividends or other dividends or distributions payable on the Series A Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Preferred Stock outstanding shall have been paid in full, the Corporation shall not:~~
- ~~i. declare or pay dividends, or make any other distributions, on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock;~~
 - ~~ii. declare or pay dividends, or make any other distributions, on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except dividends paid ratably on the Series A Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;~~
 - ~~iii. redeem or purchase or otherwise acquire for consideration shares of any stock ranking junior (either as to dividends or upon~~

~~liquidation, dissolution or winding up) to the Series A Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such junior stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Preferred Stock; or~~

- ~~iv. redeem or purchase or otherwise acquire for consideration any shares of Series A Preferred Stock, or any shares of stock ranking on a parity with the Series A Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.~~

~~B.—The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.~~

- ~~5.—Reacquired Shares. Any shares of Series A Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock subject to the conditions and restrictions on issuance set forth herein, in the Restated Certificate of Incorporation, or in any other Certificate of Amendment creating a series of Preferred Stock or any similar stock or as otherwise required by law.~~
- ~~6.—Liquidation Dissolution or Winding Up. Upon any liquidation, dissolution or winding up of the Corporation, no distribution shall be made (1) to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock unless, prior thereto, the holders of shares of Series A Preferred Stock shall have received \$100 per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, provided that the holders of shares of Series A Preferred Stock shall be entitled to receive an aggregate amount per share, subject to the provision for adjustment hereinafter set forth, equal to 100 times the aggregate amount to be distributed per share to holders of shares of Common Stock; or (2) to the holders of shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except distributions made ratably on the Series A Preferred Stock and all such parity stock in proportion to the total amounts to which the holders of all such shares are entitled upon such liquidation, dissolution or winding up. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series A Preferred Stock were entitled immediately~~

prior to such event under the proviso in clause (1) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

- ~~7.—Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series A Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 100 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.~~
- ~~8.—No Redemption. The shares of Series A Preferred Stock shall not be redeemable except as provided in that certain Rights Agreement dated as of June 30, 2000 between Axcelis Technologies, Inc. and Equiserve Trust Company NA.~~
- ~~9.—Rank. The Series A Preferred Stock shall rank, with respect to the payment of dividends and the distribution of assets, on a parity with any other series of Serial Preferred Shares and shall rank junior to any series of any other class of preferred stock of the Corporation which by its terms is senior to the Serial Preferred Shares.~~
- ~~10.—Amendment. Subject to the provisions of Article 14 of the Corporation's Restated Certificate of Incorporation, the Corporation's Restated Certificate of Incorporation shall not be amended, altered or repealed in any manner which would affect adversely the voting powers, rights or preferences of the holders of the Series A Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least two-thirds of the outstanding shares of Series A Preferred Stock, voting together as a single class.~~

IN WITNESS WHEREOF, this Certificate of Designation is executed on behalf of the Corporation by the undersigned duly authorized officer this 30th day of June, 2000.

Mary G. Puma
Chairman and CEO
Tel: (978) 787-4226
Fax: (978) 787-4090

May 1, 2009
Board of Directors
Axcelis Technologies, Inc.
c/o Stephen R. Hardis, Lead Director
108 Cherry Hill Drive
Beverly, Massachusetts 01915

Re: Modification of Compensation of Chief Executive Officer and Chairman

Dear Members of the Axcelis Board of Directors:

I am writing to propose that my base pay at Axcelis Technologies, Inc. (the "Company") be reduced to a rate of \$400,000 per year for the calendar years 2009 and 2010. This amount represents a 20% reduction from my current rate of pay, which has been set forth in the Amended and Restated Employment Agreement between the Company and me effective November 6, 2007 (the "Employment Agreement"). For the calendar year 2009, my rate of pay shall be reduced beginning with the first payroll after the Compensation Committee of the Board of Directors accepts this proposal, and such rate shall take into account the pay reductions previously implemented during 2009 through unpaid shutdowns. I have previously informed you that I would not accept a bonus payment for 2008 and I also propose that I will not have a bonus opportunity in respect of the calendar year 2009.

Accordingly, this letter will serve as my agreement to modifications of:

- (A) the minimum annual rate of base pay set forth in Section 3 of the Employment Agreement to the amount of \$400,000 for calendar years 2009 and 2010; and
- (B) the provisions of Section 5 of the Employment Agreement pertaining to annual bonuses to reflect my proposals regarding the 2008 and 2009 bonuses described in the above paragraph.

In the event that I am at any time entitled to separation pay under the Employment Agreement or under the Change of Control Agreement between the Company and me dated as of November 6, 2007, my base compensation rate and bonus opportunities shall be unaffected by this letter and all amounts due to me shall be calculated as if the modifications described in this letter had never taken effect.

Sincerely,

/s/ Mary G. Puma

Mary G. Puma
Chairman and Chief Executive Officer



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AXCELIS ANNOUNCES FINANCIAL RESULTS FOR FIRST QUARTER 2009

BEVERLY, Mass.—May 11, 2009—Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for the first quarter ended March 31, 2009. The Company reported first quarter revenue of \$25.7 million, compared to \$42.0 million for the fourth quarter of 2008. Net loss for the first quarter was \$29.2 million, or \$0.28 per share. This compares to a net loss for the fourth quarter of 2008 of \$141.4 million, or \$1.37 per share, which includes charges for restructuring of \$3.4 million (\$0.03 per share), impairment of intangible and long-lived assets of \$46.9 million (\$0.46 per share), impairment of goodwill of \$42.1 million (\$0.41 per share), and excess inventory of \$23.2 million (\$0.23 per share). In the corresponding quarter for the previous year, the Company reported revenues of \$84.9 million, and net loss of \$11.1 million, or \$0.11 per share.

First Quarter Detail

Shipments

Shipments, including aftermarket business, before provision for deferred revenue for the first quarter totaled \$25.6 million. Geographically, Axcelis' systems shipments were to: North America, 45%; and Asia, 55%. The ion implantation business accounted for 79% of total shipments in the first quarter.

Orders and Backlog

Orders (new systems bookings and aftermarket) received for the first quarter totaled \$20.9 million. New systems bookings, excluding aftermarket, amounted to \$2.4 million. Backlog plus deferred systems revenue at quarter end was \$16.0 million. Backlog consists of systems orders (aftermarket orders are excluded) that are generally scheduled to ship within six months.

Balance Sheet

Cash and cash equivalents were \$71.2 million at March 31, 2009. The Company ended the quarter with working capital of \$205.7 million.

About Axcelis Technologies, Inc.

Axcelis Technologies, Inc., headquartered in Beverly, Massachusetts, provides innovative, high-productivity solutions for the semiconductor industry. Axcelis is dedicated to developing enabling process applications through the design, manufacture and complete life cycle support of ion implantation and cleaning systems. The company's Internet address is: www.axcelis.com.

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Axcelis Technologies, Inc.
Consolidated Statements of Operations
 In thousands, except per share amounts
 (Unaudited)

	Three Months ended March 31,	
	2009	2008
Revenue	25,728	84,894
Cost of revenue	22,721	55,678
Gross profit	3,007	29,216
Operating expenses		
Research and development	9,535	16,853
Sales and marketing	6,879	11,905
General and administrative	10,670	9,814
Amortization of intangible assets	—	656
Restructuring charges	984	51
	<u>28,068</u>	<u>39,279</u>
Loss from operations	(25,061)	(10,063)

Other income (expense)		
Gain on sale of SEN	1,080	—
Equity income (loss) of SEN	(3,238)	1
Interest income	63	690
Interest expense	(1,676)	(1,601)
Other-net	(205)	318
	<u>(3,976)</u>	<u>(592)</u>
Loss before income taxes	(29,037)	(10,655)
Income taxes	<u>118</u>	<u>426</u>
Net loss	<u>\$ (29,155)</u>	<u>\$ (11,081)</u>
Net loss per share		
Basic and diluted net loss per share	\$ (0.28)	\$ (0.11)
Shares used in computing basic and diluted net loss per share		
Weighted average common shares	103,284	102,447



Axcelis Technologies, Inc.
Consolidated Balance Sheets
In thousands
(Unaudited)

	<u>March 31,</u> <u>2009</u>	<u>December 31,</u> <u>2008</u>
Assets		
Current assets		
Cash and cash equivalents	\$ 71,243	\$ 37,694
Restricted cash	8,321	8,654
Accounts receivable, net	20,971	27,486
Inventories, net	140,459	150,113
Prepaid expenses and other current assets	15,281	17,231
Total current assets	<u>256,275</u>	<u>241,178</u>
Property, plant and equipment, net	43,692	44,432
Investment in SEN	—	156,677
Other assets	11,914	12,894
	<u>\$ 311,881</u>	<u>\$ 455,181</u>
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable	\$ 11,226	\$ 8,066
Accrued compensation	12,842	15,841
Warranty	2,089	3,137
Income taxes	409	337
Deferred revenue	12,552	12,508
Other current liabilities	11,501	6,897
Current portion of convertible subordinated debt	—	83,210
Total current liabilities	<u>50,619</u>	<u>129,996</u>
Long-term deferred revenue	1,840	1,872
Other long-term liabilities	3,607	3,936
Stockholders' equity		
Preferred Stock	—	—
Common stock	103	103
Additional paid-in capital	484,395	483,546
Treasury stock	(1,218)	(1,218)
Accumulated deficit	(227,634)	(198,479)
Accumulated other comprehensive income	169	35,425
	<u>255,815</u>	<u>319,377</u>
	<u>\$ 311,881</u>	<u>\$ 455,181</u>

