

**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): February 16, 2007

Axcelis Technologies, Inc.

(Exact name of registrant as specified in 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 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

Adoption of Executive Incentive Performance Plan for Fiscal 2007. On February 16, 2007, the Compensation Committee of the Company's Board of Directors adopted an incentive performance plan for the Company's fiscal year ended December 31, 2007, known as the Axcelis Team Incentive Plan, or ATI. All of the Company's employees participate in the ATI, including the Company's Chief Executive Officer and the executive officers named in the Company's proxy statement for its annual meeting held in 2006 and expected to be named in the Company's proxy statement for its annual meeting to be held in 2007 (the "named executive officers").

Each named executive officer has a target cash bonus amount, expressed as a percentage of salary, which was approved by the Compensation Committee of the Board of Directors. The following table sets forth each current officer's current ATI target as a percentage of salary:

Executive Officer	Title	ATI Target as a % of Base Salary
Mary G. Puma	Chairman, Chief Executive Officer and President	100%
Stephen G. Bassett	EVP and Chief Financial Officer	60%
Lynnette C. Fallon	EVP HR/Legal and General Counsel	60%
Matthew Flynn	SVP, Global Customer Operations	60%
Kevin Brewer	SVP, Manufacturing Operations	50%
Marc S. Levine	SVP, Product Development	50%

Funding under the 2007 ATI plan is based 40% on execution of goals for 2007 set in the Company's strategic planning process with respect to product development, product quality and reliability, customer relationship metrics and sales and bookings targets for specific products. The remaining 60% of the funding for the 2006 ATI is based on the achievement of financial targets based on the Company's 2007 profit plan with respect to revenues, gross margin, pre-tax profit and cash generation. The Compensation Committee will evaluate the Company's performance against the goals and will score the performance

ranging from 0-200%. These scores are then weighted and are totaled into a single Company Performance Score. Funding of the 2007 ATI based on the achievement of financial goals is limited to 20% of the Company's pre-tax income (before taking into account any payout under the plan or equity compensation expense). Funding of the 2007 ATI from achievement of execution goals is not so limited.

The individual performance of each of the named executive officers during 2007 will also be evaluated by the Committee based on the achievement of individual performance goals set at the beginning of the year and the individual's contribution to achievement of the Company's financial and non-financial goals. The Individual Performance Score will range from 0-150% and will be multiplied by the Company Performance Score to determine each executive's payout. Therefore, an executive's bonus payment can range upwards from \$0 to a maximum ATI payout of 300% of the executive's target amount (assuming a 200% Company Performance Score and a 150% Individual Performance Score).

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: February 16, 2007

Axcelis Technologies, Inc.

By: /s/ Stephen G. Bassett
Stephen G. Bassett
Executive Vice President and Chief Financial
Officer