

**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 26, 2004

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 1.01 Entry into a Material Definitive Agreement

Adoption of Executive Incentive Performance Plan for Fiscal 2004. On February 26, 2004, the Compensation Committee of the Company's Board of Directors adopted an incentive performance plan, for the Company's fiscal year ended December 31, 2004, 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 all other executive officers.

Pursuant to the plan, the Committee designated for each executive officer a target cash bonus amount, expressed as a percentage of salary. In establishing these targets, the Committee applied its compensation philosophy to provide base salaries, target bonus compensation and equity compensation within the 50th percentile of such categories of compensation paid by similar companies for comparable positions, based on market benchmarking data compiled by external consulting firms. The following table sets forth each current officer's current ATI target as a percentage of salary and as dollar amount.

Executive Officer	Title	ATI Target as a % of Base Salary	ATI Target (\$)
Mary G. Puma	President and Chief Executive Officer	100%	\$ 500,000
Michael J. Luttati	Executive Vice President and COO	75%	\$ 288,750
Lynnette C. Fallon	Sr. VP HR/Legal and General Counsel	50%	\$ 152,500
Stephen G. Bassett	Sr. Vice President and Chief Financial Officer	50%	\$ 138,000
David Duff	VP and GM, IIRTP	45%	\$ 108,000
Jan Paul van Maaren	VP and GM, CCS	40%	\$ 89,400
Matthew Flynn	VP, Global Customer Operations	40%	\$ 93,400
Kevin Brewer	VP, Manufacturing Operations	40%	\$ 89,400
Donald Palette	VP, Finance	40%	\$ 82,800
Totals			\$ 1,542,250

Funding under the ATI plan is based 40% on execution of goals for 2004 set in the Company's strategic planning process with respect to product development, product quality and reliability, customer relationship metrics and sales targets. The remaining 60% of the funding for the 2004 ATI is based on the achievement of financial targets based on the Company's 2004 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. The individual performance of each of the executive officers during 2004 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 (assuming a 200% Company Performance Score and a 150% Individual Performance Score) of 300% of the executive's target amount.

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: January 21, 2005

Axcelis Technologies, Inc.

By: /S/ STEPHEN G. BASSETT
Stephen G. Bassett
Senior Vice President and Chief Financial Officer