

SCHEDULE 14A INFORMATION

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to Section 240.14a-11(c) or Section 240.14a-12

AXCELIS TECHNOLOGIES, INC.

(Name of Registrant as Specified In Its Certificate)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
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NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To be held June 26, 2003

The 2003 annual meeting of stockholders of Axcelis Technologies, Inc., a Delaware corporation, will be held at the offices of Palmer & Dodge, LLP, 111 Huntington Avenue, Boston, Massachusetts, 11:00 a.m. on Thursday, June 26, 2003 for the following purposes:

1. To elect three (3) directors to serve until the 2006 annual meeting of stockholders.
2. To ratify the appointment of independent auditors.
3. To transact such other business as may properly come before the meeting or any adjournment thereof.

Only stockholders of record at the close of business on April 28, 2003 will be entitled to vote at the annual meeting or at any adjournment.

It is important that your shares be represented at the meeting. Therefore, whether or not you plan to attend the meeting, please complete your proxy card and return it in the enclosed envelope, which requires no postage if mailed in the United States. If you attend the meeting and wish to vote in person, your proxy will not be used.

By order of the Board of Directors

Lynnette C. Fallon
Secretary

April 30, 2003

PROXY STATEMENT

The Board of Directors of Axcelis Technologies, Inc. ("Axcelis" or the "Company") is soliciting your proxy for use at the 2003 annual meeting of stockholders to be held on Thursday, June 26, 2003 and at any adjournment of the meeting. This proxy statement and the accompanying proxy card are first being sent or given to stockholders of Axcelis on or about May 1, 2003.

General Information About Voting

Who can vote. You may vote your shares of Axcelis common stock at the annual meeting if you were a stockholder of record at the close of business on April 28, 2003. On that date, there were 98,395,258 shares of common stock outstanding. You are entitled to one vote for each share of common stock that you held on the record date.

How to vote your shares. You may vote your shares either by proxy or by attending the meeting and voting in person. If you choose to vote by proxy, please complete, date, sign and return the proxy card in the enclosed postage prepaid envelope. The proxies named in the proxy card will vote your shares as you have instructed. If you sign and return the proxy card without indicating how your votes should be cast, the proxies will vote your shares in favor of each of the proposals contained in this proxy statement, as recommended by our Board of Directors. Even if you plan to attend the meeting, please complete and mail your proxy card to ensure that your shares are represented at the meeting. If you attend the meeting, you can still revoke your proxy by voting in person. If your shares are held in a brokerage or bank account, you must make arrangements with your broker or bank to vote your shares in person.

Proposals to be considered at the annual meeting. The principal business expected to be transacted at the meeting, as more fully described below, will be the reelection of three directors whose current terms end in 2003 and the ratification of the selection of independent auditors of the Company.

Quorum. A quorum of stockholders is required to transact business at the meeting. A majority of the outstanding shares of common stock entitled to vote, represented at the meeting in person or by proxy, constitutes a quorum for the transaction of business.

Number of votes required. The number of votes required to approve the proposals that are scheduled to be presented at the meeting is as follows:

Proposal	Required Vote
• Election of three nominees as directors.	Each nominee must receive a plurality of the votes cast.
• Ratification of auditors	This requires the affirmative vote of a majority of the shares present or represented at the meeting and entitled to vote.

Abstentions. Abstaining from voting for a nominee in the election of directors will reduce the number of votes cast as well as the number of votes in favor of any nominee, so will have no impact on the results of voting. In voting on the proposal to ratify the appointment of our auditors, abstentions will be counted as votes against the proposal.

Broker non-votes. A broker non-vote occurs when a broker cannot vote a customer's shares registered in the broker's name because the customer did not send the broker instructions on how to vote on the matter and the broker is barred by law or stock exchange regulations from exercising its discretionary voting authority in the particular matter. Brokers will have voting discretion for shares registered in their own name on both the election of directors and ratification of auditors.

Discretionary voting by proxies on other matters. Aside from the proposals for the election of directors and the ratification of our selection of auditors, we do not know of any other proposals that may be presented at the 2003 annual meeting. If another matter is properly presented for consideration at the meeting, the persons named in the accompanying proxy card will exercise their discretion in voting on the matter.

How you may revoke your proxy. You may revoke the authority granted by your executed proxy card at any time before we exercise it by filing with our Corporate Secretary, Lynnette C. Fallon, a written revocation or a duly executed proxy card bearing a later date, or by voting in person at the meeting. If your shares are held in a brokerage account, you must make arrangements with your broker or bank to revoke your proxy.

Expenses of solicitation. We will bear all costs of soliciting proxies. We will upon request reimburse brokers, custodians and fiduciaries for out-of-pocket expenses incurred in forwarding proxy solicitation materials to the beneficial owners of stock held in their names. In addition to solicitations by mail, our directors, officers and employees may solicit proxies from stockholders in person or by other means of communication, including telephone, facsimile and e-mail, without additional remuneration.

Householding of Annual Meeting Materials. Some banks, brokers and other nominee record holders may be "householding" our proxy statements and annual reports. This means that only one copy of our proxy statement and annual report to stockholders may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you if you call or write us at the following address or telephone number: Axcels Technologies, Inc., 55 Cherry Hill Drive, Beverly, Massachusetts 01915, Attn: Corporate Secretary, telephone: (978) 787-4000. If you want to receive separate copies of the proxy statement or annual report to stockholders in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker, or other nominee record holder, or you may contact us at the above address and telephone number.

SHARE OWNERSHIP OF 5% STOCKHOLDERS

The following table shows the amount of our common stock beneficially owned as of December 31, 2002 by persons known by us to own more than 5% of our common stock.

Beneficial Owner (1)	Shares Owned	Options or Warrants Exercisable as of April 30, 2002
Sterling Capital Management LLC, Sterling MGT, Inc., Eduardo Brea, Alexander W. McAlister, David M. Ralston, Brian R. Walton, and Mark Whelan (2) 4064 Colony Road, Charlotte, NC 28211	5,138,800	5.2%
Wellington Management Company, LLP (3) 75 State St., Boston, MA 02109	9,959,533	10.1%
Vanguard Windsor Funds-Windsor Fund (4) 100 Vanguard Blvd., Malver, PA 19355	6,700,589	6.8%

- (1) Unless otherwise noted, the number of shares beneficially owned by each person listed includes any shares over which a person has sole or shared voting or investment power. As of December 31, 2002, none of the persons named in this table had the right to acquire shares by exercising a stock option or other right. Unless otherwise noted, each person has sole investment and voting power (or shares that power with his or her spouse) over the shares listed in the table. The percentage ownership of each person listed in the table was calculated using the total number of shares outstanding on December 31, 2002.
- (2) Based on a Schedule 13G filed by Sterling Capital Management LLC et al. with the Securities and Exchange Commission in February 2003, which states that such shares are held of record by Sterling's investment advisory clients and that Sterling and the other reporting persons share the power to vote and the power to dispose of all of such shares.
- (3) Based on a Schedule 13G filed by Wellington Management Company, LLP with the Securities and Exchange Commission in February 2003, which states that such shares are held of record by Wellington's investment advisory clients and that Wellington shares the power to vote 2,957,744 of such shares and the power to dispose of all of such shares. These shares include the shares disclosed in the table as beneficially owned by Vanguard Windsor Funds, a client of Wellington.
- (4) Based on a Schedule 13G filed by Vanguard Windsor Funds-Windsor Fund with the Securities and Exchange Commission in February 2003, which states that Vanguard has sole power to vote, and shared power to dispose of, all of such shares.

SHARE OWNERSHIP OF DIRECTORS AND EXECUTIVE OFFICERS

The following table shows the amount of our common stock beneficially owned as of March 17, 2003 by our directors, the executive officers and former executive officers named in the Summary Compensation Table appearing later in this proxy statement, and all of our current executive officers and directors as a group.

Beneficial Owner (1)	Shares Owned	Options or Warrants Exercisable as of May 16, 2003	Total Shares Beneficially Owned	Percent of Class
<u>Non-Executive Directors</u>				
Alexander M. Cutler (2)	28,178	70,000	98,178	*
Stephen R. Hardis	70,735	70,000	140,735	*
Naoki Takahashi	1,000	70,000	71,000	*
Gary L. Tooker (3)	17,537	70,000	87,537	*
Patrick H. Nettles	0	55,000	55,000	*
H. Brian Thompson	5,000	55,000	60,000	*
William C. Jennings	2,000	0	2,000	*

Named Executive Officers

Mary G. Puma (4)	58,263	543,046	601,309	*
Michael J. Luttati	12,388	458,053	470,441	*
Cornelius F. Moses, III	11,035	107,500	118,535	*
David W. Duff (5)	11,859	26,094	37,953	*
Lynnette C. Fallon	3,152	20,250	23,402	*
Brian R. Bachman (6)	28,778	1,905,415	1,934,193	1.9%
Robert A. Mionis (7)	7,388	0	7,388	*

All Current Executive Officers and Directors as a Group (14

<u>persons)(8).</u>	237,096	1,654,030	1,893,126	1.9%
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* Indicates less than 1%

- Unless otherwise noted, the number of shares beneficially owned by each person listed includes any shares over which a person has sole or shared voting or investment power. The shares shown in the table also include shares that the persons named in this table have the right to acquire on or before May 16, 2003 (60 days after March 17, 2003) by exercising a stock option or other right. Unless otherwise noted, each person has sole investment and voting power (or shares that power with his or her spouse) over the shares listed in the table. The percentage ownership of each person listed in the table was calculated using the total number of shares outstanding on March 15, 2003, plus any shares these persons could acquire upon the exercise of any options held by them on or before May 14, 2003.
- Mr. Cutler's ownership includes an aggregate of 1,178 shares owned by his wife as trustee for Mr. Cutler's two minor children.
- Mr. Tooker's ownership includes 17,537 shares owned by a trust for which Mr. Tooker has shared voting and investment power.
- Ms. Puma's ownership includes 47,522 shares that are subject to forfeiture to the Company. This forfeiture provision will end as to 23,761 shares on each of December 31, 2003 and 2004 (assuming Ms. Puma is employed on those dates), at which time such shares shall be fully vested.
- Mr. Duff's ownership includes 9,570 shares that are subject to forfeiture to the Company. This forfeiture provision will end as to 1,914 shares on each of July 30, 2003, 2004, 2005, 2006 and 2007 (assuming Mr. Duff is employed on those dates), at which time such shares shall be fully vested.
- Mr. Bachman resigned as an officer and as a director of the Company on January 23, 2002. His reported ownership of shares is based on his ownership as known to the Company at the time of his resignation.
- Mr. Mionis resigned as an officer of the Company on October 14, 2002. His reported ownership of shares is based on his ownership as known to the Company at the time of his resignation.
- Includes shares and exercisable options held by the directors and named executive officers (but not Mr. Bachman or Mr. Mionis) as well as an aggregate of 17,949 shares and 109,087 exercisable options held by two other executive officers.

PROPOSAL 1: ELECTION OF DIRECTORS

Our Board of Directors has fixed the number of directors at eight, which number is subject to increase by action of the Board. Under our charter, our Board is divided into three classes as nearly equal in number of directors as possible. The term of one class expires, and their successors are elected for a term of three years, at each annual stockholders' meeting. At the upcoming annual meeting, three directors will be elected to hold office for a term of three years until our annual meeting in 2006 and until their successors are elected and qualified. Each of the Board's nominees, Mary G. Puma, Naoki Takahashi, and William C. Jennings, has consented to serve if elected. However, if any nominee is unable to serve, proxies will be voted for any other candidate nominated by the Board.

The following table contains biographical information about the nominees for director and current directors whose term of office will continue after the meeting.

<u>Name and Age</u>	<u>Business Experience and Other Directorships</u>	<u>Director Since</u>	<u>Present Term Expires</u>
*Mary G. Puma Age: 45	Ms. Puma has been the Company's Chief Executive Officer and President since January 2002 and President and Chief Operating Officer since May 2000. Prior to that, she served as General Manager and Vice President of the Semiconductor Equipment Operations of Eaton Corporation, a global diversified industrial manufacturer. In May 1996, she joined Eaton as General Manager of the Commercial Controls Division. Prior to joining Eaton, Ms. Puma spent 15 years in various marketing and general management positions for General Electric Company. Ms. Puma is a director of Nordson Corporation.	2000	2003
*William C. Jennings Age: 63	Mr. Jennings is a retired partner of PricewaterhouseCoopers LLP, where he led it's the risk management and internal control consulting practice from 1992 until his retirement in 1999. Prior to then, Mr. Jennings served as a senior audit partner at Coopers & Lybrand, as a senior executive vice president at Shearson Lehman Brothers, responsible for quality assurance, internal audit and compliance, and as an executive vice president and chief financial officer of Bankers Trust. Since retiring from	2003	2003

PricewaterhouseCoopers, Mr. Jennings provides independent consulting services to a number of companies and serves on several boards including one publicly-held company, U.S. Interactive, Inc., where he also temporarily served as chief executive officer from September until November 2000.

Naoki Takahashi Age: 57	Mr. Takahashi has been a director of Sumitomo Heavy Industries, Ltd., an integrated industrial product manufacturer, since June 1998. He has also been Executive Vice President and General Manager of Sumitomo's Precision Products Division and Self-Defense Equipment Center since April 2000 and Executive Vice President and General Manager of its Corporate Technology Operations Group from 1998 to 2002. From 1996 to 1998, he was General Manager of the Research and Development Center of Sumitomo.	2000	2003
Gary L. Tooker Age: 63	Mr. Tooker is retired Chairman of the Board of Motorola, Inc., a manufacturer of electronics equipment. Mr. Tooker served as Vice Chairman of Motorola from June to December 1999, and as Chairman from 1997. Prior to that, Mr. Tooker served as Motorola's Vice Chairman and Chief Executive Officer from 1993. Mr. Tooker is a director of Avnet, Inc. and Eaton Corporation.	2000	2004
Patrick H. Nettles Age: 58	Mr. Nettles has served as Executive Chairman of the Board of Directors of CIENA Corporation, a manufacturer of optical networking equipment, since May 2001. Prior to that, Mr. Nettles served as Chairman of the Board of Directors and Chief Executive Officer of CIENA from October 2000, as its President, Chief Executive Officer and Director from April 1994, and as its Director and Chief Executive Officer from February 1994.	2001	2004
Alexander M. Cutler Age: 51	Mr. Cutler is Chairman and Chief Executive Officer of Eaton Corporation. Prior to assuming this position in August 2000, Mr. Cutler was President and Chief Operating Officer of Eaton Corporation since 1995. Mr. Cutler served as Eaton's Executive Vice President and Chief Operating Officer, Controls from 1993 to 1995, as its Executive Vice President, Operations from 1991 and President of its Industrial Group from 1986. He is also a director of KeyCorp.	2000	2004
H. Brian Thompson Age: 63	Mr. Thompson is the Chairman of COMSAT International, a privately-held independent telecommunications company operating throughout Latin America, a position he assumed in January 2003. He has also been the Chief Executive Officer of Universal Telecommunications, Inc., a private investment and advisory firm, since 2000. Mr. Thompson previously served as Chairman and Chief Executive Officer of Global Telesystems, Inc., a telecommunications company, from March 1999 through September 2000 and served as Chairman and Chief Executive Officer of LCI International, a telecommunications company, from 1991 until its sale to Qwest Communications International, Inc., a broadband internet communications company, in June 1998. At that time, Mr. Thompson became Vice Chairman of the Board of Qwest until his resignation in December 1998. Earlier, he was Executive Vice President of MCI Communications through its growth years in the 1980s. Mr. Thompson serves on the Boards of Directors of Bell Canada International, Inc., DynCorp, COMSAT International, ArrayComm, Inc. and the United Auto Group.	2002	2005
Stephen R. Hardis Age: 67	Mr. Hardis is the Company's Chairman of the Board. He was Chairman and Chief Executive Officer of Eaton Corporation, until July 2000. Mr. Hardis became Eaton's Chairman in January 1996 and its Chief Executive Officer in September 1995. Prior to that, he served as Eaton's Vice Chairman from 1986 and its Executive Vice President, Finance and Administration from 1979. Mr. Hardis is a director of American Greetings Corporation, Lexmark International Group, Inc., Marsh & McLennan Companies, Inc., Nordson Corporation, Progressive Corporation, Apogent Technologies Inc. and Steris Corporation.	2000	2005

* Indicates a nominee for election as director.

Board of Directors and Committee Meetings

Our Board of Directors held 11 meetings during 2002. Our Board has standing Audit, Compensation and Nominating and Governance Committees. Each of our directors attended at least 75% of the meetings of the Board and of the committees on which such director served. The average rate of attendance for all directors was 93%.

Audit Committee. The Audit Committee has been established by the Board of Directors and acts under a written charter, a copy of which is attached hereto as Appendix A. The charter has also been filed with our Form 10-K for 2002 and is available on our website at www.axcelis.com. The Audit Committee is responsible for assisting the Board of Directors in monitoring and oversight of (1) the integrity of the Company's financial statements and its systems of internal accounting and financial controls and (2) the independence and performance of the Company's internal and independent auditors.

The Audit Committee, which met 9 times during 2002, is composed of three directors. Prior to our annual Board meeting on May 1, 2002, the Audit Committee was comprised of Philip S. Paul (Chairman), Ned C. Lautenbach and Gary L. Tooker. On May 1, 2002, Mr. Nettles and Mr. Thompson replaced Mr. Tooker and Mr. Lautenbach on the Committee, and Mr. Paul continued as Chairman until his resignation from the Audit Committee in September 2002. Mr. Cutler joined the Committee as Chairman effective at the first meeting in 2003. The members of the Audit Committee during 2002 were independent, as defined in Nasdaq Marketplace Rule 4200(a)(14). The current members of the Audit Committee are independent under such Rule, except for Mr. Cutler. The Rule deems directors who were employees of the issuer or an affiliate of the issuer during the last three years as not independent. We have been informed by Nasdaq that due to Mr. Cutler's employment by Eaton Corporation during 2000, when Eaton was a controlling shareholder of Axcelis, he will not satisfy the independence definition during 2003. In accordance with a permitted exception under the Nasdaq Marketplace Rules and our Audit Committee charter, our Board of Directors determined that this situation posed exceptional and limited circumstances and that Mr. Cutler's service on the Audit Committee is required by the best interests of Axcelis and its shareholders. In reaching this conclusion, the Board noted Mr. Cutler's experience and ability and concluded that the past relationship will not interfere with Mr. Cutler's exercise of independent judgement in carrying out his responsibilities as a member of the Audit Committee.

For a report on the Audit Committee's actions during 2002, see the "Audit Committee Report" below.

Compensation Committee. The Compensation Committee has been established by the Board and acts under a written charter, a copy of which has been filed with our Form 10-K for 2002 and is also available on our website at www.axcelis.com. The Compensation Committee establishes and reviews the compensation philosophy for Axcelis and has all the authority of the Board of Directors to act or exercise corporate powers with respect to the compensation of the executive officers and the administration of Axcelis' equity compensation plans. The Compensation Committee is responsible to ensure that an annual review of executive officer performance and succession planning is presented to the Board.

Until May 1, 2002, the members of the Compensation Committee were each of the directors other than Ms. Puma. Thereafter during 2002, the Compensation Committee was composed of Mr. Hardis, Mr. Tooker, Mr. Cutler and Mr. Lautenbach. Upon Mr. Lautenbach's resignation from the Board in October 2002, Mr. Thompson joined the Compensation Committee as Chairman. The Compensation Committee held 5 meetings in 2002. For a report on the Compensation Committee's actions during 2002, see the "Compensation Committee Report on Executive Compensation" below.

Nominating and Governance Committee. The Nominating and Governance Committee has been established by the Board and acts under a written charter, a copy of which has been filed with our Form 10-K for 2002 and is also available on our website at www.axcelis.com. The Nominating and Governance Committee has been delegated responsibility for the search and nomination of candidates for membership on the Board of Directors, recommendations to the Board on non-employee director compensation and the establishment of governance policies for the Board and management. The Nominating and Governance Committee is responsible for evaluating any nominee made by a shareholder and submitted to the Secretary prior to the applicable deadline for shareholder proposals and nominations. The deadlines for Axcelis' 2004 annual meeting are set forth below under "Deadlines for Shareholder Proposals."

The members of the Nominating and Governance Committee are Mr. Nettles, as chairman, and Messrs. Hardis and Cutler. The Nominating and Governance Committee held one meeting in 2002 and adopted Governance Policies, a copy of which has been filed with our Form 10-K for 2002 and is also available on our website at www.axcelis.com.

Director Compensation

Director Fees. Mr. Hardis, the Chairman of the Board, receives an annual retainer of \$200,000, payable quarterly. Each director (other than Mr. Hardis and Ms. Puma) assuming responsibility as Chairman of a committee of the Board of Directors receives an annual retainer of \$7,500. Non-employee directors other than Mr. Hardis also receive cash fees for attendance at Board and committee meetings. During 2002, the meeting fees were: (1) \$2,000 for attendance in person at a meeting of the Board of Directors; (2) \$1,000 for attendance in person at a "stand-alone" meeting of any committee of the Board of Directors; and (3) \$500 for participation in a telephonic meeting of the Board of Directors or committee of the Board of Directors.

Automatic Option Grants. All non-employee directors of Axcelis receive automatic initial and annual stock option grants under our 2000 Stock Plan. The initial option grant is for 40,000 shares and the annual grants are for 15,000 shares. Annual automatic grants are issued once a year, at the meeting of the Board of Directors following July 1 of each year. All non-employee director options have an exercise price equal to the closing price of our common stock on the grant date and are fully exercisable on the 181st day after the date the option is granted, provided the optionee is still a director on that date. The options have a term of ten years from the date of grant.

AUDIT COMMITTEE REPORT

The Audit Committee is responsible for assisting the Board of Directors in monitoring and oversight of (1) the integrity of the Company's financial statements and its systems of internal accounting and financial controls and (2) the independence and performance of the Company's internal and independent auditors.

The Committee schedules meetings to occur after the preparation of quarterly and annual financial statements but prior to the public release of financial results for the period. The Committee met in January 2002 prior to the release of our 2001 year end results, and in April, July and October of 2002, prior to the release of the financial results for the first, second and third quarters of 2002, respectively. If appropriate, additional meetings may also be held during the year to address a variety of recurring and non-recurring topics, such as the Company's internal control systems, the scope and results of the Company's internal audit plans, changes to the Audit Committee charter and other matters. During 2002, the Audit Committee held a total of nine (9) meetings.

At all of these meetings, Axcelis' Chief Financial Officer was present, as was our General Counsel and our independent auditors. The Committee's agenda is established by the Committee's chairman, with input from the Company's Chief Financial Officer. Depending on the content of the meeting, the Committee holds private sessions with the Company's independent auditors and, separately, with management, at which candid discussions of financial management, accounting and internal control issues can take place. In its executive meetings with representatives of the independent auditors, the Committee seeks to engage in a meaningful dialogue to address any questions or concerns identified by the Committee and to obtain an understanding of any questions or concerns of the auditors.

At the recommendation of the Audit Committee, the Board of Directors appointed Ernst & Young LLP as our independent auditors for 2003. The Audit Committee has discussed with our independent auditors and the Company's Chief Financial Officer overall audit scopes and plans, the results of external audit examinations, evaluations by the auditors of the Company's internal controls and the quality of the Company's financial reporting.

Management has reviewed with the Audit Committee the audited 2002 consolidated financial statements in our Form 10-K Annual Report filed with the Securities and Exchange Commission and included in the Annual Report to Stockholders which accompanies this proxy statement. The review included a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments, and the clarity of disclosures in the financial statements.

For the year ended December 31, 2002, the Committee received from the independent auditors their annual written reports covering (1) matters required to be discussed by the auditors with the Committee under Statement on Auditing Standards No. 61, Communication with Audit Committees and (2) their independence from the Company and its management, which report is made under Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees. Both reports were discussed with the auditors and management at an Audit Committee meeting, including a discussion of any relationship that may impact the objectivity and independence of our auditors and whether the provision of any non-audit services by the auditors is compatible with maintaining their independence.

In performing all of these functions, the Audit Committee acts only in an oversight capacity. Necessarily, in its oversight role, the Committee relies on the work and assurances of the Company's management, which has the primary responsibility for financial statements and reports, and of the independent auditors, who in their report on the audited annual financial statements, express an opinion on the conformity of the Company's annual financial statements to accounting principles generally accepted in the United States.

In reliance on these reviews and discussions, and the report of the independent auditors, the Audit Committee has recommended to the Board of Directors, and the Board of Directors has approved, that the audited financial statements be included in the Company's 2002 Annual Report on Form 10-K for filing with the Securities and Exchange Commission. The Committee and the Board have also recommended, subject to reconsideration in the absence of shareholder ratification, the selection of the Company's independent auditors for the current year.

By the audit committee,

Alexander M. Cutler
H. Brian Thompson
Patrick H. Nettles

EXECUTIVE COMPENSATION

Compensation Committee Report on Executive Compensation

The Compensation Committee establishes and reviews the compensation philosophy for Axcelis and has all the authority of the Board of Directors to act or exercise corporate powers with respect to the compensation of the executive officers and the administration of Axcelis' equity compensation plans. This report is submitted by the Compensation Committee and addresses the compensation policies for 2002 as they affected Ms. Puma, as Chief Executive Officer, and the other four current executive officers and one former executive officer named in the Summary Compensation Table below, referred to as the "named executive officers."

Brian R. Bachman was chief executive officer for part of January 2002. The Compensation Committee did not take any action on Mr. Bachman's compensation during 2002. The terms of Mr. Bachman's separation from the Company were negotiated by Mr. Hardis, as Chairman of the Board of Directors, in compliance with Mr. Bachman's Employment Agreement with the Company and approved by the Board. See "Separation Agreement with Mr. Bachman" below.

Compensation Philosophy

The Company's executive compensation program consists of base salary, an annual cash bonus opportunity and stock option awards and/or restricted stock grants. All of these components are designed with the objective of attracting and retaining executives and motivating management to meet and exceed Company growth and profitability goals.

In general, the Company seeks 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. In determining the total amount and mix of the compensation package for each executive officer, the Committee members subjectively consider the unique education, training and experience of the executive officer, his or her overall value to the Company in light of numerous factors such as contributions to the Company's competitive position in the marketplace, individual performance, and the past and expected contribution by the executive officer toward the achievement of the Company's performance objectives.

The Committee believes it is in the best interests of the Company and its shareholders to grant stock options and restricted stock as a long-term component of executive and key employee compensation program. Stock option and restricted stock grants to executive officers and other key employees are intended to keep employee financial interests in line with long-term shareholder value. In general, option grants to executives are made upon hire and/or promotion and thereafter on an annual basis. With limited exceptions, all option grants under our 2000 Stock Plan have an exercise price equal to the closing price of the Company's common stock on the date of grant, vest over a period of four years and expire on the 10th anniversary of the date of grant.

Executives also participate in benefit plans available to all employees, including an Internal Revenue Code Section 401(k) plan, under which the Company made a \$1,000 matching contribution to each participant in 2002, and the Employee Stock Purchase Plan, an Internal Revenue Code Section 423 plan which allows employees to purchase Axcelis shares through salary deductions. Other than a tax and financial planning reimbursement program capped at \$5,500 per year, Axcelis offers no material executive perquisites.

During 2002, the Committee engaged an independent compensation consulting firm to conduct a comprehensive review of its executive compensation programs for both competitiveness and consistency with the Company's executive compensation philosophy. This review and additional on-going advice were considered by the Committee in making certain compensation decisions during 2002. In 2002, the Committee took certain salary and option grant actions described below.

Non-CEO Executive Officer Compensation Actions in 2002

Base Salary. As a result of market conditions, no merit increases in executive salaries were approved during 2002. Adjustments were made to the base compensation of Mr. Luttati and Dr. Duff to ensure market competitiveness in light of the new responsibilities assumed by those executives during 2002. At the request of Mr. Luttati in light of business conditions, implementation of his base compensation increase was deferred. In July 2002, the Compensation Committee determined to activate the increase.

Cash Bonuses. For 2002, the Committee approved an Axcelis Team Incentive annual bonus plan using the same design as in effect during 2001. Under this plan, each executive is assigned, as part of his or her compensation package, a percentage of base salary which can be earned through the Axcelis Team Incentive. During 2002, these percentages ranged from 35-45% for the named executive officers. The Axcelis Team Incentive plan in effect in 2002 was designed to pay an

annual cash bonus based on two financial criteria, provided the Company was profitable. Because Axcelis was not profitable during 2002, no bonuses were paid under the Axcelis Team Incentive plan for 2002.

Stock Options and Restricted Stock Grants. As set forth in the Option Grants in Last Fiscal Year table in this proxy statement, in 2002 certain named executive officers received option grants in February 2002, as the second half of the 2001 annual grants and in June and December 2002 as 2002 annual grants. Given the volatility of the trading prices of Axcelis stock, for its 2002 annual grants, the Committee determined to continue the practice, begun in 2001, of using two pricing dates, 6 months apart, for annual option grants. Other option grants to named executive officers were in respect of promotion or achievement of specific performance objectives, as noted in footnotes to the table. None of the named executive officers received restricted stock grants during 2002.

Chief Executive Officer Compensation Actions during 2002

Ms. Puma's minimum base compensation is set by her Employment Agreement. See "Executive Agreements" below. In January 2002, the Committee approved an increase in Ms. Puma's base compensation to \$450,000 to reflect her new responsibilities as Chief Executive Officer. At the request of Ms. Puma in light of business conditions, implementation of her base compensation increase was deferred. In July 2002, the Compensation Committee determined to activate the increase.

Because Axcelis was not profitable during 2002, Ms. Puma did not receive any bonus payment in respect of services during 2002, although the Committee increased her target under the Axcelis Team Incentive plan from 50% to 100% of base compensation.

Ms. Puma received a stock option grant of 200,000 shares in two equal tranches, in June and December 2002, which were priced at market.

Compensation Deductibility

Section 162(m) of the Internal Revenue Code denies a tax deduction to a public corporation for annual compensation in excess of one million dollars paid to its Chief Executive Officer and its four other highest compensated officers. This provision excludes certain types of "performance based compensation" from the compensation subject to the limitation on deductibility.

The 2000 Stock Plan contains an individual annual limit on the number of stock options that may be granted under the plan so that the awards will qualify for the exclusion from the limitation on deductibility for performance-based compensation. The Committee will continue to assess the impact of Section 162(m) on its compensation practices and determine what further action, if any, is appropriate.

By the Compensation Committee,

H. Brian Thompson, Chairman
 Stephen R. Hardis
 Alexander M. Cutler
 Gary L. Tooker

Compensation Tables

The following tables contain information on compensation paid for 2002 to our Chief Executive Officer and the four other most highly paid executive officers as of the end of 2002. As required by applicable rules, the table also includes information on Brian R. Bachman, who served as our chief executive officer until January 2002 and Robert A. Mionis, who served as an executive officer until October 2002.

Summary Compensation Table

Name and Position	Year	Annual Compensation		Long-Term Compensation			
		Salary (\$)	Bonus (\$)	Awards			All Other Compensation
				Other Annual Compensation (\$)(1)	Restricted Stock Awards (\$)	Securities Underlying Options	
Mary G. Puma President and Chief Executive Officer	2002	\$ 415,002	0	\$ 3,500		200,000	\$ 67,729 (2)
	2001	\$ 380,004	0			0	\$ 77,356 (3)
	2000	\$ 320,012	\$ 312,391		\$ 341,588(4)	949,133	\$ 76,923 (5)
Michael J. Luttati Executive Vice President and Chief Operating Officer	2002	\$ 293,868	0	\$ 800		100,000	\$ 1,000 (6)
	2001	\$ 263,207	0			0	\$ 5,100 (6)
	2000	\$ 239,106	\$ 206,177			564,603	\$ 8,650 (7)
Cornelius F. Moses, III Executive Vice President and Chief Financial Officer	2002	\$ 330,000	0	\$ 2,750		50,000	\$ 1,000 (6)
	2001	\$ 330,000	0			0	\$ 5,100 (6)
	2000 (8)	\$ 82,500	\$ 185,000			215,000	0
Lynnette C. Fallon Senior Vice President HR/Legal, General Counsel	2002	\$ 295,000	0			73,500	\$ 1,000 (6)
	2001 (9)	\$ 215,577	\$ 25,000			40,500	\$ 4,419 (6)
David W. Duff Vice President and General Manager, IIRTP	2002	\$ 194,588	0	\$ 299		60,715	\$ 1,000 (6)
	2001	\$ 161,264	0		\$ 134,937(10)	10,714	\$ 5,100 (6)
	2000	\$ 136,510	\$ 83,088			28,855	\$ 6,828(11)
Brian R. Bachman	2002	\$ 46,154	0	\$ 7,726		0	\$ 1,215,873(12)

Former Vice Chairman and Chief Executive Officer	2001	\$ 600,000	0	\$ 12,123	0	\$ 4,407 (6)
	2000	\$ 500,010	\$ 415,830		1,920,415	\$ 109,839(13)
Robert A. Mionis	2002	\$ 248,540	0	\$ 5,500	25,000	0
Former Sr. Vice President- Worldwide Operations	2001	\$ 241,500	0	\$ 521,700(14)	0	\$ 5,100
	2000	\$ 217,003	\$ 174,796		280,094	\$ 8,507(15)

- (1) Except in the case of Mr. Bachman, amounts in this column represent payments to, or on behalf of, the executive under the Executive Tax and Financial Planning Program. In the case of Mr. Bachman, the amounts represent storage expenses paid by Axcelis associated with Mr. Bachman's relocation in 2000.
- (2) Represents (a) \$1,000 paid in cash as a matching contribution to Axcelis' 401(k) plan during 2002 and (b) \$66,729 in principal and accrued interest forgiven by the Company on December 31, 2001 under a promissory note due from Ms. Puma
- (3) Represents \$5,100 paid in cash as a matching contribution to Axcelis' 401(k) plan and \$72,256 in principal and accrued interest forgiven by the Company on December 31, 2001 under a promissory note due from Ms. Puma.
- (4) Represents the value of 47,522 shares using the closing price on the date of grant, December 1, 2000 (\$7.188). Ms. Puma's restricted stock is subject to forfeiture to the Company if her employment terminates. This forfeiture provision expires as to 23,761 shares on each of December 31, 2003 and 2004. Ms. Puma would be entitled to receive any dividends paid on these shares. At December 31, 2002, Ms. Puma's aggregate restricted stock holdings were the 47,522 shares of restricted stock, which had a value (based on the closing price on December 31, 2002 of \$5.609) of \$266,550.90.
- (5) Represents (a) a one-time payment of \$70,000 in consideration of the forfeiture of certain perquisites provided by Eaton Corporation and (b) \$6,923 representing the market value of shares of Eaton Common Stock received by Ms. Puma as a matching contribution to Eaton's 401(k) plan at the end of 2000.
- (6) Represents a cash matching contribution to Axcelis' 401(k) plan.
- (7) Represents the market value of shares of Eaton Common Stock received as a matching contribution to Eaton's 401(k) plan at the end of 2000.
- (8) Mr. Moses commenced employment in October 2000.
- (9) Ms. Fallon commenced employment in April 2001.
- (10) Represents the value of 9,570 shares using the closing price on the date of grant, July 30, 2001 (\$14.10). Dr. Duff's restricted stock is subject to forfeiture to the Company if his employment terminates. This forfeiture provision expires as to 1,914 shares on each of July 30, 2003, 2004, 2005, 2006 and 2007. Dr. Duff would be entitled to receive any dividends paid on these shares. At December 31, 2002, Dr. Duff's aggregate restricted stock holdings were the 9,570 shares of restricted stock, which had a value (based on the closing price on December 31, 2002 of \$5.609) of \$53,678.
- (11) Represents the market value of 89.3 shares of Eaton Common Stock received as a matching contribution to Eaton's 401(k) plan during 2000 (valued at the closing price on 12/29/00 of \$65.25) plus \$1,002 in life insurance premiums paid for by Eaton Corporation.
- (12) Represents a separation payment made to Mr. Bachman upon his resignation from the Company in January 2002 comprised of (A) \$1,125,000 of salary and target bonus due to Mr. Bachman under his Employment Agreement dated June 30, 2000, (B) a \$65,000 lump sum payment to cover incidental expenses, (C) \$20,671 in accrued vacation pay and (D) \$5,202 in life and disability premiums paid on Mr. Bachman's behalf.
- (13) Represents (a) a one-time payment of \$99,999 in consideration of the forfeiture of certain perquisites provided by Eaton Corporation and (b) \$9,840 representing the market value of shares of Eaton Common Stock received by Mr. Bachman as a matching contribution to Eaton's 401(k) plan at the end of 2000.
- (14) Represents the value of 37,000 shares using the closing price on the date of grant, July 30, 2001 (\$14.10). At December 31, 2002, all 37,000 shares of restricted stock had been forfeited back to the Company as a result of Mr. Mionis' termination of employment in October 2002.
- (15) Represents the market value of shares of Eaton Common Stock received as a matching contribution to Eaton's 401(k) plan at the end of 2000.

Option Grants in Last Fiscal Year

The following table provides information on stock options granted under our 2000 Stock Plan during fiscal year 2002 to the executive officers named in the Summary Compensation Table. No options were granted to Mr. Bachman in 2002.

Option Grants in Last Fiscal Year

Name	Number of Securities Underlying Options Granted	Percentage of Total Options Granted to Employees in Fiscal Year	Exercise Price per Share	Market Price on Date of Grant	Expiration Date	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term (7)	
						5%	10%
Mary G. Puma	100,000(1)	2.0%	\$10.28	\$10.28	6/21/2012	\$647,000	\$1,638,000
	100,000(2)	2.0%	\$5.85	\$5.85	6/21/2012	\$368,000	\$932,000
Michael J. Luttati	50,000(1)	1.0%	\$10.28	\$10.28	6/21/2012	\$323,250	\$819,000
	50,000(2)	1.0%	\$5.85	\$5.85	6/21/2012	\$184,000	\$466,000
Cornelius F. Moses, III	25,000(1)	0.5%	\$10.28	\$10.28	6/21/2012	\$161,750	\$409,500
	25,000(2)	0.5%	\$5.85	\$5.85	6/21/2012	\$92,000	\$233,000
Lynnette C. Fallon	13,500(1)	0.3%	\$13.20	\$13.20	7/30/2011	\$112,050	\$284,040
	30,000(1)	0.6%	\$10.28	\$10.28	6/21/2012	\$194,100	\$491,400
	30,000(2)	0.6%	\$5.85	\$5.85	6/21/2012	\$110,400	\$279,600
David W. Duff	10,715(3)	0.2%	\$13.20	\$13.20	7/30/2011	\$88,934	\$427,500
	50,000	1.0%	\$13.59	\$13.59	3/26/2012	\$427,500	\$1,083,000
Robert A. Mionis(5)	15,000(1)	0.3%	\$10.28	\$10.28	6/21/2012	NA	NA
	10,000(6)	0.2%	\$4.88	\$4.88	9/30/2012	NA	NA

- (1) These options were granted on June 21, 2002 and become exercisable with respect to 25% of the shares on each of June 21, 2003, 2004, 2005 and 2006.
- (2) These options were granted on December 20, 2002 and become exercisable with respect to 25% of the shares on each of June 21, 2003, 2004, 2005 and 2006.
- (3) These options were granted on February 4, 2002 and become exercisable with respect to 25% of the shares on each of July 30, 2002, 2003, 2004 and 2005.
- (4) These options were granted on March 26, 2002 in connection with Dr. Duff's promotion and become exercisable with respect to 25% of the shares on each of March 26, 2003, 2004, 2005 and 2006.
- (5) Mr. Mionis resigned in October 2002. Of his option grants in 2002, Mr. Mionis exercised the \$4.88 options in full and his \$10.28 options expired unvested. As a result, none of these options were outstanding at December 31, 2002. See "Option Exercises in Last Fiscal Year and Year End Option Values" below.
- (6) These options were earned based on performance objectives and were fully exercisable on grant.
- (7) The dollar amounts in this column represent hypothetical values of options granted to the named executives during 2002 and outstanding at December 31, 2002. The amounts shown assume the fair market value of the underlying common stock will appreciate from the date of grant at a 5% or 10% compounded rate for the full 10 year term of the option. The assumed 5% and 10% annual compounded rates of stock price appreciation are mandated by the rules of the SEC and do not represent our estimate or projection of future prices of our common stock. Actual gains, if any, on stock option exercises will depend upon the future performance of our common stock's price, which will benefit all stockholders proportionately.

Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

The following table provides information on options exercised during 2002 by the named executive officers and the total number of exercisable and unexercisable stock options held at December 31, 2002 by those officers.

	Shares Acquired on Exercise (#)	Value Realized (1)	Number of Securities Underlying Unexercised Options at Fiscal Year-End Exercisable/Unexercisable	Value of Unexercised in-the-Money Options at Fiscal Year-End Exercisable/Unexercisable(2)
Mary G. Puma	0	--	514,248/634,885	\$0/\$0
Michael J. Luttati	0	--	435,014/229,589	\$0/\$0
Cornelius F. Moses, III	0	--	107,500/157,500	\$0/\$0
Lynnette C. Fallon	0	--	13,500/100,500	\$0/\$0
David W. Duff	0	--	18,847/81,437	\$0/\$0
Brian R. Bachman	0	--	1,905,415/0	\$0/\$0
Robert A. Mionis	10,000	\$25,200	0/0	NA

- (1) Calculated by subtracting the option exercise price from the closing price of the stock on the date of exercise as reported by Nasdaq, then multiplying that number by the number of shares exercised. The amounts in this column may not represent amounts actually realized by the officer.
- (2) Based on the difference between the option's exercise price and the closing price of \$5.609 of the underlying common stock on December 31, 2002, as reported by Nasdaq.

Executive Agreements

Agreements with Ms. Puma. We entered into an Employment Agreement with Ms. Puma effective in July 2000. Her agreement provided for an initial three-year term of employment at a minimum annual base salary of \$380,000 and an annual target incentive compensation opportunity of 45% of base salary. Actual incentive compensation for any year may be greater or less if actual performance is greater or less than the target. Ms. Puma's base salary and incentive opportunities were increased by our Board of Directors in 2002, and may be subject to future adjustment by the Board, but not to less than the minimum levels in her Employment Agreement. See "Compensation Committee Report on Executive Compensation." The term of Ms. Puma's agreement automatically renews on a year-to-year basis unless one party notifies the other that the agreement will not be extended. Since neither the Company nor Ms. Puma provided notice of non-renewal during the 2003 window period, the agreement will continue until July 14, 2004, subject to further renewal. The agreement also provides that Ms. Puma will participate in the 2000 Stock Plan, the 401(k) savings plan and the welfare benefit plans that we sponsor.

In the event Ms. Puma's employment is terminated prior to the end of the term for reasons other than cause, death, disability or voluntary resignation, she is entitled to receive all compensation accrued to date, acceleration of vesting of options and other equity rights and base compensation and target bonus for two years from the date of termination of employment. In her agreement, Ms. Puma has agreed not to compete with us for a period of 12 months after termination of her active employment or the remaining term of her agreement, whichever is longer, and not to reveal confidential information for a specified period of time.

In connection with our separation from Eaton Corporation in 2000, Eaton assigned to us a note payable by Ms. Puma in the original principal amount of \$175,000, which bears interest at the rate of 9% per annum. Principal and accrued interest on the note will be due on the earlier of (A) January 1, 2011 or (B) the date 90 days after the termination of her employment with us. In accordance with the terms of the note, we forgave the principal amount of \$58,334, plus accrued interest on each of December 31, 2001 and 2002. The remaining outstanding principal amount and accrued interest will be forgiven on December 31, 2003, provided Ms. Puma is still employed by us.

Change of Control Agreements. We also have entered into Change of Control Agreements with each of our executive officers, including Ms. Puma. These Change of Control Agreements provide that in the event there is both a change in control and a termination of employment within three years of that change in control for reasons other than voluntary resignation, cause, death or disability, the officer would be entitled to severance compensation. Under the Change of Control Agreement, a resignation by an officer for reasons of a demotion or reduction in compensation, benefits or position is a termination by us and is not a voluntary resignation. If severance compensation is payable, it would consist of (i) a cash payment equal to the sum of (a) incentive compensation for the completed portion of the incentive period and (b) the amount determined by multiplying the employee's then salary and average bonus by three, and (ii) continuation of our medical, life and other welfare benefits for up to three years. In the event such severance is payable, all unvested options held by the executive will become exercisable until termination or expiration in accordance with their terms. We will also reimburse the employee for the effects, including federal, state and local income tax consequences, of any excise tax due on severance compensation.

Separation Agreement with Mr. Bachman. In January 2002, Mr. Bachman resigned as an officer of the Company, terminating his employment and triggering certain benefits under an Employment Agreement entered into in June 2000. Under a Settlement Agreement and Release entered into in January 2002, Mr. Bachman received \$1,125,000, less applicable taxes, reflecting his base compensation through the end of the three-year term of the Employment Agreement plus a target bonus payment of 25% of such base compensation for the same period. He also received an additional amount of \$65,000 to cover expenses incidental to his resignation. Finally, as contemplated by the Employment Agreement, all of Mr. Bachman's options became exercisable for the full remaining term of such options. This Settlement Agreement superseded all provisions of Mr. Bachman's Employment Agreement, as well as of his Change of Control Agreement discussed above.

Equity Plan Reserves Disclosure

The number of shares issuable upon exercise of outstanding options granted to employees and non-employee directors, as well as the number of shares remaining available for future issuance, under the company's equity compensation plans as of December 31, 2002 are summarized in the following table:

Plan category	(A) Number of shares to be issued upon exercise of outstanding options	(B) Weighted-average exercise price of outstanding options	(C) Number of shares remaining available for future issuance under equity compensation plans (excluding shares reflected in column (A))
Equity compensation plans approved by shareholders	13,015,885	\$13.12	18,197,821(1)
Equity compensation plans not approved by shareholders	0	NA	0
Total	13,015,885		18,197,821

- (1) Represents the shares available for issuance under our 2000 Stock Plan plus the shares available for issuance under our Employee Stock Purchase Plan. 14,943,571 shares are available for future issuance under the 2000 Stock Plan, which represents the total number of shares reserved for issuance under the 2000 Stock Plan, less 106,227 shares issued under the plan as restricted stock, 155,582 shares issued upon option exercises, and the outstanding options shown in column (A), all as of December 31, 2002. This plan is generally used for grants to employees and directors and was approved by our shareholders at our 2002 annual meeting. The number of shares available for issuance under the 2000 Stock Plan

increases pursuant to a formula, but not more than 5% of the outstanding common stock on each July 10th.

3,254,250 shares are available under the Company's Employee Stock Purchase Plan, which represents the total number of shares reserved for issuance under the plan less 1,203,094 shares issued through December 31, 2002. The Employee Stock Purchase Plan was approved by Eaton Corporation, as our sole shareholder prior to our initial public offering, in compliance with Internal Revenue Code Section 423. The number of shares available for issuance under the Employee Stock Purchase Plan increases by a number of shares equal to 1% of the outstanding common stock on each January 1st, up to a maximum of 7,500,000 shares.

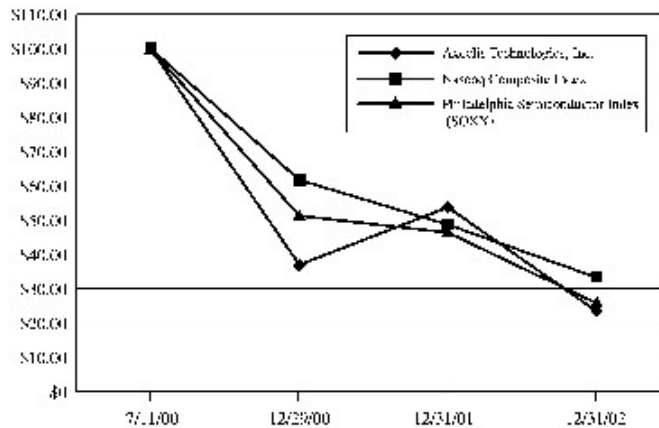
Compensation Committee Interlocks and Insider Participation

The Compensation Committee of the Board of Directors consisted of Mr. Hardis, Mr. Cutler, Mr. Tooker, Mr. Paul, Mr. Lautenbach and Mr. Takahashi until May 1, 2002, when the Compensation Committee was reduced to Mr. Hardis, Mr. Cutler, Mr. Tooker and Mr. Lautenbach. After Mr. Lautenbach resigned from the Board in October 2002, Mr. Thompson joined the Compensation Committee as Chairman.

Mr. Takahashi, one of our directors, is a director and officer of Sumitomo Heavy Industries, Ltd. Each of Sumitomo and Axcelis own 50% of the equity of a Japanese corporation known as Sumitomo Eaton Nova, or SEN. We have granted SEN an exclusive royalty-bearing license in Japan to use our current and future ion implantation technology and to manufacture, use and sell products. We have also granted SEN a non-exclusive license to sell ion implantation products outside of Japan, subject to the terms of an Export Sales Agreement under which we are exclusive marketing agent. The license agreement expires on December 31, 2004 and is automatically renewable for successive five-year periods unless either party has provided one year's prior notice of termination. We also have a trademark license agreement with SEN which will terminate on December 31, 2004 and which obligates SEN to pay us an additional 0.5% royalty on net sales. In 2002, we recognized royalty income from SEN under these license agreements of approximately \$8.275 million. From time to time, we sell ion implantation equipment and other products to SEN. In 2002, our net sales of products to SEN amounted to \$1.985 million.

Stock Performance Graph

The following graph compares the cumulative total return for our Common Stock to that of the Philadelphia Semiconductor Index (known as "SOXX") and the Nasdaq Composite Index at each fiscal year end following July 11, 2000, the date the Company's Common Stock first traded on the Nasdaq National Market. The comparison assumes an investment of \$100 on July 11, 2000 at the closing price in each of our Common Stock and the two indices and assumes reinvestment of dividends, if any. The stock performance shown on the graph below is not necessarily indicative of future price performance.



Company/Index Name	July 11, 2000	December 29, 2000	December 31, 2001	December 31, 2002
Axcelis Technologies, Inc.	\$100.00	\$37.07	\$53.84	\$23.15
Nasdaq Composite Index	100.00	61.76	48.76	33.39
SOXX Index	100.00	51.32	46.47	25.74

Company/Index Name	July 11, 2000	December 29, 2000	December 31, 2001	December 31, 2002
Axcelis Technologies, Inc.	\$100.00	\$37.07	\$53.84	\$23.43
NASDAQ Composite Index	100.00	61.76	48.76	33.39
SOXX Index	100.00	51.32	46.47	25.74

CERTAIN TRANSACTIONS

Mr. Takahashi is a director and officer of Sumitomo Heavy Industries, Ltd. with whom Axcelis has a joint venture in Japan. See "Compensation Committee Interlocks and Insider Participation" above.

We hold a promissory note from Ms. Puma, which is discussed under "Executive Agreements--Agreements with Ms. Puma" above.

Mr. Moses was an executive officer of Bradlees, Inc. within two years of such corporation's bankruptcy filing in January 2001.

Mr. Jennings temporarily served as chief executive officer of U.S. Interactive, Inc. from September 2000 until November 2000. U.S. Interactive, Inc. filed for bankruptcy protection in January 2000.

SECTION 16(a) BENEFICIAL OWNERSHIP

Section 16(a) of the Exchange Act requires our directors, executive officers and persons owning more than 10% of our registered equity securities, to file with the SEC reports of their initial ownership and of changes in their ownership of our common stock and to provide us with copies of all Section 16(a) reports they file.

To our knowledge, based solely on our review of copies of reports furnished to us and written representations that no other reports were required during the fiscal year ended December 31, 2002, we believe that during the 2002 fiscal year, our directors, officers, and 10% stockholders complied with all Section 16(a) filing requirements.

PROPOSAL 2: RATIFICATION OF THE APPOINTMENT OF INDEPENDENT AUDITORS

Upon the recommendation of its Audit Committee, the Board of Directors has appointed the accounting firm of Ernst & Young LLP as independent auditors to conduct the annual audit of our financial statements for 2003 and is seeking shareholder ratification of the appointment. Ernst & Young LLP is an internationally recognized public accounting firm that audited the Company's books in 2002 and which the Audit Committee believes is well qualified to continue.

Representatives of Ernst & Young are expected to attend the annual meeting and be available to respond to appropriate questions. They will also have the opportunity to make a statement if they desire. The fees for services provided by Ernst & Young to the Company in 2002 were as follows:

Audit Fees		\$346,100
Financial Information Systems Design and Implementation Fees		\$0
All Other Fees		
Audit related services	\$197,310	
Tax services		
Tax compliance and preparation	\$87,000	
Transfer pricing advice	\$22,000	
General tax planning	\$64,000	
Expatriate employee tax services	\$174,000	
Human Resources consulting and other services	\$53,000	
Total All Other		\$597,310
Total Fees		\$943,410

Audit related services include statutory audits for subsidiaries operating in Germany, Malaysia and the United Kingdom and a registered branch in Singapore, and assistance with the preparation of offering documents, the closing documents and resale registration statement relating to the Company's 2002 convertible debt offering. Transfer pricing advice relates to the setting of fair compensation for services provided to us by our foreign subsidiaries to ensure appropriate revenue levels are reported for taxation in those foreign countries. Expatriate employee tax services involve advice relating to, and administration of, tax equalization agreements between the Company and U.S. employees temporarily located in non-U.S. tax jurisdictions. In 2002, the Company terminated its purchase of human resources consulting services from Ernst & Young, LLP as part of an on-going effort to reduce the non-audit services purchased from our auditors. The Audit Committee of the Board of Directors approves all such non-audit services. In doing so, the Committee considers whether proposed non-audit services (1) create an apparent conflict of interest for our auditors, (2) are synergistic with the audit work or (3) involve material fees.

After reporting on these fees and services, Ernst & Young LLP informed the company that they are not aware of any relationship with the Company that, in their professional judgement, may reasonably be thought to bear on the independence of Ernst & Young LLP.

The submission of this matter to the shareholders at the annual meeting is not required by law or by our bylaws. The Board of Directors is nevertheless submitting it to the shareholders to ascertain their views. If this proposal is not approved at the annual meeting by the affirmative vote of holders of a majority of the shares present or represented at the meeting, the Audit Committee intends to reconsider its recommendation of Ernst & Young LLP as independent auditors. The Company may retain the firm for 2003 notwithstanding a negative stockholder vote.

The Board of Directors recommends a vote for ratification of the appointment of Ernst & Young LLP.

DEADLINES FOR STOCKHOLDER PROPOSALS

Assuming the 2004 annual meeting is not more than 30 days before or 30 days after June 26, 2004, if you wish to bring business before or propose director nominations at the 2004 annual meeting, you must give written notice to Axcelis by March 28, 2004 (the date 90 days before the anniversary of the 2003 annual meeting).

If you intend to bring such a proposal or nomination at the 2004 annual meeting, and you would like us to consider the inclusion of your proposal or nomination in our proxy statement for the meeting, you must provide written notice to Axcelis of such proposal or nomination prior to January 1, 2004 (120 days before the anniversary date of the mailing of this proxy statement), assuming the 2004 annual meeting is not more than 30 days before or 30 days after June 26, 2004.

Notices of stockholder proposals and nominations shall be given in writing to Axcelis Technologies, Inc., 55 Cherry Hill Drive, Beverly, Massachusetts 01915, Attn: Corporate Secretary.

AXCELIS TECHNOLOGIES, INC. Audit Committee Charter, as amended

As adopted by the Board of Directors on January 23, 2003

The Audit Committee shall be responsible to assist the Board of Directors in monitoring and oversight of (1) the integrity of the Company's financial statements and its systems of internal accounting and financial controls and (2) the independence and performance of the Company's internal and independent auditors.

Composition of the Audit Committee

The Audit Committee shall be comprised of at least three directors appointed by the Board, each of whom:

(1) must (a) be independent as defined under Rule 4200 of the Nasdaq Marketplace Rules (the "Nasdaq Rules") (subject to the limited exception in Nasdaq Rule 4350(d)(2)(B)); (b) meet the criteria for independence set forth in Section 301 of the Sarbanes-Oxley Act of 2002 and (c) not own or control 20% or more of the Company's voting securities, or such lower measurement as may be established by the Securities and Exchange Commission (the "SEC") in rulemaking under Section 301 of the Sarbanes-Oxley Act; and

(2) must be able to read and understand fundamental financial statements, including the Company's balance sheet, income statement, and cash flow statements.

Additionally, at least one member of the Audit Committee must be a "financial expert" as defined by the SEC as required by Section 407(b) of the Sarbanes-Oxley Act of 2002.

Authority to Engage Advisors

The Audit Committee shall have the authority to retain special legal, accounting or other consultants to advise the Committee as the Committee determines necessary to carry out its duties as required by the Section 301(5) of the Sarbanes Oxley Act and the Nasdaq Rules. The Audit Committee shall be provided with adequate funding for auditing services and other consultants as contemplated by Section 301(6) of the Sarbanes Oxley Act of 2002. The Audit Committee may request any officer or employee of the Company or the Company's outside counsel or independent auditor to attend a meeting of the Committee or to meet with any members of, or consultants to, the Committee.

Audit Committee Duties

The Audit Committee shall:

Audit Committee Charter

1. Review and reassess the adequacy of this Charter annually and recommend any proposed changes to the Board for approval.

Review of Financial Statements and Accounting Policies

2. Review the annual audited financial statements with management and the independent auditor before publication, including major issues regarding accounting and auditing principles and practices as well as the adequacy of internal controls that could significantly affect the financial statements, and recommend to the Board that the financial statements be included in the annual report to shareholders and annual report on Form 10-K.

3. Review analyses prepared by management and the independent auditor of significant financial reporting issues and judgments made in connection with the preparation of the Company's annual financial statements.

4. Review major changes to the Company's auditing and accounting principles and practices as suggested by the independent auditor, internal auditors or management.

5. Review with the Company's General Counsel legal matters that may have a material impact on the Company's financial statements.

6. Meet periodically with management to review the Company's major financial risk exposures and the steps management has taken to monitor and control such exposures.

7. Review at least annually any transactions between the Company and any director, officer or employee of the Company, other than ordinary course compensation arrangements.

Appointment and Review of External Auditing Function.

8. Recommend to the Board the appointment of the independent auditor, which will be accountable to the Audit Committee and the Board, as representatives of the stockholders of the Company. The Audit Committee shall have the sole authority for the appointment, compensation and oversight of the work of any registered public accounting firm employed by the Company (including resolution of disagreements between management and the auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or related work, and each such registered public accounting firm shall report directly to the Audit Committee.

9. Pre-approve the fees to be paid to the independent auditor for audit services.

10. Evaluate and pre-approve the retention of the independent auditor for non-audit services and the fees for such services, other than those services exempted by virtue of the de minimus exception contained in Section 202(i)(3) of the Sarbanes Oxley Act of 2002. Non-audit services shall mean all services provided by the independent auditor to the Company other than auditing of the Company's financial statements and statutory audits of consolidated subsidiaries required by law and comfort opinions in connection with securities underwriting) and otherwise as defined by the SEC in rulemaking under the Sarbanes-Oxley Act. In evaluating whether to approve non-auditing services, the Committee shall take into account whether such non-auditing services (1) do not create an apparent conflict of interest for the auditing firm, (2) are synergistic with the audit work and (3) do not involve material fees payable to the auditing firm.

11. Obtain annually a formal written statement from the independent auditor delineating all relationships between the auditor and the Company, consistent with Independence Standards Board Standard No. 1, and discuss such statement with the auditor and, if so determined by the Audit Committee, recommend that the Board take appropriate action to satisfy itself of the independence of the auditor.

12. Annually review with the independent auditor and management the experience and qualification of the senior members of the independent auditor team and the quality control procedures of the auditing firm.

13. At least every five years, evaluate together with the Board the performance of the independent auditor and determine whether to recommend that the Board replace the independent auditor.

14. Approve any employment by the Company of an individual who had, at any time during the prior three year period, provided services to the Company while employed by the Company's independent auditor. The Company may not employ any person as the Company's chief executive officer, controller, chief financial officer, chief accounting officer or any person serving in an equivalent position for the Company, who, during the three year period preceding the date of the initiation of the current audit (1) was employed by the Company's current independent auditor and (2) participated in any capacity in the audit of the Company.

Internal Audit Function.

15. Annually review the scope and resources to implement management's internal auditing plans, including the engagement of any external services and appointment and any replacement of the Company's director of internal auditing.

Oversight Functions.

16. Meet with the director of internal auditing or provider of out-sourced internal audit services and independent auditor prior to the Company's annual audit to review the scope, planning and staffing of the audit.

17. Discuss with the independent auditor any matters raised by the auditor under generally accepted auditing standards relating to the conduct of the Company's annual audit and quarterly reviews, including the independent auditor's judgment about the quality of the Company's accounting principles as applied in its financial reporting, and a specific discussion of accounting issues which were referred to the auditor's national office during the period. In regard to quarterly reviews, this discussion may be held either through the entire Committee or through its Chairman on the Committee's behalf.

18. Review with the independent auditor any problems or difficulties the auditor may have encountered and any management letter provided by the auditor and the Company's response to that letter.

19. Review with management and the independent auditor the Company's quarterly financial statements as early as possible and in any case prior to the filing of each Form 10-Q report. This review may be conducted either through the entire Committee or through its Chairman on the Committee's behalf. In addition, at least quarterly, review with management any off-balance sheet related entities on the Company's financial statements.

20. Meet at least quarterly with the Company's chief financial officer, director of internal auditing and out-sourced internal audit function representatives and independent auditor in separate executive sessions.

21. Prepare the report required by the rules of the SEC to be included in the Company's annual proxy statement.

22. Establish procedures for:

- (i) the receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and
- (ii) the confidential, anonymous submission by employees of the Company regarding questionable accounting or auditing matters.

23. The Audit Committee shall make regular reports to the Board concerning the Committee's actions, conclusions and recommendations.

While the Audit Committee shall have the responsibilities and powers set forth in this Charter, it shall not be the duty of the Committee to plan or conduct audits or to determine that the Company's financial statements are complete and accurate and in accordance with generally accepted accounting principles. These instead shall be the responsibility of management and the independent auditor. Except in the case where matters are brought to the attention of the Audit Committee, it shall not be the duty of the Audit Committee to conduct investigations, or to assure compliance with laws and regulations or the Company's code of conduct.

P

**Proxy Solicited on Behalf of the Board of Directors of
Axcelis Technologies, Inc. for Annual Meeting on June 26, 2003.**

R

O The undersigned hereby appoints Mary G. Puma, Cornelius F. Moses or Lynnette C. Fallon, or any of them, and any substitute or substitutes, to be the attorneys and proxies of the undersigned at the Annual Meeting of Stockholders of Axcelis Technologies, Inc. ("Axcelis") to be held at 11:00 a.m. EST on Thursday, June 26, 2003 at offices of Palmer & Dodge, LLP, 111 Huntington Avenue, Boston, Massachusetts, or at any adjournment thereof, and to vote at such meeting the shares of common stock of Axcelis the undersigned held of record on the books of Axcelis on the record date for the meeting for the election of the nominees listed below, on Proposals 2 referred to on the reverse side and described in the Proxy Statement, and on any other business before the meeting, with all powers the undersigned would possess if personally present.

X

Y

Election of Directors, (change of address/comments)
Nominees:

Mary G. Puma _____
 Naoki Takahashi _____
 William C. Jennings _____

(If you have written in the above space, please mark the corresponding box on the reverse side of this card.)

Independent Auditors:

Ernst & Young LLP

You are encouraged to specify your choices by marking the appropriate boxes, SEE REVERSE SIDE, but you need not mark any boxes if you wish to vote in accordance with the Board of Directors' recommendations. The proxies cannot vote your shares unless you sign and return this card.

SEE REVERSE SIDE

^ FOLD AND DETACH HERE ^



Please mark your votes as in this example.

This proxy when properly executed will be voted in the

manner directed herein. If no direction is made, this proxy will be voted FOR Proposals 1 and 2.

The Board of Directors recommends a vote FOR Company Proposals 1 and 2.

	FOR		WITHHELD		FOR	AGAINST	ABSTAIN	
1. Election of Directors. (see reverse)	<input type="checkbox"/>	For all Nominees	<input type="checkbox"/>	Withheld from For all Nominees	2. Ratification of appointment of independent auditors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For all nominees except as written above

All as more particularly described in the Proxy Statement relating to such meeting, receipt of which is hereby acknowledged.

Change of Address/ Comments on Reverse Side

Please sign exactly as name appears herein. Joint owners should each sign. When signing as attorney, executor, administrator, trustee or guardian, please give full title as such.

Signature: _____ Date: _____ Signature: _____ Date: _____

^ FOLD AND DETACH HERE ^



Axcelis Technologies, Inc.

THIS IS YOUR PROXY. YOUR VOTE IS IMPORTANT

DO YOU NEED ASSISTANCE IN ANY OF THE FOLLOWING AREAS?

- ADDRESS CHANGES – LEGAL TRANSFERS
- CONSOLIDATION OF ACCOUNTS – ELIMINATE MULTIPLE ACCOUNTS FOR ONE HOLDER AND CERTAIN DUPLICATE SHAREHOLDERS MAILINGS GOING TO ONE ADDRESS.

JUST CALL OUR TRANSFER AGENT'S TELEPHONE RESPONSE CENTER:

(781) 575-2725

OR WRITE TO:

EQUIERVE TRUST CO., L.L.P.

P.O. BOX 43069

PROVIDENCE, RI 02940-3069

