

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

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

Filed by the Registrant

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 under §240.14a-12

**Axcelis Technologies, Inc.**

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(Name of Registrant as Specified in Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
  - Fee paid previously with preliminary materials.
  - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a6(i)(1) and 0-11.
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**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS  
to be Held May 7, 2025**

The 2025 annual meeting of the stockholders of Axcelis Technologies, Inc., a Delaware corporation, will be held at the offices of the Company at 108 Cherry Hill Drive, Beverly, Massachusetts, at 11:00 a.m. on Wednesday, May 7, 2025 for the following purposes:

1. To elect as directors eight nominees to serve until the 2026 annual meeting of stockholders, with the Axcelis Board of Directors' recommended director candidates named in the attached proxy statement.
2. To ratify, by an advisory vote, the appointment of our independent registered public accounting firm to audit our financial statements for the year ending December 31, 2025.
3. To approve an amendment to the 2012 Equity Incentive Plan to increase the number of shares reserved for issuance thereunder.
4. To approve, by an advisory vote, the 2024 compensation of our named executive officers.
5. To transact such other business as may properly come before the meeting or any adjournment thereof.

These business items are described more fully in the proxy statement accompanying this Notice.

Only stockholders of record at the close of business on March 17, 2025 will be entitled to vote at the annual meeting or at any adjournment.

By order of the Board of Directors,

Dated: March 31, 2025

Eileen J. Evans, *Secretary*

***Stockholders should bring identification and, after checking in with the Security Desk in the building lobby, they will be directed to the meeting room***

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## GENERAL INFORMATION ABOUT VOTING

The Board of Directors (the “Board”) of Axcelis Technologies, Inc. (“Axcelis” or the “Company”) is soliciting your proxy for use at the 2025 annual meeting of stockholders to be held on Wednesday, May 7, 2025 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 March 31, 2025. The meeting will be held at the offices of the Company at 108 Cherry Hill Drive, Beverly, Massachusetts. Stockholders should bring identification and, after checking in with the Security Desk in the building lobby, they will be directed to the meeting.

**Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to Be Held on May 7, 2025:** This proxy statement and our Annual Report to Stockholders are available on our website at: [www.axcelis.com/proxy.html](http://www.axcelis.com/proxy.html).

**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 March 17, 2025. On that date, there were 32,180,818 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 either by proxy or by attending the meeting and voting in person. To vote by proxy, either (A) complete, sign, date and mail the proxy card or voting instruction form or (B) follow the instructions on the card or form for voting online or by telephone.

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 proposal, as recommended by our Board of Directors. Even if you plan to attend the meeting, please vote by mail, telephone or online as instructed on the proxy card or voting instruction form to ensure that your shares are represented at the meeting. If you attend the meeting, you can 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 election of eight directors (all of whom are incumbent directors); an advisory vote to ratify the selection of the independent registered public accounting firm for the Company; a vote on a proposal to approve an amendment to the 2012 Equity Incentive Plan to increase the number of shares reserved for issuance thereunder; and an advisory vote on our 2024 executive compensation.

**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 and the Board's recommendation.** The votes required to approve the proposals that are scheduled to be presented at the meeting and the Board's recommendation on each are as follows:

Proposal	Required Vote	Axcelis Board Recommendation
Election of eight nominees as directors.	Each nominee must receive a plurality of the votes cast.	<b>FOR ALL</b> of the Axcelis Board-recommended nominees named in this proxy statement and on the proxy card
Ratification of the appointment of our independent registered public accounting firm (our "independent auditors") to audit our financial statements for 2025.	This non-binding proposal will be considered approved if more votes are cast in favor than against.	<b>FOR</b> ratification
Approval of the proposed amendment to the 2012 Equity Incentive Plan.	The amendment will be considered approved if more votes are cast in favor than against.	<b>FOR</b> the approval
Approval of the 2024 compensation of our named executive officers as described under "Executive Compensation" in this proxy statement.	This non-binding proposal will be considered approved if more votes are cast in favor than against.	<b>FOR</b> approval

**Abstentions.** Abstaining from voting on any of the proposals will reduce the number of votes cast as well as the number of votes in favor so will have no impact on the results of voting for any of the proposals listed above.

**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 the proposal to ratify the appointment of our independent auditors, but not in the election of directors or the other proposals. Broker non-votes will not be included in the votes cast, so will have no impact on the results of voting with respect any of the proposals listed above.

**If your shares are held in a stock brokerage account or by a bank or other nominee.** You are considered the beneficial owner of shares held in a brokerage or bank account, and these proxy materials are being forwarded to you by your broker, bank, or other nominee, which is considered the stockholder of record with respect to those shares. As a beneficial owner, you have the right to direct your broker, bank, or other nominee on how to vote the shares in your account. **Your broker, bank, or other nominee will only be able to vote your shares with respect to the proposals at the annual meeting (other than the ratification of the auditor appointment) if you have instructed them how to vote.** Your broker, bank, or other nominee has enclosed a voting instruction form for you to use to direct the broker, bank, or other nominee regarding how to vote your shares. Please instruct your broker, bank, or other nominee how to vote your shares using the voting instruction form. Please return your completed proxy card or voting instruction form to your broker, bank or other nominee and contact the person responsible for your account so that your vote can be counted. If your broker,

bank, or other nominee permits you to provide voting instructions via the Internet or by telephone, you may vote that way as well.

**Discretionary voting by proxies on other matters.** Aside from the proposals for the election of directors, the ratification of our selection of auditors, the proposal to amend the 2012 Equity Incentive Plan, and the advisory vote on 2024 executive compensation, and we do not know of any other proposals that may be presented at the 2025 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, Eileen J. Evans, 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: Axcelis Technologies, Inc., 108 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. Our annual report is also available on our website at [www.axcelis.com](http://www.axcelis.com).

### SHARE OWNERSHIP OF 5% STOCKHOLDERS

The following table shows the amount of our common stock beneficially owned as of December 31, 2024 by persons known by us to own more than 5% of our common stock.

Beneficial Owner (1)	Shares Owned	Percent of Class
<b>BlackRock, Inc. (2)</b> 55 East 52 <sup>nd</sup> Street, New York, NY 10055	5,338,625	16.5%
<b>The Vanguard Group (3)</b> 100 Vanguard Blvd., Malvern, PA 19355	4,396,134	13.6%

- (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 percentage ownership of each person listed in the table was calculated using the total number of shares outstanding on December 31, 2024 (32,345,343 shares).
- (2) Based on a Schedule 13G/A filed with the Securities and Exchange Commission (the "SEC") in November 2024 reporting on ownership as of September 30, 2024. This filing states that BlackRock, Inc. is a holding company whose investment management subsidiaries acquired the shares reported. According to the Schedule 13G/A, BlackRock, Inc. has sole voting power over 5,253,863 shares and sole dispositive power of all the shares reported in the table.
- (3) Based on a Schedule 13G filed with the SEC in January 2025 reporting on ownership as of December 31, 2024. This filing reports on beneficial ownership of The Vanguard Group, and states that The Vanguard Group has sole voting power over no shares, shared voting power over 61,181 shares, sole dispositive power over 4,296,319 shares and shared dispositive power over 99,815 shares.

## SHARE OWNERSHIP OF DIRECTORS AND EXECUTIVE OFFICERS

The following table shows the amount of our common stock beneficially owned as of March 17, 2025 (the record date for the 2025 annual meeting) by the current directors, the executive officers named in the *Executive Compensation—Summary Compensation Table* below, and all of our current executive officers and directors as a group.

Beneficial Owner (1)	Shares Owned as of March 17, 2025	Shares Subject to Exercisable Rights to Acquire as of May 16, 2025	Total Shares Beneficially Owned	Percent of Class
<b>Non-Executive Directors</b>				
Tzu-Yin Chiu	5,155	1,662	6,817	*
Gregory B. Graves	1,005	1,662	2,667	*
John T. Kurtzweil	31,484	1,662	33,146	*
Jeanne Quirk	5,929	1,662	7,591	*
Necip Sayiner	1,005	1,662	2,667	*
Thomas St. Dennis	11,907	1,662	13,569	*
Jorge Titingier	4,229	1,662	5,891	*
Dipti Vachani	6,830	1,662	8,492	*
<b>Named Executive Officers</b>				
Russell J. Low	40,632	10,076	50,708	*
James G. Coogan	2,914	1,187	4,101	*
Gregory F. Redinbo	9,898	1,956	11,854	*
Christopher Tatnall	2,938	2,937	5,875	*
Gerald M. Blumenstock	2,128	712	2,840	*
<b>All current Executive Officers and Directors as a Group (14 persons) (2)</b>				
	126,054	30,164	156,218	*

\* Indicates less than 1%.

- (1) Unless otherwise noted, the number of shares beneficially owned by each person listed includes any shares over which the person has sole or shared voting or investment power. In accordance with the rules of the SEC, 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, 2025 (60 days after March 17, 2025) by exercising a stock option or other right. Unless otherwise noted, to the knowledge of the Company based on information provided to the Company or filed with the SEC, 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 17, 2025 (32,180,818 shares), plus any shares that person could acquire upon the exercise of any options or other rights on or before May 16, 2025. None of the shares owned or rights to acquire shares are held in a margin account or subject to a pledge.
- (2) In addition to the directors and NEOs currently serving, Eileen J. Evans commenced service as the Executive Vice President (“EVP”), General Counsel and Secretary in December 2024, but holds no shares as of March 17, 2025, and no restricted stock units (“RSUs”) expected to vest on or before May 16, 2025. Lynnette C. Fallon, our former EVP and General Counsel, retired as an executive officer in February 2025.

## STOCKHOLDER ENGAGEMENT

### 2024 Annual Meeting Vote Results

In 2024, the average vote in favor of the election of our Board nominees was 94.6%. Also at our 2024 annual meeting, 93.8% of votes were cast for approval of the advisory vote on the Company's 2023 executive compensation (commonly referred to as "Say-on-Pay"). We believe that this voting result reflects stockholder support for our executive compensation decisions.

### 2024 Stockholder Outreach

**Routine Investor Relations.** We rely on a variety of regular and special disclosure documents and investor relations activities to ensure that our stockholders understand our performance, our potential, our governance policies, and compensation practices. We routinely engage with our stockholders to discuss our business, performance, and strategy. These discussions sometimes also cover Board composition, governance policies and executive compensation. Our investor relations program includes press releases on product shipments, earnings, and other material matters; quarterly earnings conference calls; participation in industry conferences arranged by investment banks; non-deal roadshows ("NDRs") arranged by investment analysts and others supporting our stock; one-on-one meetings in connection with conferences, roadshows or otherwise; and routine phone and email conversations with stockholders. Our investor website is a regularly updated repository of investor relations material, including press releases, links to SEC filings, investor presentations, governance documents, including all committee charters and our governance guidelines. See <https://investor.axcelis.com/>. Our website and the information contained therein or connected thereto shall not be deemed to be incorporated into this proxy statement.

During 2024, in addition to our routine quarterly earnings calls and follow up meetings, Axcelis representatives attended 18 investor conferences and NDRs in New York City, Boston, Los Angeles, San Francisco, Minneapolis, and Chicago. The Company also held an investor conference in San Francisco in July 2024 and hosted many investor groups at our headquarters throughout the year.

**Key 2024 Investor Messages.** Following on a strong year in 2023, Axcelis had its second best revenue and profitability year in 2024. Our key messages to investors following this performance were:

- Axcelis delivered revenue of \$1.02 billion dollars in 2024, and earnings per share of \$6.15 for the full year. Despite a 10% decline in revenue from 2023, reflecting the continuing industry downturn, Axcelis delivered higher gross margins, generated solid free cash flow, returned capital to shareholders through our stock repurchase program, and ended the year with a stronger balance sheet than at year end 2023.
- Axcelis remained the technology leader and supplier of choice in the implant-intensive power device segment, which accounted for 56% of the value of our 2024 system shipments.
- We are continuously working to expand our footprint with existing and new customers and currently have evaluation systems in the field at strategic customer sites in key market segments.
- Axcelis received 22 customer satisfaction awards in 2024. In addition, Axcelis was named to both the 2023 and 2024 editions of Forbes' List of America's Best Mid-Cap Companies and to both of Fortune Magazine's 2023 and 2024 Top 100 Fastest Growing Companies lists.

**Support for Stockholder Interest in Executive Compensation Decisions.** Axcelis seeks to maintain investor confidence that our executive compensation is both (i) set at an appropriate level for each position, and (ii) structured to drive behavior to optimize business results. As in the past, the Axcelis Compensation Committee ensured our 2024 executive compensation programs were

aligned with market benchmarking and business strategies. Axcelis' 2024 executive compensation programs are discussed in detail under "*Executive Compensation—2024 Compensation Discussion and Analysis*" below. It is essential that the peer group used for compensation benchmarking is appropriate and robust. In August 2024, our Compensation Committee worked with Pearl Meyer & Partners, an independent compensation consultant ("Pearl Meyer"), to add five new members to our compensation peer group, removing two peers used in 2023. This updated peer group was used to make executive officer compensation decisions for 2025.

***Responsiveness to Stockholder Interest in Environmental, Social and Governance ("ESG") Issues.*** Axcelis recognizes that many investors are interested in aspects of corporate management relating to ESG matters. We are committed to being responsive to this interest and have increased our disclosures in these areas. We intend to continue to take steps to meet the expectations of the investment community.

***Corporate Social Responsibility Policy.*** Our response to these areas begins with our Corporate Social Responsibility policy, in which we state our commitment to the recognition and safeguarding of human rights in all the countries in which we operate. Axcelis' Corporate Social Responsibility Policy is guided by the United Nations' Universal Declaration of Human Rights and is reflective of our Ethical Business Conduct at Axcelis Policy, our Environmental Policy and our commitment to a safe and humane workplace, as evidenced in many of our Human Resources policies. At the same time, we respect the sovereignty of nations throughout the world and affirm their primary responsibility to protect their citizens' human rights. We seek to do business with those partners—customers, suppliers, and contractors—who share the same commitment to human rights that we have. We have adopted a Supplier Code of Conduct which requires our vendors to adopt the principles in our Corporate Social Responsibility policy and to cascade these commitments down their supply chain.

***ESG Report.*** ESG topics have become a major focus of institutional investor stewardship functions, Nasdaq, proxy advisory firms, and some state legislatures. Axcelis is committed to being responsive to this interest. We have increased disclosures in these areas and intend to continue to take steps to meet the expectations of the investment community. In 2024, we published our second integrated ESG Report, which includes:

- Disclosures of Axcelis environmental outcomes using aspects of The Climate Disclosure Standards Board framework, and the Semiconductors Standard published by the Sustainability Accounting Standards Board.
- Disclosures on the composition of our workforce and leadership and on our performance against our goals to increase the number of women and under-represented minorities in our workforce.
- Overviews of the Company's ethics and insider trading policies, our Board leadership structure, our stock ownership guidelines for directors and officers, and other corporate governance matters.

Our Annual Report on Form 10-K also includes disclosures on our workforce composition, our compensation and benefit programs, employee training and development offerings. Board oversight of ESG risks is discussed below in this proxy statement under "*Corporate Governance—Risk Oversight by the Board of Directors.*" Our Corporate Social Responsibility Policy, our 2024 ESG Report, our most recent EEO-1 report, and other governance documents are available under the "ESG Hub" on our website, which is linked under the "Environmental, Social and Governance Matters" page found in both the "About Us" and "Investors" menus on our website at Axcelis.com.

***Board Diversity.*** Our Nominating and Governance Committee seeks to be responsive to stockholder interest in racial, ethnic and gender representation at the Board level. We value the diversity of experience and perspective gained through a Board that reflects the diversity of the global

community of our workforce and customers. We have for several years disclosed the gender and racial/ethnic composition of our Board. At Axcelis, three of the eight nominees for election in 2025 are diverse, in that they are not non-Hispanic white males, as discussed below.

***Outcome of Outreach Efforts and Investor Interest.*** We find our direct interaction with investors extremely informative and valuable, and we are very appreciative of the time that our investors took to speak with us in 2024 and prior years. We also value the expressions of interest from investors and other participants in the investment community on environmental, social and governance topics, including diversity and inclusion, and appreciate the communication of their priorities.

## PROPOSAL 1: ELECTION OF DIRECTORS

The Board has nominated eight directors for re-election at the 2025 annual meeting of stockholders, all of whom have terms ending at the 2026 annual meeting. All of the nominees were elected to terms of one year at the 2024 annual meeting.

Dipti Vachani, one of our incumbent directors, has declined to be nominated for re-election at the 2025 annual meeting. Ms. Vachani's service as Board member will end at the 2025 annual meeting, and the Company expresses appreciation for her contributions. Accordingly, our Board of Directors has nominated all of the current directors, other than Ms. Vachani, for re-election at the 2025 annual meeting.

Each nominated director will, if elected, hold office for a term of one year until our annual meeting in 2026 and until the director's successor is elected and qualified. Each of the Board's nominees has consented to serve if elected. However, if prior to the 2025 annual meeting, any nominee is deemed unable to serve, proxies will be voted for any other candidate nominated by the Board. The Board recommends a vote FOR each of the eight Axcelis nominees. The seven independent nominees represent a balance of long tenured and newer directors with a strong mix of relevant experience. Axcelis' Nominating and Governance Committee and Board have evaluated each of the Axcelis nominees against the factors and principles Axcelis uses to select nominees for director discussed below under "Corporate Governance — Board Nomination Process and Requirements."

All of the seven independent director nominees joined the Board in 2015 or later, with three (43%), joining the Board in 2022 or later.

Our director nominees bring a strong mix of experience that supports the Company's strategy to continue its growth as a supplier of capital equipment to the global semiconductor industry, as shown in the chart below:

	Public Company CEO	Semiconductor industry	Capital Equipment	Global Experience	Customer Viewpoint (including expertise in sales and marketing)	Finance/ Accounting/ Capital Markets	M&A Management	Cybersecurity Risk Management
Chiu	✓	✓		✓	✓			
Graves		✓	✓	✓	✓	✓	✓	
Kurtzwell		✓	✓	✓	✓	✓	✓	✓
Low		✓	✓	✓	✓			
Quirk		✓	✓	✓	✓	✓	✓	
Sayiner	✓	✓		✓	✓		✓	
St. Dennis	✓	✓	✓	✓	✓		✓	
Titinger	✓	✓	✓	✓	✓		✓	✓

In addition to our nominees' experience-based skills, we are proud of the diversity represented by the slate of nominees, which includes Ms. Quirk, a woman, Mr. Titinger, with Hispanic ethnicity, and Dr. Chiu, with Asian ethnicity. As disclosed above, three of the nominees are not white non-Hispanic men, representing 38% of all nominees for election at the 2025 Annual Meeting.

Based on this evaluation of skills and attributes, our Nominating and Governance Committee and Board have concluded that it is in the best interests of Axcelis and its stockholders that each of the proposed nominees listed below be elected to serve as a director of Axcelis for a one year term.

## 2025 Nominees for Election to the Axcelis Board of Directors

**Tzu-Yin (“TY”) Chiu, Ph.D.: director since 2018, age 68*****Business Experience and Other Directorships******Experience, Qualifications and Attributes***

Dr. Tzu-Yin Chiu serves as President of National Silicon Industry Group (“NSIG”), a position he has held since April 2020. NSIG is the parent company of Shanghai Simgui Technology Co., Ltd., Shanghai Xinsheng Semiconductor Technology Co., Ltd (known as “Zing Semi”), and Okmetic, based in Finland, all providers of high-quality semiconductor wafer research and development, production, and sales. Dr. Chiu has served as CEO of Zing Semi from 2019 but has informed us of his intention to resign in early 2025. NSIG also holds a minority interest in Soitec, which designs and manufactures innovative semiconductor materials, based in France. Dr. Chiu retired as the nonexecutive Vice Chairman of Semiconductor Manufacturing International Corporation (“SMIC”), a leading semiconductor foundry in China, in 2018. Dr. Chiu served in that position following his retirement as SMIC’s CEO in 2017, a position he assumed in 2011, at which time he also joined the SMIC Board. Between 2009 and 2011, Dr. Chiu served as Chief Executive Officer of Hua Hong Semiconductor Limited (known as “HHNEC”), a global, leading pure-play foundry, headquartered in China. From 2005 to 2009, Dr. Chiu worked at other chip manufacturers in Asia, having first worked at SMIC from 2001 to 2005 as Senior Vice President, Operations. Prior to joining SMIC, Dr. Chiu was a Senior Director Fab Operations at Taiwan Semiconductor Manufacturing Company Limited. Dr. Chiu worked at AT&T/Bell Labs from 1984 to 1996, as the head of the High-Speed Electronics Department and Silicon Research Operations Department. In addition, Dr. Chiu has served as Vice Council Chairman of China Semiconductor Industry Association (CSIA) and a board member of Global Semiconductor Alliance (GSA). In addition to serving on the Board of NSIG, Dr. Chiu also serves as a director of EverDisplay Optronics (Shanghai) Co., Ltd., Ascend Power, and New Ray Mask, where he serves as Chairman of the Board. He also serves on the Engineering Advisory Board of University of California, Berkeley, and the external Advisory Board of Tsinghua-Berkeley Institute.

Dr. Chiu has over 30 years’ experience in the semiconductor industry and a track record of managing successful semiconductor manufacturing companies at the executive level. Dr. Chiu’s expertise spans technology research, business development, operations and corporate management. His familiarity with the Chinese semiconductor market has been particularly valuable to Axcelis as that market has grown. Dr. Chiu has served on the Technology and New Product Development Committee since his election in May 2018 and served on the Nominating and Governance Committee from 2018 to May 2024. The Board highly values his contributions in these roles.

**Gregory B. Graves: director since 2024, age 64*****Business Experience and Other Directorships*** ***Experience, Qualifications and Attributes***

Mr. Graves served as Chief Financial Officer of Entegris, Inc., a leading supplier of advanced materials and process solutions for the semiconductor industry from 2007 to May 2023, and retired from Entegris in July 2023. In addition to the CFO title, Mr. Graves was also Entegris's Executive Vice President and Treasurer. Prior to becoming CFO, Mr. Graves held various positions at Entegris in business development, strategic planning and finance since 2002. Prior to 2002, Mr. Graves held positions in investment banking and corporate development, including at U.S. Bancorp Piper Jaffray and at Dain Rauscher. Mr. Graves currently serves as a director of Laird Superfood, Inc., a plant-based food company; SkyWater Technology, Inc., a US semiconductor foundry; and Janel Corporation, a global logistics provider. He previously served as a director of Plug Power Inc., an energy solutions provider, until June 2019.

Mr. Graves' background in accounting and finance, and his experience as a long-serving chief financial officer for a supplier to the semiconductor industry, give him valuable insight on finance and business development matters in our industry, which is highly valued by our Board. Since his appointment to the Board in February 2024, Mr. Graves has served as a member of the Axcelis Audit Committee and Compensation Committee. The Board highly values his contributions in these roles.

**John T. Kurtzweil: director since 2015, age 68*****Business Experience and Other Directorships Experience, Qualifications and Attributes***

Mr. Kurtzweil has served as an independent consultant since 2018, which includes periodically serving as an interim Chief Financial Officer for his clients.

Mr. Kurtzweil is also engaged in cybersecurity matters, holding a certificate in cybersecurity oversight from Carnegie Mellon University. This background enables him to assist the Company, other boards, and his consulting clients in assessing their cybersecurity defenses and incident preparedness. From July 2017 to November 2018, Mr. Kurtzweil served as the Chief Financial Officer of Akoustis Technologies, Inc., an RF filter semiconductor company. From 2015 to March 2017, Mr. Kurtzweil was VP Finance of Cree, Inc., a provider of light emitting diode, lighting, and semiconductor products, and Chief Financial Officer of its subsidiary, Wolfspeed, a Cree Company. He was an independent consultant from October 2014 to June 2015. From 2012 until 2014, Mr. Kurtzweil served as Senior Vice President, Chief Financial Officer and Special Advisor to the CEO of Extreme Networks, Inc., a provider of open networking innovations. From 2006 to 2012, Mr. Kurtzweil served as Executive Vice President, Finance and as Chief Financial Officer and Treasurer of Cree, Inc. From 2004 to 2006, Mr. Kurtzweil was Senior Vice President and Chief Financial Officer at Cirrus Logic, Inc., a fabless semiconductor company. Mr. Kurtzweil served on the Board of SkyWater Technology, Inc., a US semiconductor foundry until May 2024.

Mr. Kurtzweil brings to the Board significant senior executive leadership experience, including nineteen years as chief financial officer of publicly traded technology companies and placing an aggregate of over \$2.0 billion in equity and debt instruments. His technology industry experience includes several M&A transactions and when combined with his treasury experience, gives him a valuable perspective as a director. Mr. Kurtzweil has developed an advanced understanding of cybersecurity strategies through a certificate program at Carnegie Mellon University. His qualifications to serve as a director also include that he is a certified public accountant and certified management accountant, his cybersecurity oversight expertise, his financial market experience, training through the Stanford Directors College, active membership with National Association of Corporate Directors and his qualifications as an audit committee financial expert. Mr. Kurtzweil has served on the Audit Committee since his election to the Board in May 2015, serving as Chairperson since February 2017. He served on the Compensation Committee from 2015 to 2024 and has served on the Nominating and Governance Committee since May 2024. The Board highly values his contributions in these roles.

**Russell J. Low, Ph.D.: director since 2023, age 54*****Business Experience and Other Directorships***

Dr. Low is our President and Chief Executive Officer, a position he assumed in May 2023. Prior to that, beginning in 2021, he was our Executive Vice President, Global Customer and Engineering Operations. Dr. Low joined Axcelis in 2016 as Executive Vice President, Engineering. Prior to joining the Company, Dr. Low held the position of Vice President of Engineering, MOCVD Business Unit at Veeco Instruments since 2013, prior to which he was Veeco's Senior Director of Engineering, Molecular Beam Epitaxy Business Unit beginning in 2012. From 2003 to 2012, Dr. Low held a number of positions at Varian Semiconductor Equipment Associates, most recently as Director of Technology. Prior to that, Dr. Low held engineering positions in the thermal processing and ion implant divisions of Applied Materials, Inc. from 1997 to 2003. Dr. Low serves on the North American Advisory Board (NAAB) of SEMI International and is a member of the Massachusetts High Tech Council. Dr. Low is not currently serving on any other public company Boards.

***Experience, Qualifications and Attributes***

Dr. Low's technical understanding, extensive management experience at the Company, and more broadly in our industry, contributed to his selection as Axcelis' next Chief Executive Officer and President beginning in May 2023. As such, Dr. Low's contributions to Board discussions are essential as the Company moves forward. Dr. Low's leadership of the Company's Engineering and Global Customer Operations functions during a period of improving financial performance and market share, were highly valued by the Board.

**Jeanne Quirk: director since 2022, age 55*****Business Experience and Other Directorships***

Ms. Quirk is the Senior Vice President, Mergers and Acquisitions, for TE Connectivity, a position she has held since 2015. TE Connectivity (formerly known as Tyco Electronics Ltd.) is a manufacturer of connectivity and sensor solutions for a variety of industries including automotive, industrial and semi-conductor equipment, data communication systems, aerospace, defense, oil and gas, medical and renewables. She brings extensive experience in leading the development of organic and inorganic strategies and the execution of successful mergers, acquisitions, and divestitures. Prior to joining TE, Ms. Quirk worked at PricewaterhouseCoopers for 10 years where she assisted a broad range of strategic buyers and financial sponsors with their acquisitions. Ms. Quirk is not currently serving on any other public company Boards.

***Experience, Qualifications and Attributes***

Ms. Quirk has over 30 years' experience in the electronics industry, focused on inorganic growth, which is an area of interest for the Company. Ms. Quirk has served on the Audit Committee and the Nominating and Governance Committee since her election in February 2022, assuming the role of Chairperson of the Nominating and Governance Committee in May 2024. The Board highly values her contributions in these roles.

**Necip Sayiner: director since 2024, age 59*****Business Experience and Other Directorships***

Dr. Sayiner served as the Executive Vice President of Renesas Electronics Corporation, a company engaged in the research, development, design, manufacture, sale, and servicing of semiconductor products, from February 2017 to March 2019, also serving as President of Renesas Electronics America from July 2017 to March 2019. Previously, he was the President, Chief Executive officer and a director of Intersil Corporation, a leading provider of innovative power management and precision analog solutions, from March 2013 until its acquisition by Renesas Electronics Corporation in February 2017. Prior to Intersil, from September 2005 to April 2012, he served as president and chief executive officer, and director of Silicon Laboratories, a fabless semiconductor company engaged in the design of analog-intensive, mixed signal integrated circuits. Dr. Sayiner served as Chairman of the Semiconductor Industry Association (“SIA”), from December 2015 to November 2016 and as Vice Chairman from November 2014 to December 2015.

Dr. Sayiner was initially appointed to the Board of the SIA in September 2013.

Dr. Sayiner also serves as a director on the board of Rambus, Inc., a manufacturer of semiconductor chips and IP that advance data center connectivity, and on the board of Sandisk Corporation, a global Flash and advanced memory technology innovator. He previously served as a director of Power Integrations, Inc., a semiconductor manufacturing company, until May 2023.

***Experience, Qualifications and Attributes***  
Dr. Sayiner’s deep knowledge of the semiconductor industry from his career at chip design and device manufacturing companies provides the Axcelis Board with valuable input from the customer perspective. His experience as chief executive officer, extensive engineering experience, and track record of strong revenue and profitability growth are all highly valued by our Board. Since his appointment to the Board in February 2024, Dr. Sayiner has served as a member of the Technology and New Product Development Committee and the Compensation Committee.

**Thomas St. Dennis: director since 2015, age 71*****Business Experience and Other Directorships***

Thomas St. Dennis is the non-executive Chairperson of FormFactor, Inc., a leading provider of semiconductor wafer test technologies and expertise, a position he assumed in 2016. Previously, Mr. St. Dennis served as FormFactor's Executive Chairperson beginning in 2013, and as its Chief Executive Officer from 2010 to 2014. Mr. St. Dennis held various positions at Applied Materials, Inc., a semiconductor equipment manufacturer, from 1992 to 1999 and again from 2005 to 2009. His most recent role at Applied Materials was as Senior Vice President and General Manager of the Silicon Systems Group. From 2003 to 2005, Mr. St. Dennis was Executive Vice President of Sales and Marketing at Novellus Systems, Inc., a semiconductor capital equipment manufacturer. Mr. St. Dennis currently serves on the boards of directors of FormFactor and Veeco Instruments Inc., a company that designs, manufactures and markets thin film equipment for semiconductor processing applications.

***Experience, Qualifications and Attributes***

Mr. St. Dennis' prior experience in the semiconductor equipment industry as well as his extensive international business background make him an effective advisor to the Board regarding strategic and marketing issues. His experience and skills are highly valued by our Board. Mr. St. Dennis has served on the Nominating and Governance Committee and the Technology and New Product Development Committee since his election to the Board in May 2015. Beginning in May 2020, Mr. St. Dennis was appointed Chairperson of the Technology and New Product Development Committee. The Board highly values his contributions in these roles.

**Jorge Titinger: director since 2019, age 63*****Business Experience and Other Directorships***

Mr. Titinger has served as the Company's independent Chairperson of the Board since May 2024, prior to which he served as the Board's Lead Director, beginning in May 2023. Mr. Titinger serves as principal advisor to the Board regarding strategic Titinger Consulting, a private consulting and advisory service provider founded by Mr. Titinger in 2016. Beginning in 2012, Mr. Titinger served as President and Chief Executive Officer of Silicon Graphics International Corp., a producer of computer hardware and software, which was acquired by Hewlett Packard Enterprise in 2016. From 2008 to 2011, Mr. Titinger served in various offices at Verigy Ltd., a provider of semiconductor automatic test equipment, ending as President and Chief Executive Officer in 2011. Prior to his service at Verigy, Mr. Titinger held executive positions with FormFactor, Inc. from 2007 to 2008, and KLA-Tencor Corporation from 2002 to 2007. Mr. Titinger served as a director of Xcerra Corporation, a provider of semiconductor and electronics test products and services from 2012 until it was acquired by Cohu, Inc., a supplier of semiconductor test and inspection equipment, in 2018. Mr. Titinger served on the Board of Directors of Cohu, Inc. from 2018 to 2021. Mr. Titinger currently serves as a director of (i) FormFactor, a leading provider of semiconductor wafer test technologies and expertise; (ii) CalAmp Corp., a provider of mobile resource management telematics systems, software, and subscription services for the Internet of Things market; and (iii) Ichor Holdings, Ltd. (also known as Ichor Systems), a leader in the design, engineering and manufacturing of critical fluid delivery subsystems and components for semiconductor capital equipment.

Mr. Titinger's prior experience in the semiconductor industry as well as his extensive international business background make him an effective advisor to the Board regarding strategic and marketing issues. His leadership experience and skills are highly valued by our Board. Mr. Titinger also brings cybersecurity expertise, given his participation on the Cybersecurity and Data Privacy Committee of the Board of CalAmp Corp., a company that provides solutions to help organizations worldwide to monitor, track, and protect their data and vital assets. In addition, when Mr. Titinger served as an executive at KLA-Tencor Corporation, he was responsible for cybersecurity, managing that company's CIO and the CISO. Mr. Titinger has served as Chairperson of our Compensation Committee since May 2022 and as Chairperson of the Board since May 2024, after serving a year as Lead Director. The Board highly values his contributions in these roles.

## BOARD OF DIRECTORS

### Board of Directors Independence and Meetings

The Board of Directors has determined that the nominees for election in 2025, other than Dr. Low, are independent under the criteria established by Nasdaq. None of these non-management directors, to the Company's knowledge, had any business, financial, family, or other type of relationship with the Company or its management (other than as a director and stockholder of the Company), except for relationships that the Board considered to be immaterial under the Nasdaq independence standards.

In determining that each such director is independent, the Board considers whether Axcelis purchases and sells products and services from and to companies (or their affiliates) at which directors are or have been employed as officers or serve as directors. Mr. Graves serves on the Board of Directors of SkyWater Technology, Inc. Its subsidiary, SkyWater Technology Foundry, Inc., a US semiconductor foundry, is a customer of Axcelis. Mr. Kurtzweil also served on the SkyWater parent company Board until May 2024. Axcelis' transactions with SkyWater are carried on in an arms-length commercial relationship, and there is no reason to conclude that the relationship interfered with the exercise of our directors' independent judgment in carrying out the responsibilities of a director at Axcelis. The amount the Company received from SkyWater in each of the past three fiscal years was below the total revenue threshold in the Nasdaq independence standards (that is, the greater of \$200,000 or 5% of Axcelis' consolidated gross annual revenues), which standard would apply if one of our directors were an executive of SkyWater, which none are. Accordingly, this relationship was not determined by the Board to impair the independence of Mr. Graves. See also "*Corporate Governance—Certain Relationships and Related Transactions—2024 Related Party Disclosures.*"

The Board also determined that the members of the Audit and Compensation Committees meet additional independence requirements under Securities and Exchange Commission ("SEC") rules, Internal Revenue Code ("IRC") rules and additional Nasdaq rules.

Our Board held seven meetings during 2024 and acted once by unanimous written consent in 2024. Independent directors have regularly scheduled executive sessions at which only independent directors are present. None of our incumbent Board members attended less than 75% of the 2024 Board meetings and of those committees of which the director was a member. On average, our Board members attended 97% of the 2024 Board meetings and of those committees of which the director was a member, excluding those meetings for which the director recused himself due to a conflict of interest. Our Governance Guidelines state that it is expected that all directors will attend the Annual Meeting and all Board of Directors meetings and meetings of committees on which the Director serves. All of the director nominees were in attendance at the 2024 Annual Meeting in person, except Dr. Chiu, due to his employer's travel restrictions at that time.

### Board of Directors Leadership Structure

Since May 2024, Mr. Titinger has been the Independent Chairperson of the Board of Directors, having served as the Lead Director for the year from May 2023 to May 2024. During that year, our previous Chief Executive Officer served as Executive Chairperson of the Board, supporting Dr. Low in his first year as Chief Executive Officer. Our Governance Guidelines require the Board to appoint a Lead Director in the event that the Chairperson is not independent, as defined in the Nasdaq listing standards. We believe this leadership structure serves the Company and our stockholders well by providing independent leadership of the Board of Directors.

### Responsibility for an Annual Evaluation of the CEO

Our Governance Guidelines provide that the Chairperson or Lead Director, if there is one, will lead the Board in conducting an annual evaluation of the Chief Executive Officer (the "CEO"). The

process for the annual CEO evaluation may be modified from time to time by the Nominating and Governance Committee with the consent of the Chairperson or Lead Director, but currently involves the following steps:

- Annually, after the close of a fiscal year, the CEO submits a self-evaluation to the Chairperson or Lead Director;
- The Chairperson or Lead Director, if one, discusses the self-evaluation with the CEO and solicits input from other Directors in one-on-one conversations; and
- The Chairperson or Lead Director, if one, consolidates the CEO self-evaluation with Board feedback and communicates the Board's evaluation to the Chief Executive Officer at the first Board meeting of the new fiscal year.

Our Governance Guidelines provide that the CEO evaluation should consider aspects of corporate performance, including progress against strategic goals and the capacity of the Company to achieve future goals. The evaluation should use a combination of objective and subjective criteria.

### **Compensation of Directors**

The Nominating and Governance Committee has responsibility under its charter to review and recommend non-employee director compensation for adoption by the full Board. Non-employee director compensation is approved by the full Board of Directors on the recommendation of the Nominating and Governance Committee.

**2024 Director Cash Compensation.** Our non-employee director cash compensation in effect during 2024 consisted solely of annual cash retainers, paid quarterly in advance. Non-employee director cash compensation in effect during the first half of 2024 was set on July 1, 2020 and reviewed in May 2022, using a Pearl Meyer report comparing the Company's non-employee Board compensation to that provided by the companies in our executive compensation peer group. The 2022 report showed that the 2020 retainers for each category of director service were set at approximately the median for each category. Accordingly, no change was made to non-employee director cash compensation in 2022. Following the Board's practice of reviewing Board compensation every other year, no review was undertaken in 2023.

Director cash compensation was reviewed by the Nominating and Governance Committee and full Board in May 2024, using a Pearl Meyer report comparing the Company's non-employee director compensation to that provided by the companies in our executive compensation peer group. The 2024 report showed that the 2020 retainers for certain categories of director service were below the median, and the Board approved changes to the annual cash retainers for service as a Board member, as Compensation Committee Chair, Audit Committee member, Compensation Committee member, and as Lead Director/Independent Chairperson of the Board, effective for the second half of 2024.

Accordingly, our non-employee director cash compensation retainers paid for service in the first and second half of 2024 were in accordance with the following schedule:

follows:

Role	Annual Retainers in Effect January 1, 2024— June 30, 2024	Annual Retainers in Effect Beginning July 1, 2024
Board Member	\$ 60,000	\$65,000
Audit Committee Chair	\$ 25,000	\$25,000
Compensation Committee Chair	\$ 15,000	\$20,000
Nominating and Governance Committee Chair	\$ 10,000	\$10,000
Technology and New Product Development Committee Chair	\$ 10,000	\$10,000
Audit Committee Member	\$ 10,000	\$12,500
Compensation Committee Member	\$ 7,500	\$10,000
Nominating and Governance Committee Member	\$ 5,000	\$ 5,000
Technology and New Product Development Committee Member	\$ 5,000	\$ 5,000
Chairperson/Lead Director of the Board Premium	\$ 50,000	\$60,000

The Company has entered into an Indemnification Agreement with each of the non-employee directors, which are in the same form as the Indemnification Agreements with each of the Company's executive officers. Axcelis' Indemnification Agreements are intended to provide protection from legal liability arising from the individual's service as a director to the extent typically provided by U.S. public companies. The Company indemnifies its non-employee directors to the fullest extent permitted by law with respect to his or her status or activities as a director of Axcelis against all judgments, fines, amounts paid in settlement, and all reasonably incurred expenses. These Indemnification Agreements supplement the indemnification provisions in the Company's Restated Certificate of Incorporation. As required in the Indemnification Agreements, the Company purchases director and officer liability insurance to reimburse the Company for costs incurred under the Indemnification Agreements and for certain third-party liabilities. In addition, the Company maintains "Side A" director and officer liability insurance, which is for the exclusive benefit of the directors and officers, permitting direct reimbursement from the insurer if the Company was unable or unwilling to provide indemnification due to a lack of funds or another issue. The adequacy of our director and officer liability insurance coverage is reviewed, and adjusted if needed, on an annual basis.

Non-employee directors also receive reimbursement of reasonable and customary out-of-pocket expenses incurred in attending Board and committee meetings, in accordance with the Axcelis Board of Directors Expense Reimbursement Policy. Travel by directors to Axcelis Board meetings, or otherwise on Company business, is covered by our standard business travel insurance, which provides emergency medical coverage. Non-employee directors do not receive any Company-paid perquisites.

The Board of Directors may, from time to time, form committees in addition to the four committees currently in use (Audit, Compensation, Nominating and Governance, and Technology and New Product Development) and set compensation for service on such additional committees.

#### **2024 Equity Awards.**

Following the election of Mr. Graves and Dr. Sayiner to the Board in February 2024, upon recommendation of the Nominating and Governance Committee and the Compensation Committee, the full Board of Directors approved two grants of RSUs to each of the new directors effective March 15, 2024. The first grant, valued at \$80,000 (equal to 50% of the 2023 annual director grant, given the new directors' mid-year election to the Board) would vest as to 100% of the shares on the anniversary of the date of grant, if the director remained in office on that date. The second grant, a special new

director grant, valued at \$160,000 (equal to the value of the 2023 annual director grant) would vest as to 25% of the shares on each of the next four anniversaries of the date of grant, if the director remained in office on the vesting date. The number of units was determined by dividing the approved values by a 30-day average closing price of the Company's common stock over a period ending March 11, 2024, which was \$119.38. In accordance with this formula, each of Mr. Graves and Dr. Sayiner received on March 15, 2024 (i) an RSU for 670 shares of common stock, vesting over a one year period, and (ii) an RSU for 1,340 shares of common stock, vesting over a four year period. Using the grant date closing price of \$107.61, these new director RSUs had grant date values of \$72,099 and \$144,197, respectively.

On May 9, 2024, upon recommendation of the Nominating and Governance Committee and the Compensation Committee, the full Board approved the grant to each of the non-employee directors re-elected by the stockholders at the 2024 annual meeting, effective May 15, 2024, of RSUs valued at \$175,000. The number of units was determined by dividing \$175,000 by a 30-day average closing price of the Company's common stock over a period ending May 10, 2024, which was \$105.31. In accordance with this formula, each non-employee director received an RSU for 1,662 shares of common stock. Using the grant date closing price of \$112.94, each director RSU grant had a grant date value of \$187,706. The Board fixed a one-year vesting period for the 2024 non-employee director RSU grants, reflecting market practice. Accordingly, the 2024 non-employee director RSU grants will vest on May 15, 2025, provided the director completes his or her one-year term of service.

Long-term ownership of Company equity by directors is encouraged through the Company's director stock ownership guidelines, which are discussed below under "*Corporate Governance—Governance Policies.*"

The chart below shows compensation for all non-employee directors who served the Company during 2024:

Name	Fees earned or paid in cash (\$)	Stock awards (\$)(1)(2)(3)	Total (\$)
<b>Tzu-Yin Chiu</b>	\$ 70,000	\$ 187,706	\$257,706
<b>Greg Graves</b>	\$ 68,997	\$ 404,002	\$472,999
<b>Joseph P. Keithley(4)</b>	\$ 29,231	\$ —	\$ 29,231
<b>John T. Kurtzweil</b>	\$ 93,750	\$ 187,706	\$281,456
<b>Jeanne Quirk</b>	\$ 81,250	\$ 187,706	\$268,956
<b>Necip Sayiner</b>	\$ 63,702	\$ 404,002	\$467,704
<b>Thomas St. Dennis</b>	\$ 77,500	\$ 187,706	\$265,206
<b>Jorge Titinger</b>	\$140,000	\$ 187,706	\$327,706
<b>Dipti Vachani</b>	\$ 76,250	\$ 187,706	\$263,956

- (1) The amounts shown represents the grant date fair value of the equity awards received by each independent director in 2024 determined in accordance with the assumptions described in the Stock Award Plans and Stock-Based Compensation note to the Company's 2024 Financial Statements included in the Company's Annual Report on Form 10-K filed with the SEC. All of the independent directors received an RSU for 1,662 shares on May 15, 2024 with a grant date fair value of \$187,706. These awards will vest as to 100% of the RSUs on May 15, 2025, provided the director completes his or her one year term of office. In addition, Mr. Graves and Dr. Sayiner, as new directors, received on March 15, 2024: (i) an RSU grant for 670 shares with a grant date fair value of \$72,099, vesting 100% on the one year anniversary of the date of grant, and (ii) an RSU grant for 1,340 shares with a grant date fair value of \$144,197, vesting 25% on each of the next four anniversaries of the grant date.

- (2) At December 31, 2024, Ms. Quirk and Ms. Vachani each held 1,143 unvested RSUs in addition to the 2024 annual grant, for a total of 2,805 unvested RSUs, and Mr. Graves and Dr. Sayiner each held 2,010 unvested RSUs in addition to the 2024 annual grant, for a total of 3,672 unvested RSUs. All other directors in office at year end 2024 held only the 1,662 unvested RSU granted in May 2024.
- (3) None of the non-employee directors received stock option grants in 2024. No non-employee director held stock options at year end 2024.
- (4) Mr. Keithley retired from the Board in May 2024.

## BOARD COMMITTEES

Our Board has standing Audit, Compensation, Nominating and Governance, and Technology and New Product Development committees, each of which has a chairperson and two or more additional members from among the independent directors. The current composition of each of these committees is set forth below:

Audit Committee	Compensation Committee	Nominating and Governance Committee	Technology and New Product Development Committee
<ul style="list-style-type: none"> <li>• John T. Kurtzweil, Chairperson</li> <li>• Jeanne Quirk</li> <li>• Gregory B. Graves</li> </ul>	<ul style="list-style-type: none"> <li>• Jorge Titinger, Chairperson</li> <li>• Gregory B. Graves</li> <li>• Necip Sayiner</li> <li>• Dipti Vachani</li> </ul>	<ul style="list-style-type: none"> <li>• Jeanne Quirk, Chairperson</li> <li>• John T. Kurtzweil</li> <li>• Thomas St. Dennis</li> </ul>	<ul style="list-style-type: none"> <li>• Thomas St. Dennis, Chairperson</li> <li>• Tzu-Yin Chiu</li> <li>• Necip Sayiner</li> <li>• Dipti Vachani</li> </ul>

Committee membership is reviewed by the Board annually after each annual meeting.

### Audit Committee

The Audit Committee operates under a written charter and 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 independent auditors and any internal auditors engaged by management or the Audit Committee. The Audit Committee has adopted procedures for the handling of complaints regarding accounting, internal controls and auditing matters which are described in our Ethics policy. The Audit Committee's charter, material on ethics reporting and other governance material is available in the "Investors" section of our website.

During 2024, the Audit Committee consisted of Mr. Kurtzweil (Chairperson), Ms. Quirk, Mr. Graves (beginning February 2024), Mr. Titinger (until May 2024) and our former director, Joseph P. Keithley (until May 2024). The Board of Directors determined that each of those directors were audit committee financial experts as defined by the SEC. The Board's conclusions regarding the qualifications of a director as an audit committee financial expert are based on the director's certification that the director has (1) an understanding of generally accepted accounting principles and financial statements; (2) the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves; (3) experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, or experience actively supervising one or more persons engaged in such activities; (4) an understanding of internal controls and procedures for financial reporting; and (5) an understanding of audit committee functions.

The Audit Committee plays a key role in oversight of the Company's Enterprise Risk Management processes, as well as taking responsibility for oversight of specific risks, such as the Company's management of cybersecurity threats. See "*Corporate Governance—Risk Oversight by the Board of Directors*" below.

For a report on the Audit Committee's actions during 2024, see the "*2024 Audit Committee Report*" below.

### 2024 Audit Committee Report

*Note: In accordance with an instruction to the SEC regulation under which this Audit Committee report is provided (Regulation S-K, Item 407(d)(3)), this Audit Committee Report shall not be deemed to be "soliciting material," or to be "filed" with the SEC or subject to certain other SEC provisions, as described in that instruction.*

The Audit Committee schedules meetings to occur after the preparation of preliminary quarterly and annual financial statements and prior to the public release of financial results for the period. The Committee met in April, July and November of 2024, prior to the release of the financial results for the first, second and third quarters of 2024, respectively, and in February 2025, prior to the release of our fourth quarter and 2024 year-end results. The Audit Committee also typically reviews the Form 10-Q and Form 10-K either in a telephonic, video conference or in-person meeting. The Audit Committee meets in connection with each of the quarterly in person Board meetings. At these meetings, and the occasional additional meeting, the Audit Committee addresses a variety of recurring and non-recurring topics, such as the Company's internal control systems, Enterprise Risk Management system, management of cybersecurity threats, changes to the Audit Committee charter and other matters.

The Audit Committee met 11 times in 2024. At all meetings relating to the release of financial results, Axcelis' Chief Financial Officer and Corporate Controller were present for all or a portion of the meeting, as were our independent auditors. Our Chief Executive Officer and General Counsel also usually participate in these meetings. The Committee's agenda is established by the Committee's Chairperson, 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 sessions 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.

Under its charter, the Audit Committee has responsibility for recommending to the Board the appointment of an independent auditing firm, which firm will be accountable directly to the Audit Committee, as a representative for the stockholders of the Company. To determine independence, the Audit Committee relies on responses from directors and executive officers in annual questionnaires and on the auditing firm's own conclusion regarding its independence. In selecting and evaluating an independent auditing firm, the Audit Committee considers the firm's history with the Company, if any, and the quality and efficiency of its past work; the firm's familiarity with the Company's industry and the significant accounting principles relating to the Company's business; the firm's general reputation, capability, and expertise in handling the breadth and complexity of the Company's worldwide operations; and the firm's estimated fees. Beyond the performance and capabilities of a particular firm, the Audit Committee also considers whether a change in audit firm is advisable either to ensure independence or to obtain more competitive fees. This consideration is balanced by an awareness of the potential inefficiency and disruption from changing to a different independent public accounting firm. Weighing these factors, the Audit Committee recommended the engagement of Ernst & Young LLP as the Company's independent auditing firm for 2025, which accounting firm has served as the Company's auditor since 1999.

The lead audit partner of the independent auditor is required by law to rotate every five years. Our current lead audit partner from Ernst & Young LLP has been serving in that capacity since 2021. The next mandatory periodic rotation of Axcelis' lead audit partner at Ernst & Young LLP is scheduled to take place in 2026. The Audit Committee will provide oversight and input to the selection of a successor lead audit partner.

Once the firm is appointed, the Audit Committee has the sole authority for the definition of the scope of, and oversight of, the work of the independent auditor, and for compensation of the firm. The Audit Committee manages the process of approving the procurement of services and compensation in accordance with a Policy Regarding Pre-Approval of Services adopted by the Audit Committee. Under this policy, when the Board appoints an audit firm, the purchase of planned audit-related and any specified planned tax services are also automatically approved. Estimated fees

for these planned services are reviewed by the Audit Committee each year, and under the Pre-Approval of Services policy, management may pay all fees that are not materially higher than the estimates reviewed by the Audit Committee.

At the recommendation of the Audit Committee, the Board of Directors appointed Ernst & Young LLP as our Independent Registered Public Accounting Firm to audit our financial statements for 2024. At the 2024 annual meeting of stockholders, our stockholders ratified this appointment. The Audit Committee 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 consolidated financial statements for the year ended December 31, 2024 prepared by management and audited by Ernst & Young LLP, management's assessment of the effectiveness of our internal control over financial reporting and Ernst & Young LLP's evaluation of our internal control over financial reporting. The review of these audited financial statements 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.

In addition, the Committee discussed with the independent auditors the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the SEC and received from the independent auditors their written disclosure letter concerning independence required to be discussed by the auditors with the Committee under the applicable requirements of the PCAOB. These items 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 reliance on these reviews and discussions, and the report of our Independent Registered Public Accounting Firm, the Audit Committee recommended to the Board of Directors that such audited financial statements be included in the Company's 2024 Annual Report on Form 10-K for filing with the SEC and in the Annual Report to Stockholders which accompanies this proxy statement.

The Committee and the Board have also recommended, subject to reconsideration in the absence of stockholder ratification, the selection of the Company's independent auditors for the current year, as discussed below under *"Proposal 2: Ratification of the Appointment of Our Independent Registered Public Accounting Firm."*

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, who have 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.

By the Audit Committee,

John T. Kurtzweil, Chairperson  
Gregory B. Graves  
Jeanne Quirk

#### **Compensation Committee**

In 2024, the Compensation Committee of the Board of Directors consisted of Mr. Titinger (Chairperson), Ms. Vachani, Mr. Graves and Mr. Sayiner (each of whom joined the committee in

February 2024), as well as Mr. Kurtzweil (until May 2024). The Compensation Committee holds four regularly scheduled meetings per year and occasionally calls special meetings or acts by written consent to address particular matters. In 2024, the Compensation Committee met five times. The Compensation Committee operates under a written charter, a copy of which is available in the “Investors” portion of our website at [www.axcelis.com](http://www.axcelis.com).

The Compensation Committee establishes 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 annual CEO evaluation is considered by the Compensation Committee in the course of its deliberations on the Chief Executive Officer’s compensation. The charter of the Compensation Committee also provides for the Committee’s responsibility to provide oversight of workforce diversity initiatives and goals. The Committee has directed management to track certain demographic metrics and to record our progress against specific goals on diversity and inclusion. See “*Stockholder Engagement—Responsiveness to Stockholder Interest in Diversity and Inclusion Issues*” above.

The Compensation Committee meets in the first quarter of each year to review the level and structure of each component of executive compensation, and to establish the goals and targets applicable to the executives’ annual cash and equity incentive compensation for the coming year, as well as to determine the results for the year just ended. The Committee’s 2024 compensation decisions are described in detail in “*Executive Compensation—2024 Compensation Discussion and Analysis*” below.

To support its decision-making processes, the Compensation Committee frequently obtains the advice of an independent compensation consultant with respect to the structure and competitiveness of the Company’s executive compensation programs, as well as the consistency of our programs with the Company’s executive compensation philosophy. The Compensation Committee has the sole authority to hire and fire all outside compensation consultants providing information and advice to the Compensation Committee. In 2024, the Company engaged Pearl Meyer to provide benchmarking and advice related to compensation decisions for executive officers. Other than advising the Nominating and Governance Committee and the Board on independent director compensation, as discussed above, Pearl Meyer did not provide any other services to the Company in 2024. Under its charter, the Compensation Committee must assess and consider the independence of any retained advisor under the criteria set forth in the Nasdaq listing standards.

At the request of the Compensation Committee, the CEO will make specific proposals to the Compensation Committee regarding compensation for executive officers. Management will often work with the Compensation Committee’s outside consultant to ensure that the consultant has access to the appropriate information to enable the consultant to complete its analyses for the Compensation Committee. The consultant’s invoices are paid by the Company. The Chief Executive Officer, the Chief Financial Officer and the Executive Vice President HR/Legal participated in all or some of the 2024 Compensation Committee meetings to present and discuss the material. Depending on the matter under discussion, the Compensation Committee may meet alone with the Chief Executive Officer CEO in executive session. All decisions on executive compensation are made by the Compensation Committee in executive session without any of the executive officers. The Compensation Committee delegates to the CEO the authority to make equity grants to employees other than executive officers on commencement of employment, as a bonus award or in the annual equity award program, subject to limitations established by the Compensation Committee.

For a discussion on the Compensation Committee’s decisions relating to executive compensation during 2024, see “*Executive Compensation—2024 Compensation Discussion and Analysis*” below. The Compensation Committee also makes recommendations to the Board with respect to policies relating to compensation, including the Company’s director and officer stock ownership guidelines,



executive compensation clawback policy, and policies relating to the ownership of Axcelis securities by directors and officers. See “*Corporate Governance—Governance Policies*” below.

### **Compensation Committee Interlocks and Insider Participation**

None of the directors who served on the Compensation Committee of the Board of Directors during 2024 (Mr. Titinger, Mr. Graves, Dr. Sayiner, Ms. Vachani, and Mr. Kurtzweil) has been an officer or employee of Axcelis or had a relationship during 2024 requiring disclosure under Item 404 of Regulation S-K.

### **Nominating and Governance Committee**

During 2024, the Nominating and Governance Committee was comprised of Ms. Quirk and Mr. St. Dennis, as well as Mr. Kurtzweil, who joined the Committee after May 2024, and our former director, Joseph P. Keithley and Dr. Chiu, both of whom served until May 2024. Prior to May 2024, Mr. Keithley served as Chairperson, after which, Ms. Quirk was appointed as Chairperson of the Nominating and Governance Committee.

The Nominating and Governance Committee is responsible for identifying and nominating candidates for membership on the Board of Directors, making recommendations to the Board on non-employee director compensation and establishing governance policies for the Board and management. The Committee operates under a written charter and Governance Guidelines, copies of which are available in the “Investors” section of our website at [www.axcelis.com](http://www.axcelis.com). The Nominating and Governance Committee held four meetings in 2024. The Nominating and Governance Committee has the sole authority to hire and fire all outside consultants providing information and advice to the Nominating and Governance Committee.

Under a process established by the Nominating and Governance Committee, the Board of Directors undertakes an annual self-evaluation of Board size, composition, effectiveness, and management interaction. In addition, each Board member completes an annual self- and peer- performance assessments. See “*Corporate Governance—Board Evaluations and Peer Review Processes*.”

The Nominating and Governance Committee manages the process of identifying and recommending individuals to either (A) be nominated by the Board of Directors to be elected as directors by the stockholders or (B) to be appointed by the Board as a director until the next annual meeting of stockholders, as discussed below under “*Corporate Governance—Board Nomination Process and Requirements*.”

The Nominating and Governance Committee also adopts, or recommends to the Board the adoption of, Bylaw provisions and governance policies that relate to the operation of the Board and committees and the Company’s relationship with stockholders, which are described below under “*Corporate Governance—Governance Policies*.” The Nominating and Governance Committee, together with the Compensation Committee, makes recommendations to the Board with respect to membership on Board committees, the Company’s director and officer stock ownership guidelines, executive compensation clawback policy, and policies relating to the ownership of Axcelis securities by directors and officers. See “*Corporate Governance—Governance Policies*” below.

The Nominating and Governance Committee has developed a comprehensive statement of the Company’s governance standards and processes arising from its charter, bylaws, and policies, called Governance Guidelines. These were first adopted by the Board of Directors in February 2016 and are periodically updated. These Governance Guidelines are available in the “Investors” section of our website at [www.axcelis.com](http://www.axcelis.com)

## CORPORATE GOVERNANCE

### Governance Policies

Our Board and committees seek to implement best governance practices, both on general corporate governance matters and on compensation. Key policies are as follows:

#### Corporate Governance: What We Do

**Adhere to High Ethical Standards and Legal Compliance:** Our ethics policy applies to our directors, executive officers and all other employees. This policy promotes ethical actions and legal compliance. We provide employee training on ethics and a variety of compliance topics, including the Foreign Corrupt Practices Act, Export Controls regulation, employment laws, and Insider Trading regulation.

We received a report in 2024 from an employee regarding the failure of the reporting employee's manager to implement changes in policies and processes as required by applicable laws, resulting in areas of non-compliance with certain labor laws. The reporting employee also alleged that the manager charged personal expenses to a company-guaranteed credit card. After investigation, it was determined that the manager used a company credit card for a small amount of parking fees that were not clearly business-related. The manager admitted this, but asserted a belief that doing so was permitted by Company policies. The legal compliance matter was reviewed by outside counsel and remediations were completed. The charged employee voluntarily resigned from the Company in 2024, and the role was replaced with an external hire. No other ethics or legal compliance violation reports were received by the Company in 2024 or were otherwise identified by the Company in 2024.

**Implement Policies and Processes Designed to Curtail Insider Trading.** We have adopted insider trading policies and procedures governing the purchase, sale, and/or other dispositions of the registrant's securities by directors, officers and employees, that are reasonably designed to promote compliance with insider trading laws, rules and regulations. Stock transactions by the Company are undertaken only in compliance with applicable laws, including the Delaware General Corporation Law, Nasdaq listing standards applicable to the Company, and our certificate of incorporation and bylaws.

**Ensure we have an Independent Chairperson of the Board or Lead Director:** Our Governance Guidelines require that either the Chairperson of the Board is an independent director, or if not, a Lead Director is appointed by the Board. The responsibilities of Chairpersons and Lead Directors are specified in the Governance Guidelines.

**Ensure Directors and Officers Hold Stock in Axcelis:** Our Stock Ownership Guidelines require that non-employee directors own shares having a value at least equal to three times the amount of the annual base Board retainer (which is currently \$65,000). Our Chief Executive Officer is required to own shares having a value equal to three times base salary. The other executive officers are required to hold the lesser of 16,250 shares or shares having a value equal to 150% of such officer's base salary. Executive officers are encouraged to retain 50% of any shares received on exercise of options or vesting of RSU awards (after payment of the exercise price and tax withholding), until stock ownership guidelines are met. Directors and executive officers have five years to meet guideline ownership.

**Conduct a Strong CEO Performance Review Process:** As described above under "*Board of Directors—Responsibility for an Annual Evaluation of the CEO,*" our Governance Guidelines specify the process by which an annual Chief Executive Officer performance review is developed and submitted to the full Board for their consideration, with input from the Chief Executive Officer, the Chairperson or Lead Director, and all other Board members.

**Conduct an Annual Board Assessment and Director Evaluation:** Our Governance Guidelines and the charter of the Nominating and Governance Committee address the requirement for annual Board self-assessment processes, which cover meeting agendas, schedules, presentations, access to and

communications with senior management, and the Board’s contribution as a whole. The annual process also includes an assessment by each director of their own and each other director’s individual performance, using specified criteria. See “*Corporate Governance—Board Evaluations and Peer Review Processes.*”

### **Corporate Governance: What We Don’t Do**

**Fail to Refresh our Board:** Our Governance Guidelines require an annual Board self-evaluation and peer-evaluation prior to the re-election nomination process. These evaluations, along with other assessments, are considered prior to the annual nomination process described below under “*Corporate Governance—Board Nomination Process and Requirements.*” Our Governance Guidelines provide that Directors who have reached the age of 75 may not be nominated for election. This retirement policy has no exemptions or conditions. Since its adoption in 2015, seven incumbent directors have not been eligible for re-nomination as a result of the retirement policy. Our Governance Guidelines also require Board members to tender their resignation on a change in principal occupation, and if he or she receives a greater number of votes “withheld” in an uncontested election than votes “for” his or her election.

**Allow Directors and Officers to Hedge or Pledge Their Stock Positions:** Our policies prohibit directors and executive officers from pledging Axcelis stock in a margin account or otherwise or entering into transactions designed to hedge or offset any decrease in the market value of Axcelis stock. The Company’s policies also prohibit the purchase of publicly traded options on Axcelis securities and place limitations on the use of standing or limit orders to purchase or sell Axcelis securities.

**Allow Minority Stockholder Rights to be Harmed:** Our charter and bylaws protect all stockholders by requiring advance notice of stockholder proposals, and prohibit stockholders from calling a special meeting, acting by written consent or filing governance litigation outside of Delaware. These provisions ensure that minority stockholders have notice and an opportunity to vote on all matters properly brought before them, and that claims are heard by sophisticated Delaware courts.

### **Compensation Governance: What We Do**

**Align Compensation with Median Pay at Peer Companies and Relevant Survey Data:** Executive officer compensation is benchmarked, usually annually, to median levels at peer companies and in surveys. We evaluate these peers, at least biennially, to ensure they are comparable companies.

**Align Compensation with Company and Individual Performance:** We set compensation with strong pay-for-performance orientation, using both a cash annual incentive plan tied to financial metrics and RSU grants tied to operational goals. Performance evaluations are obtained and considered in compensation decision-making. Only our Chief Executive Officer has an employment agreement setting a minimum salary and bonus opportunity.

**Assert Executive Compensation Clawback Rights:** We updated our Executive Compensation Clawback policy in 2023 to ensure alignment with the new regulations issued by the SEC under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Our policy continues to extend beyond the requirements of that law to allow a clawback of incentive compensation in the event of any violation of an agreement with the Company or of any policy of the Company or a voluntary departure to work for a competitor.

**Require Termination of Employment prior to a Change of Control Payout:** Our Change of Control Agreements with our executive officers provide for “double trigger” benefits, due only if the executive experiences a qualifying termination of employment in connection with a change of control.

**Require Multi-Year Vesting of Equity Awards:** Under our equity incentive plan, equity grants that are solely based on continued employment, service, or the passage of time may not vest until the first

anniversary of grant, and for employees, full vesting may not occur until the fourth anniversary of grant, except for grants received in lieu of cash compensation otherwise due. Our usual equity award vesting terms for employees provide for annual vesting over a four year period, at the rate of 25% per year.

**Maintain Compensation Committee Practices that Ensure Independence:** All of the members of the Compensation Committee are determined to be independent, and they have authority to engage an independent consultant of their choice. All compensation decisions involving executive officers are made in executive sessions of the independent directors without management. In addition, the Committee receives feedback from stockholders through an annual Say-on-Pay vote.

#### **Compensation Governance: What We Don't Do**

**Pick Aspirational Peer Companies or Benchmark above Median Compensation Levels:** Our Compensation Committee targets median benchmarked pay for our executives, evaluating the compensation peer group used for benchmarking purposes at least biennially, with the help of an independent compensation consultant chosen by the Compensation Committee.

**Allow for Unlimited Cash Incentive Payouts or Guaranteed Bonuses:** Payout under our annual cash incentive plan is capped at 200% of target, which ensures outperformance reaches our stockholders after a fixed return to executives. We do not provide guaranteed minimum bonuses under any compensation arrangements with executives, other than occasionally for the year in which an executive joins the Company.

**Provide Special Perquisites or Retirement Benefits:** We do not provide any perquisites or retirement benefits to our executive officers that are not generally made available to all of our employees.

**Provide "Single Trigger" Severance Payments or Golden Parachute Arrangements:** We do not provide "single trigger" severance payments due solely on account of the occurrence of a change of control event.

**Indemnify Executives for Change of Control Excise Taxes:** None of our change of control agreements with executive officers contain reimbursement provisions for change in control excise taxes, including those under US Internal Revenue Code Sections 280G and 4999. Our Governance Guidelines prohibit the Company from entering into any future change of control agreement with a provision indemnifying an executive for the effects of any excise tax due on severance compensation.

**Re-Price or Buy Back Equity Awards:** Our equity plans prohibit repricing of equity awards or cash repurchase of equity awards (except in the case of a corporate transaction).

**Offer Nonqualified Defined Contribution or Other Deferred Compensation Plan.** We do not have any such plans.

Our Governance Guidelines, other policies and our Certificate of Incorporation and Bylaws are posted in the "Investors" section of our website at [www.axcelis.com](http://www.axcelis.com). Any waivers of our Ethics policy would also be disclosed in that section of our website.

#### **Board Evaluations and Peer Review Processes**

A healthy and vigorous Board evaluation process is an essential part of good corporate governance. At Axcelis, this process includes annual evaluations of the Board and committee functions, including the interaction between the Board and management, and assessments by each director of his or her own performance and of that of each of the other directors. The Nominating and Governance Committee establishes and oversees the evaluation process, which focuses on identifying areas where Board, committee, and director performance is effective, as well as opportunities for further development or improvement.

Each year, the Nominating and Governance Committee reviews the format and effectiveness of prior evaluation processes to identify actionable feedback for directors and management to consider. Axcelis' process has been a combination of written input, collected by the Chairperson of the Nominating and Governance Committee and interviews between designated members of the Nominating and Governance Committee and each director. These individual discussions are an important opportunity to ensure directors feel they can provide candid feedback on Board operations and the performance of Board members.

The Board has historically used two documents to guide the process: (i) a Board evaluation questionnaire and (ii) a self- and peer- evaluation form. The Board evaluation questionnaire addresses topics such as the composition of the Board and committees, the meeting schedule, agenda items, presentation content, the relationship with management (including availability and responsiveness), and the overall effectiveness of the Board and opportunities for improvement. The self- and peer-evaluation form asks directors to rate themselves and other directors on skills and behaviors in three categories: essential Board qualifications, participation in meetings, and overall value-add of the member.

The Nominating and Governance Committee has considered whether to engage a third-party facilitator for these annual processes but has not done so to date. In 2024, we used the Board's internet portal to collect the Board evaluation input, which was then reviewed by the Chairperson of the Nominating and Governance Committee. This allowed for a paperless approach to the request and submission of information.

This formal process is conducted annually between the August and November meetings of the Board, so that conclusions from the Board evaluation process can inform the decisions regarding nominations for re-election, usually made in February of each year. At the November Board meeting, the Chairperson of the Nominating and Governance Committee, and other directors involved in interviewing, provide verbal summaries of the feedback received, first to the Nominating and Governance Committee and then to the full Board. The Chairperson of the Board, or Lead Director if one, may participate in the collection of feedback and/or consultation prior to the November meeting on specific potential outcomes from the feedback.

Under our Governance Guidelines, the Chairperson of the Board (or Lead Director if one) and the Chairperson of the Nominating and Governance Committee are responsible for responding to issues identified in the annual Board self-evaluation. These processes commonly lead to actions such as the following:

- Addressing Board and committee composition and refreshment needs to ensure the availability of appropriate skills and experience to meet the current and anticipated needs of the business;
- Implementing individual director input on Board and Committee meeting agenda items;
- Increasing time available for executive sessions without management present; and
- Providing periodic input to our CEO and senior management on desired presentation content and style.

In addition to the formal Board evaluation process, our Board and committees engage in an on-going informal evaluation of their own effectiveness throughout the year, usually discussed in executive sessions and in one-on-one conversations outside of meetings. Committee chairs also regularly communicate with management to discuss the development of meeting agendas and presentations, which results in a two-way feedback loop. The Chairperson of the Board (or Lead Director) and other directors have on-going engagement on these topics with our Chief Executive Officer. The Chair of our Audit Committee consults regularly with our Chief Financial Officer and Corporate Controller. The Chairs of our Nominating and Governance Committee and Compensation

Committee communicate regularly with our General Counsel and Corporate Secretary, and the Chair of our Technology and New Product Development Committee interacts regularly with executive officers managing the Marketing and Engineering functions. These conversations mainly relate to agenda items, presentation content and the need to obtain external expert input to support committee discussions and decision-making.

### **Stockholder Communications to the Directors**

Stockholders may communicate with the Board by mailing a communication to the entire Board or to one or more individual directors in care of the Corporate Secretary, Axcelis Technologies, Inc., 108 Cherry Hill Drive, Beverly, Massachusetts 01915. All communications from security holders to Board members (other than communications soliciting the purchase of products and services or requests for publicly available documents) will be promptly relayed to the Board members to whom the communication is addressed.

### **Annual Meeting Stockholder Deadlines**

The Company's annual meeting of stockholders provides our stockholders with an opportunity to propose actions for adoption by the stockholders and to nominate individuals for election to the Board of Directors. The Company's Bylaws include provisions requiring advance notice of proposals by stockholders for items to include in the agenda for the annual meeting and for director nominations. Our Bylaws have been filed with the SEC and are also posted on the "Investors" page of our website at [www.axcelis.com](http://www.axcelis.com).

If you intend to bring proposed business to the 2026 annual meeting and you would like us to consider the inclusion of your proposal in our proxy statement for the meeting, you must provide written notice to Axcelis of such proposal by December 1, 2025 (120 days before the anniversary date of the mailing of this proxy statement). Any such proposal should comply with the requirements of Securities Exchange Act Rule 14a-8.

If you wish to bring business before or propose director nominations at the 2026 annual meeting, you must give written notice to Axcelis between January 7, 2026 and February 6, 2026 (the dates 120 days and 90 days, respectively, before the anniversary of the 2025 annual meeting). These dates assume that the 2026 annual meeting is held not more than 30 days before or 30 days after May 7, 2026. If that is not the case, you must give written notice to Axcelis between the date 120 days before the 2026 annual meeting date and the later of (A) 90 days before the 2026 annual meeting date or (B) the date 10 days after public announcement of the 2026 annual meeting date.

Notices of stockholder proposals and nominations shall be given in writing to Axcelis Technologies, Inc., 108 Cherry Hill Drive, Beverly, Massachusetts 01915, Attn: Corporate Secretary.

### **Board Nomination Process and Requirements**

In an on-going effort to refresh the Board of Directors, the Nominating and Governance Committee from time to time seeks new nominees for election to the Board through a variety of channels, including the engagement of director search firms, less formal recommendations from stockholders of the Company and through business and personal contacts. Director search firms engaged by the Company are paid a retainer fee to identify and screen candidates meeting specifications established by the Committee for a particular Board nominee search. Such specifications will change from one search to another based on the Committee's determination of the needs of Board composition at the time a particular search is initiated.

The Nominating and Governance Committee will evaluate any candidate recommended for nomination as a director, whether proposed by a stockholder in accordance with the nomination provisions in our Bylaws, or identified through the Committee's own search processes, about whom it

is provided appropriate information. In evaluating a candidate, the Nominating and Governance Committee must, at a minimum, determine that the candidate is capable of discharging his or her fiduciary duties to the stockholders of the Company. The Committee will determine whether the particular nomination would be consistent with Axcelis' Governance Guidelines. These Governance Guidelines provide in part that all new candidates for election to the Board and all Board members eligible for nomination for reelection to the Board shall be evaluated on the following criteria:

- (a) such candidate or Board member's current level of, and on-going commitment to, education regarding the responsibilities of a member of a board of directors under standards set forth in the Company's Governance Guidelines;
- (b) the adequacy of such candidate or Board member's time available to commit to responsibilities as a member of the Board;
- (c) the existence of any financial relationship with the Company other than that arising as an employee of the Company, as a Board member and/or as a stockholder; and
- (d) in the case of re-election, such member's compliance with our Director Stock Ownership Guidelines.

If a candidate is presented to the Nominating and Governance Committee at a time when it has established specifications for a particular Board search, the Nominating and Governance Committee will consider whether the candidate satisfies the established specifications. More generally, the Nominating and Governance Committee will consider a candidate's skills, character, leadership experience, business experience and judgment, and familiarity with relevant industry, national and international issues in light of the backgrounds, skills and characteristics of the current Board and the needs of the Company's business. Given the global nature of the Company's business, the Nominating and Governance Committee will consider whether a nominee's geographic or cultural background or other factors contributes to Board diversity that is beneficial to the Company for business reasons. Apart from seeking candidates with attributes that are deemed advantageous in terms of the Company's business objectives, the Board is committed to maintaining gender, racial and ethnic diversity on the Board. The Board believes the current nominees exhibit an appropriate mix of the desired characteristics, as shown in the charts under "*Proposal 1: Election of Directors*" above.

Finally, the Nominating and Governance Committee must consider whether a nominee (in conjunction with the existing Board members) will assist the Company in meeting the requirements of applicable law, the rules of the SEC, the Nasdaq listing standards, and the IRC regarding the independence, sophistication, and skills of the members of the Board of Directors and the Audit, Compensation and Nominating and Governance committees.

In order to provide clarity to our stockholders on the information required to support the consideration of an individual as a candidate for nomination for election as a director, the Company's Bylaws stipulate the amount and nature of information required about a director candidate and the stockholder proposing his or her election. These disclosure requirements also ensure that all stockholders entitled to vote on a director nomination have all relevant information about the nominee. Our Bylaws have been filed with the SEC and are also posted on the "Investors" portion of our website at [www.axcelis.com](http://www.axcelis.com). Nomination information should be sent to the Nominating and Governance Committee of Axcelis Technologies, Inc., 108 Cherry Hill Drive, Beverly, Massachusetts 01915, Attn: Corporate Secretary. The Committee may require further information, including but not limited to the completion of a questionnaire designed to elicit disclosures required by the securities laws and to determine eligibility for Board and committee membership.

## **Certain Relationships and Related Transactions**

### ***Review Process***

Nasdaq listing rules require the Company to conduct an appropriate review of all related party transactions which are disclosable under Item 404 of the SEC's Regulation S-K. In its charter, the



Nominating and Governance Committee is given responsibility to review and approve any such related party transactions, including (a) business arrangements between the Company and directors or their affiliates or between the Company and employees, other than compensation for service as a director or as an employee of the Company, and (b) any other relationships between a director or employee and the Company or a third party (including membership on the boards of directors of a third party) which create the appearance or reality of a current or potential conflict of interest.

Axcelis reviews all relationships and transactions reported to it in which the Company and our directors and executive officers or their immediate family members are participants to determine whether such persons have a direct or indirect material interest. The Company's General Counsel is primarily responsible for the development and implementation of processes and controls to obtain information from the directors and executive officers with respect to related person transactions and for then determining, based on the facts and circumstances, whether the Company or a related person has a direct or indirect material interest in the transaction. As required under SEC rules, transactions that are determined to be directly or indirectly material to the Company or a related person are disclosed in the Company's proxy statement. In addition, the Nominating and Governance Committee reviews and determines whether to approve or ratify any related person transaction that is required to be disclosed. In the course of its review and approval or ratification of a disclosable related party transaction, the Nominating and Governance Committee considers:

- the nature of the related person's interest in the transaction;
- the material terms of the transaction, including, without limitation, the amount and type of transaction;
- the importance of the transaction to the related person;
- the importance of the transaction to the Company;
- whether the transaction would impair the judgment of a director or executive officer to act in the best interest of the Company; and
- any other matters the Committee deems appropriate.

Any member of the Nominating and Governance Committee who is a related person with respect to a transaction under review may not participate in the deliberations or vote respecting approval or ratification of the transaction, provided, however, that such director may be counted in determining the presence of a quorum at a meeting of the Committee that considers the transaction.

### **2024 Related Party Disclosures**

During 2024, no related person transactions requiring disclosure in the proxy statement were identified or submitted to the Nominating and Governance Committee for approval.

As discussed above under "*Board of Directors—Board of Directors Independence and Meetings*," Mr. Graves serves as a director of SkyWater Technology, Inc., which has a subsidiary, SkyWater Technology Foundry, Inc., that is a customer of the Company. Mr. Kurtzweil also served as a director of SkyWater Technology, Inc. until May 22, 2024. In 2024, SkyWater purchased goods and services from Axcelis for payments that exceeded \$120,000 and these business transactions have continued in 2025. However, neither Mr. Graves nor Mr. Kurtzweil had or has any direct or indirect material interest in these payments, or the services and products provided by the Company, which are the result of arms-length commercial transactions.

Two of the current Board members nominated for re-election (Mr. St. Dennis and Mr. Titinger) are also Board members of FormFactor, Inc. The Company has no business relationship with FormFactor.

## Risk Oversight by the Board of Directors

**Top Risks in Our Business.** Risk oversight is an essential responsibility of the Board. All business operations and opportunities have integral risks that must be managed. The top risks in our business are:

- The highly competitive nature of the semiconductor equipment industry may limit the rate and level of acceptance of our current products by customers and requires us to continue to make substantial investments in new products and features to successfully compete for customer selection;
- The dependence of our business on international trade, especially with Asia and the potential negative impact on our business from economic disruption from political, fiscal or global health reasons;
- The need to maintain global infrastructure to support our customers; and
- The cyclical nature of the semiconductor industry and its overall condition in a particular period.

A more extensive list of risk factors associated with our business can be found in the Company's 2024 Annual Report on Form 10-K filed with the SEC and which serves as the Annual Report to Stockholders accompanying this proxy statement.

**Strategic Planning and Risk Management.** In order to ensure that longer term risks are considered in a timely and appropriate matter, our management engages in an annual strategic planning process that covers risks and opportunities relating to our technology, product development, marketing strategies, customer relationships and operations. The resulting three year strategic plan is discussed at a quarterly Board meeting. Following that, these same topics are covered in business updates at the other three quarterly Board meetings during the year, allowing strategies to be re-evaluated and modified as needed. Strategic planning in our industry must constantly evolve in light of (i) trends in the electronics markets driving demand for certain semiconductor devices, (ii) technical trends in semiconductor fabrication driving particular product requirements, and (iii) factors in the business environment, such as the global economy and trade, and other international tensions. Our Board and management regularly discuss these factors and seek to anticipate changes in risks, opportunities, and appropriate responses.

**Cybersecurity Risk Management.** Cybersecurity risk management involves executing on multiple technical fronts, requiring current knowledge of best practices and available solutions, which include network security improvements, on-going employee cybersecurity training, and other measures to protect systems and data from unauthorized access or misuse. The Company believes the most effective risk management is achieved by using a team of experts who have daily responsibility for maintaining the security of our information technology systems, with Board members exercising an oversight role. The Board has asked the Audit Committee to engage with management in an annual review of the Company's activities to mitigate cybersecurity risk. Two of our directors, John Kurtzweil and Jorge Titingier, have acquired some in-depth cybersecurity knowledge. See "*Proposal 1: Election of Directors—2025 Nominees for Election to the Axcelis Board of Directors*" above. In its annual review, the Audit Committee receives a presentation on cybersecurity risk assessment and risk management from the Company's Chief Information Officer, supplemented at times with reports from the Company's external Chief Information Security Officer. Management's report to the Audit Committee and the Audit Committee's observations are then shared with the full Board. This approach to risk management is consistent with the SEC's guidance in July 2023 that "effective cybersecurity processes are designed and administered largely at the management level, and that directors with broad-based skills in risk management and strategy often effectively oversee management's efforts without specific subject matter expertise, as they do with other sophisticated technical matters." Cybersecurity risk trends and

mitigation requirements are also covered in a quarterly scorecard provided to the full Board as part of the Company's Enterprise Risk Management process, discussed below.

**Environmental and Climate Change Risk Oversight.** The Company has an active program to ensure compliance with environmental laws, and to understand our contribution to climate change and the potential impact of global warming on our operations and those of our suppliers and customers. Axcelis is a founding member of the Semiconductor Climate Consortium ("SCC") of SEMI International, our industry organization. By collaborating with SCC member companies' joint knowledge and innovative technologies, Axcelis hopes to promote progressive action towards climate change. In our Enterprise Risk Management process discussed below, climate change risk has been identified as a high impact risk, driving quarterly updates to the Board on trends and needed mitigations. Management also discusses these risks and goals in detail in our annual ESG report, which is available on our external website, Axcelis.com, and provided to the Board, as discussed above.

**Human Capital Risks.** Our business depends on our ability to attract and retain qualified, experienced employees. There is substantial competition for experienced engineering, technical, financial, sales and marketing personnel in our industry. In particular, we must attract and retain highly skilled design and process engineers and key leaders for our business to drive our strategy and its execution. We use detailed job descriptions and focused interview teams to assess candidates. One of our quarterly Board meetings is dedicated to the Axcelis Talent Review, in which executive performance and succession are discussed, high potential employees are identified, and key metrics, such as voluntary turnover and hiring activity are shared with the Board for input. The Compensation Committee is responsible for ensuring that the Axcelis Talent Review processes are appropriate and timely. Management also engages in an active program to ensure compliance with employment and labor laws, which includes mandatory all-employee training on discrimination and manager training on employment decision-making.

**Our Enterprise Risk Management Process and Board Committee Oversight.** In order to ensure that risk is assessed comprehensively and managed consistently, the Board uses an Enterprise Risk Management ("ERM") process, which allows for full Board oversight of the most significant risks facing the Company. The Board also uses its committee structure to engage in more detailed reviews of certain risks. The goal of the ERM process is to provide an ongoing effort, effected at all levels of the Company across all corporate functions, to identify, assess and monitor risk, and to agree on mitigating actions. Annually, senior leadership reassesses the risks to the Company's business, ranking them by potential severity of impact and likelihood, creating a "heat map" of business risks. At each quarterly Board meeting, senior management reports on risks that are rated as having a higher likelihood of occurrence than other risks and/or a higher severity of impact than other risks, commenting on the trend and the status of the risk at the time of the report. As noted above, these higher risks include, among others, strategic planning, cybersecurity, and climate change. The Audit Committee annually reviews the ERM process to ensure that it is robust and functioning effectively.

In addition to the ERM process, each committee of the Board oversees specific areas of risk relevant to the committee through direct interactions with the Chief Executive Officer and the heads of corporate functions. For instance, the Audit Committee oversees risk relating to financial reporting through its interactions with the Chief Financial Officer, Corporate Controller, and the Company's independent auditors. The Technology and New Product Development Committee oversees risk in the Company's technology and product development initiatives. The Compensation Committee considers risk arising from compensation policies and practices. See "*Executive Compensation—2024 Compensation Discussion and Analysis—Risk Assessment of Compensation Policies and Practices.*" A committee may address risks directly with management or, where appropriate, may elevate a risk for consideration by the full Board.

The separate ERM process and Board committee approach to risk management leverages the Board's leadership structure to ensure that risk is overseen by the Board both company-wide and through specific areas of competency.



**Section 16(a) Beneficial Ownership Reporting Compliance.**

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 2024, our directors, officers, and 10% stockholders complied with all Section 16(a) filing requirements.

**PROPOSAL 2: RATIFICATION OF THE APPOINTMENT OF OUR INDEPENDENT  
REGISTERED  
PUBLIC ACCOUNTING FIRM**

Upon the recommendation of the Audit Committee, the Board of Directors has appointed the independent registered public accounting firm of Ernst & Young LLP as independent auditors to conduct the annual audit of our financial statements for 2025 and is seeking stockholder ratification of the appointment. Ernst & Young LLP is an internationally recognized independent registered public accounting firm that audited the Company's financial statements in 2024 and which the Audit Committee believes is well qualified to continue.

Ernst & Young LLP has audited the Company's financial statements since 1999. Prior to recommending the reappointment of the Company's independent auditor each year, the Audit Committee receives input from the Company's Chief Executive Officer and Chief Financial Officer on management's relationship with the auditor and input from the independent auditor on the engagement. In its decision to recommend reappointment, the Audit Committee also considers the fees charged by the independent auditor and the potential benefits and challenges from switching independent audit firms. The audit engagement partner assigned to the Company's account rotates every five years, and the Audit Committee provides oversight and input to the selection of a successor audit engagement partner, along with management.

Representatives of Ernst & Young LLP 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 aggregate audit fees billed for, and other fees billed in, each of the last two fiscal years for professional services rendered by Ernst & Young LLP were as follows:

	2023	2024
<b>Audit Fees</b>	\$2,231,136	\$2,219,000
<b>Audit Related Fees</b>	\$ 32,200	\$ 37,500
<b>Tax Fees</b>	\$ 46,745	\$ 1,600
<b>Total Fees</b>	<b>\$2,310,081</b>	<b>\$2,258,100</b>

Audit fees include statutory audits for subsidiaries and branches operating in countries outside of the United States. Audit related fees include the audit for the Company's 401(k) plan required under ERISA, and the Company's subscription to Ernst & Young's accounting and auditing research platform. Tax fees may include international tax planning relating 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.

The Audit Committee has adopted a policy requiring the Committee's pre-approval of the engagement of the Company's independent auditor to perform specific audit-related or non-audit (including tax) services and fees for such services. This pre-approval of audit-related and non-audit services performed by the independent auditor is designed to avoid any engagements which could impair the auditor's independence. The policy also prohibits engagement of the independent auditor to perform certain types of services that are always viewed as inconsistent with independence. The Audit Committee does not delegate its responsibility to approve services performed by the independent auditor to any member of management. Under its charter, the Audit Committee will preapprove estimated fees to be paid to the independent auditor for approved services. Under the Committee's pre-approval policy, once the Audit Committee has approved fee estimates from the audit firm, management is authorized to pay actual fee amounts that are not materially greater than the reviewed estimates.

The standard applied by the Audit Committee in determining whether to grant approval of any type of non-audit service, or of any specific engagement to perform a non-audit service, is whether

the services to be performed, the compensation to be paid therefor and other related factors are consistent with the independent auditor's independence under guidelines of the SEC, the PCAOB and applicable professional standards. Relevant considerations include (i) whether the work product is likely to be subject to, or implicated in, audit procedures during the audit of our financial statements, (ii) whether the independent auditor would be functioning in the role of management or in an advocacy role, (iii) whether the independent auditor's performance of the service would enhance our ability to manage or control risk or improve audit quality, (iv) whether such performance would increase efficiency because of the independent auditor's familiarity with our business, personnel, culture, systems, risk profile and other factors, and (v) whether the amount of fees involved, or the proportion of the non-audit fees to the total fees payable to the independent auditor would tend to reduce the independent auditor's ability to exercise independent judgment in performing the audit.

All of the non-audit services rendered by Ernst & Young LLP in respect of the 2023 and 2024 fiscal years were pre-approved by the Audit Committee in accordance with this policy.

Ernst & Young LLP informed the Company that they are not aware of any relationship with the Company that, in their professional judgment, may reasonably be thought to bear on the independence of Ernst & Young LLP.

Ratification of the appointment of Ernst & Young LLP by the stockholders is not required by law or by our Bylaws. The Board of Directors is nevertheless submitting it to the stockholders 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 votes cast 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 2025 notwithstanding a negative stockholder vote.

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

### **PROPOSAL 3: APPROVAL OF AMENDMENT TO THE 2012 EQUITY INCENTIVE PLAN**

We are seeking stockholder approval of an amendment to our 2012 Equity Incentive Plan (the “2012 EIP”) adopted, subject to stockholder approval, by our Board, increasing the number of shares authorized for issuance by 3 million (or such lesser amount as may be fixed by our Chief Executive Officer prior to the 2025 annual meeting). Of the shares previously approved (including, in accordance with the terms of the 2012 EIP, shares recaptured as a result of the expiration or forfeiture of prior grants made under our 2000 Stock Plan), 419,955 shares remained available for grant as of December 31, 2024. If approved, we expect to use the additional authorized shares for continued periodic equity grants to employees (including executive officers), directors and consultants.

Our Board of Directors recommends a vote FOR this proposal for the following reasons, each of which is discussed below in more detail:

- Our ability to attract, motivate and retain high-performing individuals as employees, directors and consultants depends on the availability of equity compensation.
- We have used our 2012 EIP reserve conservatively. The reserve was last increased in 2019, and our three-year average burn rate for equity grants, at less than 1%, compares favorably to ISS’s 2025 Benchmark of 3.17% for Russell 3000 Semiconductor and Semiconductor Equipment companies.
- The total voting power dilution from the 2012 EIP will be less than 11% after the proposed share reserve increase, based on the shares outstanding at December 31, 2024.

#### **Why the 2012 EIP is Important**

The 2012 EIP is our sole vehicle for making equity awards to our employees (including executive officers), directors and consultants. Our ability to attract, motivate and retain high-performing individuals in these roles is vital to our ability to compete successfully in the market and to increase stockholder value. We believe our ability to grant equity incentives as an element of compensation is essential for us to remain competitive in attracting and retaining such employees, consultants and directors. We believe equity incentives motivate high levels of performance and provide an effective means of recognizing employee contributions to the success of Axcelis. Moreover, equity incentives align the interests of the selected employees, consultants and directors with the interests of our stockholders—when Axcelis performs well, those employees, consultants and directors who have received equity awards are rewarded along with other stockholders.

Because the 2012 EIP is the only plan under which we can grant equity incentives, maintaining its viability by increasing the number of shares available for grant is essential for us to be able to continue to use equity incentives to attract, motivate and retain the employees, consultants, and directors necessary for our future success. Without this amendment, we believe that the shares available for grant under the 2012 EIP will be insufficient to meet our anticipated recruiting and retention needs.

#### **Careful Management of Equity Award Use: Burn Rate and Voting Power Dilution from the Axcelis Equity Award Plans**

The proposed increase, together with the shares available under the 2012 EIP at year end 2024, will make approximately 3.4 million shares available for grant in 2025 and beyond (noting that plan provisions count restricted stock and RSUs at 1.5x the actual number of shares issuable). We believe that this increase is necessary and reasonable for us to maintain annual equity programs over the next several years. The number of shares used will vary based on the stock price and on the positions receiving grants each year. Using current stock prices, our 2025 annual equity program is modeled at a grant of 340,000 shares, which as RSUs, will count as 510,000 shares against the reserve. The number

of shares granted under the plan will decrease as our stock price increases, since grant sizes are benchmarked on a value basis to peer companies. Growth of our headcount will offset the effect of increased stock prices.

We seek to maximize stockholder value by granting only the number of equity awards necessary to attract, retain and reward key employees, consultants, and directors, which amount can vary from year to year. We ensure our burn rate is below the ISS Russell 3000 burn rate standard for the Semiconductor and Semiconductor Equipment companies. Our three-year average burn rate, calculated by dividing (A) the number of full value awards granted (no options were granted in 2024) by (B) the weighted average shares outstanding for the year, as shown in the table below, is 0.78%. This three-year average burn rate compares favorably to ISS's 2025 Benchmark of 3.17% for Russell 3000 Semiconductor and Semiconductor Equipment companies.

Fiscal Year	Full Value Awards Granted	Weighted Average Shares Outstanding (Basic)	Annual Burn Rate
2024	249,000	32,552,000	0.76%
2023	220,000	32,758,000	0.67%
2022	300,000	33,043,000	0.91%
<b>Three Year Average</b>			<b>0.78%</b>

In addition to burn rate, the Board is cognizant of voting power dilution and, accordingly, has limited the proposed increase to 3 million shares in order to keep the total percentage voting power dilution associated with our equity award plans ("Plan VPD") to less than 11% of total capitalization. We have calculated Plan VPD by dividing the sum of (1) the proposed 2012 EIP reserve increase, (2) the shares currently available under the 2012 EIP and (3) the number of shares issuable in respect of outstanding unvested RSUs granted under the 2012 EIP by the total shares outstanding plus the sum of (1)–(3) above. This calculation, at year end 2024 with the proposed reserve increase of 3 million shares, is shown below:

Voting Power Dilution	Year End 2024
Common Stock Outstanding	32,364,611
Unvested Awards (RSUs) Outstanding	464,904
Currently Available Reserve under 2012 EIP	419,955
Proposed Increase in 2012 EIP Reserve	3,000,000
<b>Voting Power Dilution % after Proposed Increase</b>	<b>10.7%</b>

### Board Recommendation

The Board of Directors believes that the amendment to the 2012 EIP promotes important corporate goals and is therefore in the best interests of Axcelis' stockholders. The amendment to the 2012 EIP will provide Axcelis with the shares necessary to offer effective equity incentives, which are essential for Axcelis to attract, motivate and retain employees and to align Axcelis' compensation with our stockholders' interests.

**The Board of Directors recommends that you vote FOR Proposal 3, the amendment to the 2012 EIP.**

## Outstanding Equity Awards and Shares Available to Grant

As noted above, as of year end 2024, the 2012 EIP had 419,955 shares available for issuance and the only equity awards outstanding under the plan were 464,904 unvested Restricted Stock Units.

## Summary of the 2012 Equity Incentive Plan

The following is a brief description of the material features of the 2012 EIP, as amended, and is qualified in its entirety by reference to the terms of the 2012 EIP. Stockholders may obtain a copy of the 2012 EIP upon written request to the Corporate Secretary of the Company.

<b>Administration</b>	The 2012 EIP is administered by the Compensation Committee or other committee appointed by the Board. The Compensation Committee has authority to: select the participants who will receive awards, grant awards, determine the terms, conditions, and restrictions applicable to the awards, determine how any exercise price is paid, modify or replace outstanding awards within the limits of the 2012 EIP, accelerate the date on which awards become exercisable, waive the restrictions and conditions applicable to awards, and establish rules governing the 2012 EIP, including special rules applicable to awards made to employees who are foreign nationals or are employed outside the United States. Subject to specific limitations under the Plan, as discussed below, the Compensation Committee is given the broad authority to establish these terms in order best to achieve the purpose of the 2012 EIP. The Compensation Committee may also assume awards granted by an organization acquired by the Company or may grant awards in replacement of any such awards.
<b>Types of Awards</b>	The 2012 EIP provides for the grant of stock options (incentive stock options or “non-qualified” stock options), restricted stock, RSUs, stock appreciation rights, awards of common stock that are not subject to restrictions or forfeiture and other awards, the value of which is based in whole or in part on the value of common stock and which may be settled in cash, common stock or other property (“stock equivalents”). These awards are payable in cash or common shares, or any combination thereof, as established by the Compensation Committee.
<b>Eligibility</b>	All employees and consultants of Axcelis and its subsidiaries, and all directors of Axcelis, are eligible to participate in the 2012 EIP. Participants are selected by the Compensation Committee of our Board of Directors in its discretion. At December 31, 2024, the Company had 1,524 employees and eight non-employee directors.
<b>Plan Limitations on Award Terms</b>	The 2012 EIP establishes certain limits on the terms of awards granted under the 2012 EIP: <ul style="list-style-type: none"> <li>• The exercise price of options and stock appreciation rights granted under the 2012 EIP must be not less than the fair market value of the common stock on the date of grant.</li> <li>• The term of options and stock appreciation rights granted under the 2012 EIP may not exceed seven years.</li> </ul>

- The vesting, settlement or lapse of forfeiture restrictions solely based on continued employment, service or the passage of time must (with certain exceptions) occur (i) not sooner than one year after the date of grant, and (ii) for employee grants only, over not less than four years from the date of grant for all shares subject to the award.
- The 2012 EIP prohibits the Compensation Committee, without obtaining stockholder approval, from amending any outstanding option or stock appreciation right to reduce the exercise price or canceling and replacing an option or stock appreciation right with an award exercisable for common stock at a lower exercise price. No award may be canceled in exchange for a cash payment from the Company to the award owner, except in the event of a corporate transaction in which a company other than the Company is the surviving, continuing, successor or purchasing entity and in which the stockholders of the Company receive consideration that is all or predominantly cash in exchange for their shares of common stock in the transaction.

#### **Share Counting Under the Plan**

The following provisions apply to the process of determining how the available shares under the 2012 EIP are deemed to be used:

- Each share subject to an award under the 2012 EIP, other than options and stock appreciation rights, shall be counted as 1.5 shares per plan terms;
- Shares subject to awards granted under the 2012 EIP on assumption of, or substitution for, equity awards of a company acquired by Axcelis will not count against the share reserve under the 2012 EIP; and
- Outstanding shares used to pay the exercise price of an option or stock appreciation right or shares which are withheld by the Company to satisfy the exercise price or tax withholding due on exercise or vesting may not be netted out against the shares issued on an award granted under the 2012 EIP.

#### **Performance Goals for Performance-Based Awards**

When so determined by the Compensation Committee, awards may specify performance objectives that, if achieved, will result in vesting, exercisability or the lapse of restrictions on awards. Such grants should specify one or more objective performance goals and the effect of achieving the goal at or above a specified level for or within a requisite period or at a requisite date.

#### **Treatment of Awards in an Extraordinary Event**

In the event of a recapitalization, stock dividend, stock split, reverse stock split (or combination), other distribution to stockholders (other than normal cash dividends), or similar transaction, the Compensation Committee will adjust the number and class of shares that may be issued under the 2012 EIP (including the number of shares that may be subject to awards granted to a participant in any fiscal year) and the number and class of shares, and the exercise price, applicable to outstanding awards. Similar adjustments may be made in the



affecting the common stock where an adjustment is required in order to preserve the benefits intended to be provided by the plan. If considered appropriate, the Committee may make provision for a cash payment with respect to all or part of an outstanding award instead of or in addition to any such adjustment. In the event of a corporate transaction in which a company other than Axcelis is the surviving, continuing, or successor purchasing entity, outstanding awards may be assumed by such other company or may be exchanged for substituted awards from such other company. The terms of such assumed or substituted awards shall be appropriate in light of (A) the consideration received by the Company's stockholders in the transaction and (B) the terms of the outstanding awards. Awards outstanding under the 2012 EIP which are not assumed or exchanged shall terminate on such terms as the Compensation Committee may determine. Notwithstanding the foregoing, if in such a transaction the stockholders of the Company receive consideration that is predominantly cash, then either (A) any vesting or lapse of forfeiture provisions on outstanding awards under the 2012 EIP shall accelerate on the closing of the transaction and the award holder may share in the transaction consideration or (B) such awards shall be compensated through a separate payment in an amount that the award holder would have received in the transaction assuming such acceleration, as determined by the Compensation Committee.

**Non-Assignability of Awards**

No award granted under the 2012 EIP may be transferred or assigned by a participant or eligible transferee except on such terms as the Compensation Committee determines, and incentive stock options may be transferred only to the extent permitted by the Internal Revenue Code.

**Amendment and Termination of the 2012 EIP**

The Board of Directors may amend, suspend, or terminate the 2012 EIP at any time, subject to stockholder approval as needed to comply with tax or regulatory requirements.

**Summary of U.S. Federal Income Tax Consequences of Awards under the 2012 EIP**

The following is a brief summary of certain consequences under current U.S. federal income tax law of certain transactions under the 2012 EIP. This summary is not intended to be complete and does not describe state, local, foreign or other tax consequences.

***Incentive Stock Options.*** In general, an employee will not recognize taxable income at the time an incentive stock option is granted or exercised. However, the excess of the fair market value of the common shares acquired upon exercise over the exercise price will be considered income for the purposes of the alternative minimum tax. If the option is not exercised by a specified date after termination of the holder's employment, the income tax treatment will be the same as that for a non-qualified stock option, described below. Upon disposition of the shares acquired upon exercise, the holder will recognize capital gain or capital loss in an amount equal to the difference, if any, between the sale price and the exercise price, so long as minimum holding period requirements are satisfied. If the holding period requirements are not satisfied, the employee will recognize ordinary income upon disposition of the shares equal to the difference between the exercise price and the lesser of the fair

market value of the common shares on the date the option is exercised or the amount realized in the disposition. Any remaining gain or loss is treated as a capital gain or capital loss.

**Non-Qualified Stock Options.** In general, a participant will not recognize taxable income upon the grant of a stock option that does not qualify as an incentive stock option (a “non-qualified stock option”). Upon exercise, the participant will recognize ordinary income in an amount equal to the difference between the exercise price and the fair market value of the common shares acquired upon exercise. Upon disposition of the common shares, appreciation or depreciation after the date of exercise will be treated as either capital gain or capital loss.

**Restricted Stock Units.** The participant will recognize no income at the time RSUs are awarded to the participant. When shares are issued on the vesting of RSUs, the participant will recognize compensation income equal to the excess of the fair market value of the vested shares stock at that time over the amount, if any, paid by the participant for the shares. Upon disposition of shares after issuance, any gain or loss realized by a participant will be treated as capital gain or loss.

**Restricted Stock.** Unless a participant makes an election under Section 83(b) of the IRC, the participant will recognize no income at the time restricted stock is awarded to the participant. When the restrictions lapse or are otherwise removed, the participant will recognize compensation income equal to the excess of the fair market value of the restricted stock at that time over the amount, if any, paid by the participant for the restricted stock. Dividends paid on restricted stock during any restriction period will, unless the participant has made an election under Section 83(b) of the IRC, constitute compensation income. Upon disposition of common shares after the restrictions lapse or are otherwise removed, any gain or loss realized by a participant will be treated as capital gain or loss. If a participant makes an election under Section 83(b) of the IRC, the participant will recognize compensation income equal to the excess of the fair market value of the common shares on the date of grant over the price paid for those common shares. Dividends paid on the stock thereafter will be treated as dividends taxable to the participant.

**Stock Appreciation Rights and Stock Equivalents.** The grant of stock appreciation rights and stock equivalents will have no immediate tax consequences to the participant receiving the grant. The amount received by the participant upon the exercise of the stock appreciation rights or stock equivalent will be included in the participant’s ordinary income in the taxable year in which award is exercised or vested.

**Parachute Payment Tax.** The value of any accelerated vesting or exercisability of options or stock appreciation rights, or any accelerated lapse of restrictions on restricted stock or RSUs, in connection with a change in control of the Company will be taken into account in determining whether the participant is deemed to have received an “excess parachute payment” under Section 280G of the IRC. This may subject the participant to an excise tax.

**Tax Consequences to the Company.** To the extent that a participant recognizes ordinary income in the circumstances described above, the Company or the subsidiary for which the participant performs services will be entitled to a corresponding tax deduction provided that, among other things, (a) the income meets the test of reasonableness, (b) is an ordinary and necessary business expense, (c) is not an “excess parachute payment” and (d) is not disallowed by the \$1 million limitation on compensation paid to “covered employees” under Section 162(m) of the IRC.

#### **Awards Available under the 2012 Equity Incentive Plan**

All employees and consultants of Axcelis and its subsidiaries, and all directors of Axcelis, are eligible to participate in the 2012 EIP. Participants are selected by the Compensation Committee of our Board of Directors in its discretion. The benefits or amounts that will be received in the future under the 2012 EIP by named executive officers, executive officers as a group, and all current non-employee directors

or employees who are not executive officers as a group are not determinable because grants are subject to the discretion of the Compensation Committee. Our current grant practices are described in “*Board of Directors—Compensation of Directors*” and “*Executive Compensation—2024 Compensation Discussion and Analysis*.”

The table below shows the number of RSUs and stock options awarded under the 2012 EIP through 2024. No other types of awards have been granted.

2012 Equity Incentive Plan Grants from inception through December 31, 2024		
Name and Title or Group	Number of RSUs Granted from Plan Inception through 2024	Number of Options Granted from Plan Inception through 2024
<b>Russell J. Low</b> , CEO and President	172,708	21,898
<b>James G. Coogan</b> , EVP and Chief Financial Officer	15,387	0
<b>Gregory T. Redinbo</b> , EVP, Marketing and Applications	25,902	0
<b>Christopher J. Tatnall</b> , EVP, Global Customer Operations	15,723	0
<b>Gerald M. Blumenstock</b> , EVP, Research, Development & Engineering	9,880	0
<b>All Current Executive Officers as a Group (1)</b>	251,040	0
<b>All Current Non-Employee Directors as a Group</b>	176,436	0
<b>All Employees, excluding Executive Officers, as a Group</b>	2,240,023	2,868,977

(1) Includes one executive officer who is not a named executive officer.

The closing price of our common stock on December 31, 2024, as reported by Nasdaq, was \$69.87.

### Current Equity Compensation Plan Information

We maintain the 2012 EIP and the 2020 Employee Stock Purchase Plan. The number of shares issuable upon exercise of outstanding unvested RSUs granted to employees and non-employee directors (there are no outstanding options), as well as the number of shares remaining available for future issuance, under our equity compensation plans as of December 31, 2024 are summarized in the following table:

Plan category	(A) Number of shares to be issued upon exercise of outstanding options, warrants and rights (1)	(B) Weighted- average exercise price of outstanding options, warrants and rights (2)	(C) Number of shares remaining available for future issuance under equity compensation plans (excluding shares reflected in column (A))(3)
Equity compensation plans approved by stockholders	464,904	\$ —	1,299,342
Equity compensation plans not approved by stockholders	NA	NA	NA
Total	464,904	\$ —	1,299,342

- (1) Represents, as of December 31, 2024: (464,904 shares issuable on vesting of outstanding RSUs under the 2012 EIP (some of which will be withheld in respect of tax withholding obligations).
- (2) For the purposes of this table, the weighted-average exercise price of outstanding options, warrants and rights includes RSUs as if they had a \$0.00 exercise price.
- (3) Represents the total shares available for issuance under our 2012 EIP and our 2020 Employee Stock Purchase Plan, as of December 31, 2024, as follows:
- (A) 419,955 shares were available for future issuance under the 2012 EIP. Such amount represents the total number of shares reserved for issuance under the 2012 EIP (7,762,500 shares approved by the stockholders, plus 1,777,029 shares added in accordance with the terms of the 2012 EIP as a result of the expiration or forfeiture of awards granted under our prior equity grant plan that were outstanding at the time of the adoption of the 2012 EIP), less the shares issuable on options and RSUs (counted at 1.5 shares each) outstanding under the 2012 EIP included in column (A)) and the shares issued prior to such date on exercise of options and vesting of RSUs granted under the 2012 EIP. This plan is generally used for grants to employees and directors and was initially approved by our stockholders at our 2012 annual meeting.
- (B) 879,387 shares were available under our 2020 Employee Stock Purchase Plan, which represents the total number of shares reserved for issuance under the plan (1,000,000) less the shares purchased through December 31, 2024.

#### PROPOSAL 4: ADVISORY VOTE REGARDING EXECUTIVE COMPENSATION

This proposal, commonly known as “Say-on-Pay,” asks the stockholders to approve the 2024 compensation of the Company’s named executive officers as described under “Executive Compensation” below in this proxy statement (referred to herein as “NEOs”).

The Company’s overall compensation goal is to drive stockholder value by (i) retaining executive talent through pay opportunities commensurate with pay at other companies of a similar size in the same or similar industries, as adjusted for individual factors, and (ii) driving achievement of long-term and annual strategic goals through payouts tied to performance. Details of the 2024 compensation provided to the NEOs may be found in the “*Executive Compensation—2024 Compensation Discussion and Analysis*” and the accompanying tables in this proxy statement. Key features of NEO compensation in 2024 were:

- **2024 Target Pay was a Balanced Mix of Base and Short- and Long-Term Incentive Pay with a Strong Emphasis on Performance-based Awards.** In 2024, the NEOs received base pay, a target annual cash incentive, and RSU equity compensation, that aligned well with elements of peer executive compensation targets. In 2024, all of the NEOs received 50% of their equity compensation as performance based restricted stock units (“RSUs”) and the other half as service vesting RSUs. Combining the annual cash incentive target with the grant date value of his RSUs, 50% of the total 2024 target compensation of Russell J. Low, our CEO, was subject to achievement of specific performance goals. For the non-CEO NEOs, an average of 45% of their 2024 total target compensation was similarly performance-based.
- **2024 Realized Cash Incentive Compensation was Below Target.** The annual cash incentive compensation realized by the NEOs under the 2024 Axcelis Management Incentive Plan equaled the executive’s target multiplied by a plan score of 68.2%. This below target score resulted from the Company’s failure to achieve 2024 profit plan revenues, profitability, and gross margin. See “*Executive Compensation—Summary of Axcelis 2024 Executive Compensation—2024 Business Environment*” below.
- **2024 Performance-based Equity Awards were Earned Above Target.** The 2024 RSUs were subject to the achievement of up to ten 2024 key operational goals, of which two were weighted 25% and the remainder weighted 12.5% each. Management achieved all of the ten goals relating to these 2024 RSUs, and accordingly, the NEOs with RSUs have earned 150% of the target number of shares. Half of the shares earned on the 2024 RSUs granted to the NEOs vested in February 2025 and the remaining half will vest in February 2026, subject to continuation of employment.
- **2024 Realized Total Compensation was above Target.** Aggregating the payout on the 2024 Axcelis Management Incentive Plan and the achievement on the 2024 RSUs, Dr. Low received 113% of his target pay for 2024. On average, the non-CEO NEOs received 108% of their target pay for 2024. These percentages are calculated using the 2024 equity award values approved by the Compensation Committee and assume all RSUs vest over the remaining service periods.

The vote solicited by this proposal, which is required by Section 14A of the Securities Exchange Act of 1934, is advisory and its outcome will not be binding on the Board nor require the Board to take any action. Moreover, the outcome of the vote will not be construed as overruling any decision of the Board or creating or implying any additional fiduciary duty of the Board. However, the Board intends to consider the outcome of this vote when considering future compensation arrangements for the Company’s NEOs. We expect to hold such a vote at the annual meeting each year.

The proposal will be considered approved at the annual meeting if more votes are cast in favor than against. Abstentions and broker non-votes will not count as votes cast for or against this proposal.

**The Board of Directors recommends a vote FOR approval of the 2024 compensation of the Company’s named executive officers.**



## EXECUTIVE COMPENSATION

### 2024 Compensation Discussion and Analysis

This 2024 Compensation Discussion and Analysis is intended to provide a context for the disclosures contained in this proxy statement with respect to the compensation paid to the Company's principal executive officer (Russell J. Low), principal financial officer (James G. Coogan), and the three other most highly compensated executive officers in 2024, who were serving at December 31, 2024. These executive officers are included in the Summary Compensation Table below and are referred to herein as "named executive officers" or "NEOs." Specifically, this Compensation Discussion and Analysis will explain the objectives and material elements of the compensation of the NEOs during 2024. In this Compensation Discussion and Analysis, the Compensation Committee of the Board of Directors is sometimes referred to as the "Committee."

### Executive Summary of Axcelis 2024 Executive Compensation

#### 2024 Business Environment.

Axcelis designs, manufactures and services ion implantation and other processing equipment used in the fabrication of semiconductor chips. Our Purion platform family of ion implanters are, we believe, the most innovative implanters available on the market today. We sell to leading semiconductor chip manufacturers worldwide. In addition to equipment, we provide extensive aftermarket lifecycle products and services through our Customer Solutions & Innovation ("CS&I") team, which sells spare parts, equipment upgrades, maintenance services, used tools, and customer training.

Following on a strong year in 2023, Axcelis had its second best revenue and profitability year in 2024. Our key messages to investors following this performance were:

- Axcelis delivered revenue of \$1.02 billion dollars in 2024, and earnings per share of \$6.15 for the full year. Despite a 10% decline in revenue from 2023, reflecting the continuing industry downturn, Axcelis delivered higher gross margins, generated solid free cash flow, returned capital to shareholders through our stock repurchase program, and ended the year with a stronger balance sheet than at year end 2023.
- Axcelis remained the technology leader and supplier of choice in the implant-intensive power device segment, which accounted for 56% of the value of our 2024 system shipments.
- We are continuously working to expand our footprint with existing and new customers and currently have evaluation systems in the field at strategic customer sites in key market segments.
- Axcelis received 22 customer satisfaction awards in 2024. In addition, Axcelis was named to both the 2023 and 2024 editions of Forbes' List of America's Best Mid-Cap Companies and to both of Fortune Magazine's 2023 and 2024 Top 100 Fastest Growing Companies lists.

#### 2024 Say-on-Pay Vote

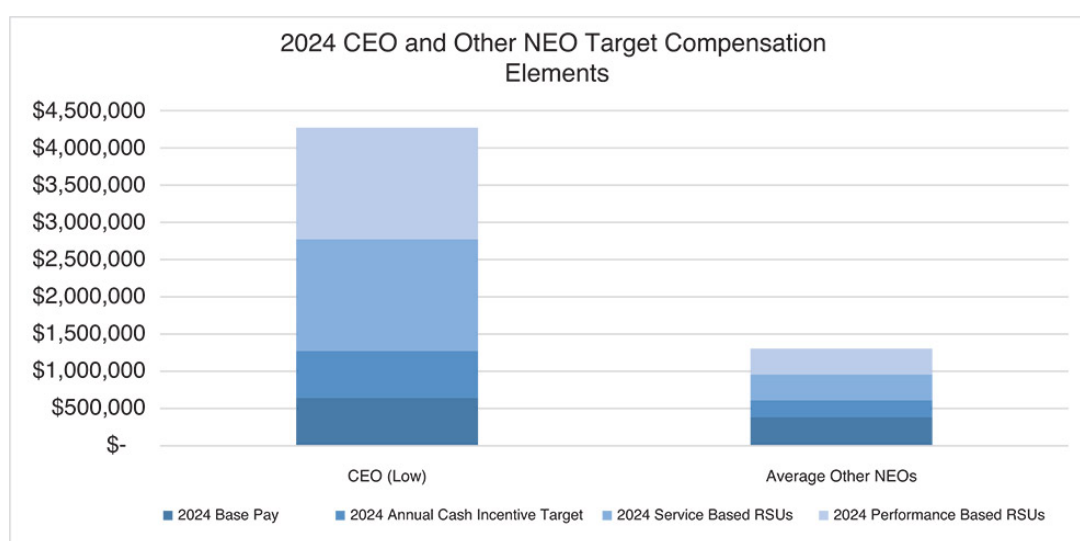
At our 2024 annual meeting, approximately 93.8% of votes cast were in favor in the advisory vote on 2023 executive compensation (commonly referred to as "Say-on-Pay"). The Compensation Committee considered that the results of the 2024 Say-on-Pay vote validated our general approach to executive compensation. The overall structure of our 2024 executive compensation was unchanged from that in 2023.

#### 2024 Executive Target Compensation Balanced Service and Performance-based Components.

- Base salary represented 15% of the 2024 total target compensation of the Company's chief executive officer (Russell J. Low) and an average of 28% of the 2024 total target compensation of the non-CEO NEOs.

- In 2024, Dr. Low’s target cash incentive compensation represented 15% of his total target compensation and his equity compensation was equally divided between service vesting RSUs and PRSUs. Cash and equity performance-based compensation totaled 50% of Dr. Low’s total target compensation in 2024. For the non-CEO NEOs, on average, performance-based cash and equity components represented 45% of their total 2024 target compensation.
- Each NEO received two 2024 RSU grants having equal value at grant: one with four year service vesting and the other to be earned based on achievement of operational performance goals designed to drive long term business value, and having a two year service vesting overlay. Using the value approved by the Compensation Committee, these RSU grants represented 70% of total target compensation for Dr. Low and 54% of the 2024 total target compensation, on average, of the other NEOs.

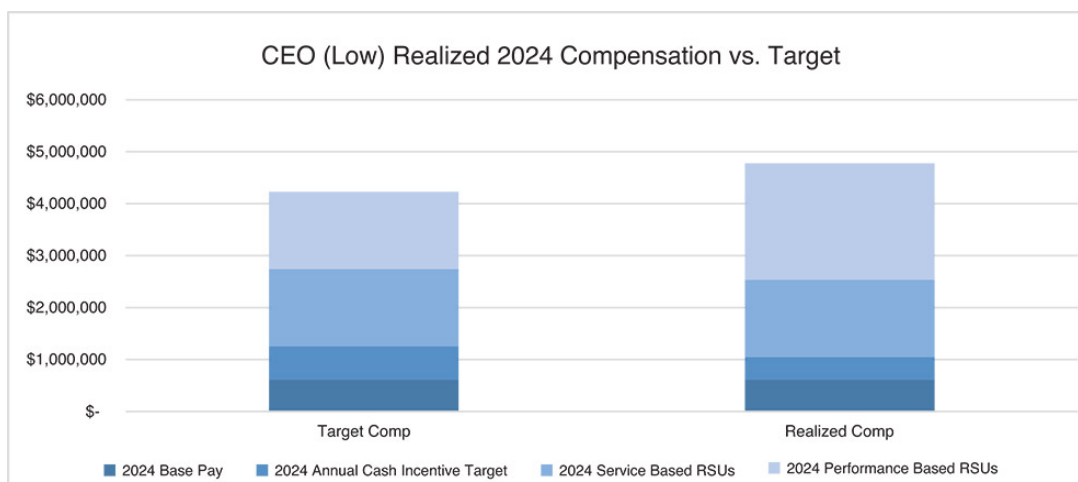
The 2024 target compensation elements for Dr. Low and the average for the other NEOs are shown in the chart below:



### **2024 Aggregate Realized Compensation was Above Target.**

The 2024 performance-based compensation realized by the NEOs was slightly above target pay when the below-target 2024 Axcelis Management Incentive Plan (“2024 AMI”) payout is combined with an above-target achievement on the 2024 PRSUs. This calculation of realized compensation treats the RSU awards (including the PRSUs) at the values approved by the Compensation Committee, without regard to changes in the price of the underlying common stock. Accordingly, the 68.2% score on the 2024 AMI due to the Company’s failure to achieve 2024 profit plan revenues, profitability, and gross margin, was offset by the strong achievement of operational goals used in the PRSUs. The NEOs earned 150% of the PRSUs granted in 2024 based on the achievement of ten out of ten 2024 operational goals, two weighted 25% of target each and eight weighted 12.5% each. The earned 2024 PRSUs vested 50% in February 2025 and the remaining 50% will vest in February 2026, subject to continuation of employment. As a result of the over-target PRSUs and the below target payout on the 2024 Axcelis Management Incentive Plan, Dr. Low received 113% of his target pay for 2024, and, on average, the other NEOs received 108% of their target pay for 2024, assuming all earned 2024 PRSUs and service vesting RSUs vest over the remaining service periods.

The chart below compares our CEO's 2024 realized compensation to his 2024 target compensation:



The realized compensation information above provides a comparison of realized compensation to the target compensation approved by our Compensation Committee. To calculate “target” compensation, we include the target cash incentive and approved value of equity awards. For “realized” compensation, we use actual cash incentive paid and the approved value of equity awards, adjusted for the results of the achievement of performance objectives under our PRSUs.

Another effort to show actual compensation is the Pay Versus Performance chart found below and related discussion, required by Item 402(v) of Regulation S-K issued by the SEC. The Pay Versus Performance chart compares the total compensation amounts shown in the Summary Compensation Table to an adjusted amount, referred to as compensation “actually paid.” The “actually paid” amounts are adjusted Summary Compensation Table amounts, in which the grant date fair value of equity awards required for the Summary Compensation Table is replaced by the sum of (A) the value of unvested shares at the first year end after grant, plus (B) increases and decreases in the value of (i) shares vesting in the year on the vest dates in comparison to the value of those shares at the prior year end, and (ii) unvested shares at year end in comparison to the value of those shares at the prior year end. Accordingly, the “actually paid” compensation is simply an alternative way of calculating the value for executive equity awards that uses the stock price at year end and vest dates, instead of the stock price at grant. The annual cash incentive earned as a result of performance is already included in the Summary Compensation Table and is unaffected by the re-valuations in the Pay Versus Performance chart.

### **Compensation Philosophy and Governance Practices**

The Company's overall compensation goal is to drive stockholder value by implementing an executive compensation program designed to:

- (1) motivate and retain executive talent by offering total target compensation with a proportion of performance-based compensation that aligns with median compensation in those categories at other companies of a similar size in the same or similar industries, as adjusted for individual factors; and
- (2) drive achievement of annual and long-term strategic objectives by rewarding executives through cash incentive pay tied to approved financial goals and equity grants that deliver value on the achievement of operational goals that will drive long-term business objectives, aligning pay with performance.

The Company also seeks to support our compensation philosophy with strong governance practices, which include:

- An annual Say-on-Pay vote and related stockholder outreach;
- Annual or biennial benchmarking of executive compensation against an appropriate peer group;
- An equity award plan that seeks to align to best practices (including with respect to cost and voting power dilution, fungible share counting for whole share awards and prohibitions on repricing and cash repurchases);
- Equity grant practices below industry burn rates and acceptable voting power dilution;
- Executive stock ownership guidelines;
- Appropriate double trigger change of control benefits for executives with no excise tax indemnification;
- An executive compensation clawback policy that empowers the Board to recover incentive compensation both (i) under terms set forth in the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and (ii) in cases of non-compliance with the Company's policies and other problematic situations (see "*Executive Compensation Clawback Policy*" below); and
- No executive perquisites.

#### **Review of Executive Compensation in 2024**

All executive compensation is determined by the Compensation Committee. For a discussion of the Committee's processes in general, see "*Corporate Governance—Compensation Committee*" in this proxy statement. Executive compensation for incumbent executives is reviewed annually.

The Compensation Committee engaged an outside compensation consultant, Pearl Meyer, to assist with decisions relating to 2024 compensation. The Committee assessed Pearl Meyer's independence in light of the SEC rules and Nasdaq listing standards and determined that no conflict of interest or independence concerns exist. The Committee's decisions on 2024 compensation were made with reference to a full benchmarked review of executive compensation provided by Pearl Meyer in October 2023. This Pearl Meyer report covered both cash and equity compensation for each of the executive officer positions at Axcelis in comparison to market data.

Axcelis' practice is to have a comprehensive review of its peer group every other year, and accordingly, in Pearl Meyer's 2023 executive compensation report, a peer group approved by the Compensation Committee in 2022 was used, with certain adjustments. To establish the 2022 compensation peer group, Pearl Meyer developed a "short list" of potential peers, selecting companies that met the following criteria: (i) revenue and market cap of 0.3x to 3.0x that of Axcelis, (ii) complex capital equipment manufacturing businesses, (iii) use of a direct sales force, and (iv) international sales presence. Lumentum Holdings Inc., an earlier reported peer with significantly higher revenue than the company, was not used in either the 2022 or 2023 Pearl Meyer report. At the time of Pearl Meyer's 2023 executive compensation benchmarking report (used to set 2024 executive compensation) Pearl Meyer also excluded ACM Research, Inc. from the peer group, due to its use of a compensation structure that did not align to that of the Company. At the time of the 2023 executive compensation report, Axcelis' revenue was positioned at the 70th percentile of the peer group and its market cap was in the upper quartile.

Accordingly, the Company's compensation peer group for the October 2023 Pearl Meyer benchmarking report was comprised of the following 12 companies selected by the Committee:

3D Systems Corporation  
 Advanced Energy Industries, Inc.  
 Cohu, Inc.  
 FormFactor, Inc.  
 Ichor Holdings, Ltd.  
 Kulicke and Soffa Industries, Inc.  
 Onto Innovation Inc.  
 Photonics, Inc.  
 Ultra Clean Holdings, Inc.  
 Varex Imaging Corporation  
 Veeco Instruments Inc.  
 Viavi Solutions Inc.

In developing their 2023 report for the Committee, Pearl Meyer obtained compensation information for this group of peer companies. In addition, Pearl Meyer used compensation information from a proprietary global technology survey, reflecting companies of approximately the same size as Axcelis. The weight of peer group information and compensation survey data information used to develop compensation benchmark data for each of the Axcelis executive officers varied by the position, depending on the availability of data for that position from the peer group.

In August 2024, the compensation peer group was reviewed for benchmarking executive compensation in 2025, and the Committee approved an updated peer group with 15 members, removing 3D Systems and Varex Imaging, and adding Entegris, Inc., IPG Photonics Corporation, MKS Instruments, Inc., Novanta Inc. and OSI Systems, Inc.

#### Material Elements of Named Executive Officer Compensation

The table below lists the key elements of NEO compensation, why Axcelis has chosen to pay each compensation element, and how Axcelis determines the amount of each element:

Compensation Element	Principal Rationale for Inclusion	How Amount is Determined
Base salaries	To attract and retain qualified executives in a competitive industry.	We seek to provide opportunities for each element of compensation at levels that consider both the market median (50th percentile) benchmark for the position and the contribution and experience of the particular executive.
Annual Cash Incentive	To drive achievement of annual objectives through at-risk pay tied to financial goals, resulting in appropriate pay-for-performance.	
Equity Awards	To drive achievement of long-term stockholder value through RSU grants with service vesting, half of which are earned only on achievement of operational goals designed to drive long term performance, resulting in retention and appropriate pay-for-performance.	

In their October 2023 report, Pearl Meyer made two general observations in benchmarking the compensation of the Axcelis executive team:

- Recent changes in the composition of Axcelis' leadership team made a notable impact on comparisons versus the market, with newly promoted executives at the lower end of the

competitive market range, the two newly hired executives at median to low end of the competitive market range, with longer-tenured Axcelis executives competitively positioned near median; and

- Market data for executive pay had increased meaningfully relative to 2022, particularly in the case of the CEO.

The following discussion explains how each 2024 NEO compensation element, and the Committee's decisions regarding that element, fit into the Company's overall compensation objectives and affected decisions regarding other elements.

### Base Salary

The Company pays a base salary to each of its NEOs. Base salary for NEOs is set on commencement of employment with the Company and reviewed by the Compensation Committee annually thereafter to adjust as needed to align with market benchmarking. In the event that base salary is a factor in calculating annual incentive cash compensation or equity grants, when fixing or adjusting base salary, the Compensation Committee will consider the impact of a change on these other compensation components.

In February 2024, the Committee approved base pay for all NEOs after a review of the Pearl Meyer benchmarking report received in October 2023. Dr. Low's 2024 base salary amount was set at the minimum base salary established by his Employment Agreement with the Company. The Committee approved a 5% increase to Dr. Redinbo's 2023 base salary from \$310,000 to \$325,000 for 2024. No changes were made to the base salary of the other NEOs from that existing at the end of 2023.

### Annual Cash Incentive—2024 Axcelis Management Incentive Plan

In February 2024, the Compensation Committee adopted the Company's annual cash incentive plan, the 2024 AMI. Approximately 380 management-level employees plus the executive officers participated in the 2024 AMI, each of whom was assigned a target payout, expressed as a percent of base salary paid for the year. As aligned with benchmarking, Dr. Low's 2024 AMI target was set at 100%, Mr. Coogan's at 70%, and the 2024 AMI targets for Dr. Redinbo, Dr. Tatnall, and Mr. Blumenstock were set at 60%.

The Committee also determined to maintain the same metric categories for the 2024 AMI as used in 2023: revenue, operating profit, and gross margin. As in prior years, to facilitate calculating results, each of the gross margin and operating profit metrics were set at a pre-cash incentive payout amount. Revenue growth over time is critical for the Company, as an indication of growing market share. Operating profit is viewed as a preferable metric to net income since it eliminates factors outside the control of management. Gross margin evidences the Company's ability to generate funds for R&D and other expenses, as well as to drive profitability.

The table below shows the metrics established for the 2024 AMI, setting 25%, 100%, and 200% funding scores for 2024 revenue, operating profit, and gross margin.

Full Year Targets, in millions, except Gross Margins	25% Score: 80% of 2024 Profit Plan Revenues	100% Score: 2024 Profit Plan	200% Score—115% of 2024 Profit Plan Revenues	Weighting of Metric
Score	25%	100%	200%	
2024 Revenue	\$ 881.186	\$ 1,101.482	\$ 1,266.704	50%
2024 Operating Profit before annual cash incentive plan payout	\$ 174.256	\$ 279.105	\$ 359.156	25%
2024 Gross Margins, before annual cash incentive plan payout	43.9%	45.7%	46.7%	25%

The minimum and maximum 2024 AMI revenue levels were set at 80% and 115% of the profit plan revenues, respectively. The operating profit levels are those modeled as achievable at each of the revenue levels. The range in gross margins is not associated with the revenue amounts at the three score levels but represents a reasonable range for the year. The 2024 AMI funding level was capped at a 200% payout.

Under the 2024 AMI plan design, after year end, actual 2024 financial performance is compared to these metrics, and a weighted score developed. Assuming the threshold level is met, each of the metrics is scored by placing the 2024 results between the applicable goal posts (25% and 100% or 100% and 200%) and interpolating the final score. Each of these scores is weighted and totaled for a final score submitted to the Compensation Committee for approval. A total at-target payout (a 100% funding score) of the 2024 AMI would have equaled approximately \$13.2 million. The Compensation Committee had the authority to adjust the funding for extraordinary items and other qualitative aspects of the Company's 2024 performance (using benchmarks and budgets) to ensure that the funding score reflected actual performance and not extraordinary events and was otherwise appropriate. No special adjustment to the 2024 AMI score was made by the Committee. As designed, actual payouts equal the individual participant's target payout multiplied by the AMI score determined using the metrics set by the Committee.

In February 2025, the Compensation Committee determined that the final 2024 AMI funding score was 68.2%, based on the Company's revenue, operating profit, and gross margin for the year, with the resulting scores shown in the chart below:

Metric	2024 Results (in millions, except gross margins)	Score	Weighting	Weighted Score
2024 Revenue	\$ 1,017.9	71.5%	50%	35.8%
2024 Operating Profit <i>before</i> annual cash incentive plan payout	\$ 223.4	60.2%	25%	15.0%
2024 Gross Margins <i>before</i> annual cash incentive plan payout	45.0%	69.7%	25%	17.4%
<b>Total Score</b>				<b>68.2%</b>

This funding score resulted in the 2024 non-equity incentive plan compensation to the NEOs as shown in the Summary Compensation Table below. A payout of the 2024 AMI was made in the first quarter of 2025.

### Long-Term Equity Incentive Compensation

**Equity Compensation Philosophy.** Equity compensation for NEOs, which since 2016 has taken the form of RSUs, is designed to align the interests of executives with those of our stockholders and to retain and motivate executives through the use of multi-year vesting periods and performance goals. Thus, equity grants should constructively influence management's incentive to enhance the value of the Company's stock and achieve strategic objectives.

Long-term ownership of equity awards is further encouraged through the Company's executive stock ownership guidelines, which establish a minimum number of shares that the executive must own, aligning the executive officers with long-term stockholder interests. The Chief Executive Officer is required to own shares having a value equal to three times his or her base salary. The other NEOs are required to own shares having a value equal to 1.5 times the executive's base salary or, if less, 16,250 shares. Until an NEO meets the requisite stock ownership level prescribed by the stock ownership guidelines, the NEO is encouraged to retain 50% of the net shares received through the exercise of stock options or in connection with the vesting of RSUs. These guidelines are intended to ensure that the executives' interests in the value of the Company's stock include interests in stock as well as equity-based incentive awards, and as such are more fully aligned with the interests of Company stockholders. NEOs are also subject to the Company's policies prohibiting hedging and pledging our common stock, which are discussed above under "Corporate Governance."

**Equity Compensation Processes.** Equity grants to executives are made upon hire and, typically, on an annual basis thereafter. Annual equity grants to executive officers have been made in most years in order to ensure a meaningful retentive effect by maintaining the percentage of the executive's equity position that is unvested and to continue to award long-term compensation that is directly tied to Company performance. The Compensation Committee determines the form and amount of equity grants made to the NEOs. The 2012 EIP allows the Compensation Committee to award several different forms of equity rights, including restricted stock, RSUs, incentive stock options and non-qualified stock options. Past equity grants to NEOs have taken the form of non-qualified stock options and RSUs.

RSUs allow us to issue fewer shares than stock options to deliver comparable value, which reduces overhang and potential stockholder dilution. RSUs also have a significant retention effect given the vesting terms. Beginning in 2016, the Compensation Committee attached performance goals to a portion of the RSU grants to NEOs, a practice aligned with peers, by issuing PRSUs.

It is the Committee's general practice to approve equity awards with a future effective date, usually the 15<sup>th</sup> (or the next succeeding trading day) of a month following the approval, with annual equity grants approved in February and made in May. The Company believes that this time period between the approval and effectiveness of an equity grant means that the Committee is unable to know or estimate the trading price of the Company's common stock on the effective date of grant. As a result, the Committee has not, to date, thought it necessary to adopt a policy of timing the approval or effectiveness of equity awards to specific dates following the release of financial results or other material information. The Committee approves equity grant values based on market benchmarking. The stock price or the existence of material non-public information at the time of approval are not relevant to the determination of the approved grant value. A 30-day average stock price is used to size RSU grants, as discussed below, and the Company has not and would not release material non-public information in a manner designed to influence that average stock price.

**2024 Annual Equity Grants.** In February 2024, the Compensation Committee determined that, as in the prior year, RSUs would be used as the form of equity compensation for the NEO annual equity grants. 50% of the total 2024 annual grants to the NEOs have vesting based on service alone, and the other 50% were structured as PRSUs, to be earned based on the achievement of performance goals, followed by service vesting.

In February 2024, the Compensation Committee fixed values for the 2024 RSU grant to each NEO then in office. After referencing the executive compensation benchmark report received in October 2023, the Committee set the values for the 2024 annual equity awards to Dr. Low and Dr. Redinbo at the same level as the NEO's annual grant in 2023. The Compensation Committee set the 2024 annual grant values for each of Mr. Blumenstock and Mr. Coogan at the same level as those NEOs received in their respective 2023 new hire grant. In the case of Dr. Tatnall, the Compensation Committee set his 2024 annual grant value at the full year level used for the pro-rated equity award he received on his promotion in September 2023.

The number of units for each RSU grant was determined by dividing the approved grant value by the average closing price of the Company's common stock over a 30-day period ending three trading days prior to the grant date. The 2024 annual RSU grants to NEOs are set forth in the *Grants of Plan Based Awards in Fiscal 2024* table below.

The service -based 2024 RSUs will vest at the rate of 25% on each of the first four anniversaries of the date of grant until fully vested in May 2028 (assuming continuation of employment). The 2024 PRSUs require that management earn the awards based on attaining up to ten performance goals. With the annual cash incentive plan focused on current annual financial results, the Committee used these performance-based annual equity awards to focus the NEOs on achieving near term milestones that were essential for the Company's long term growth.

As in prior years, as aligned with Pearl Meyer's benchmarking, the PRSUs permit recipients to earn above target awards for over-target performance. The 2024 PRSUs have two goals counting for 25% of the target grant, each and the remaining eight goals counting for 12.5% of the target grant each. Accordingly, it was possible for the NEOs to earn either more or less than 100% of the granted 2024 PRSUs, with the achievement of all ten goals earning them a maximum of 150% of the target grant.

The 2024 PRSUs were designed to drive the achievement of specific operational goals that needed to be achieved in 2024 for the Company to fulfill its aggressive growth strategy, resulting in high profitability and market share. As in prior years, the Committee used the PRSUs to keep management's focus on critical, well-understood, initiatives rather than on broad financial metrics. These operational goals related to improvements in quality and customer satisfaction, improving product performance, penetrating targeted customers and geographic markets with specific products, developing new applications and products, all of which have strategic implications for our business. Unlike broad financial metrics, which can be set over multiple years, the type of foreseeable operational goals selected by the Committee are designed to be achieved in the near term. The Committee believes that these operational goals are no less strategic than longer term financial goals, and given the Company's track record, may be more effective at driving the right near term behavior to achieve desired long term results.

The 2024 RSU performance goals related to: (i) achieving a targeted reduction in the cost of parts replaced at install; (ii) achieving a specified reduction in the number of defects per system shipped in the fourth quarter of 2024; (iii) achieving unscheduled down time below a specified percentage at customers with service agreements with the Company; (iv) obtaining purchase orders for high energy systems at identified customers; (v) penetrating a new customer with one of our high current implanters; (vi) successfully closing a silicon carbide evaluation system at a named customer and verifying a specific performance enhancement at a customer site; (vii) obtaining purchase orders from two advanced logic customers; (viii) achieving technology feasibility milestones for two of three identified programs; (ix) releasing for sale two of four identified product upgrades; and (x) obtaining a purchase order or an evaluation agreement from either a new Japanese customer or for a new application at an existing Japanese customer.

Disclosure of customer names and exact financial and technical goals for these performance objectives would violate customer confidentiality agreements and provide sensitive information to the Company's competitors. The 2024 PRSU terms do not contemplate partial achievement of a goal. PRSUs that are earned through goal achievement are also subject to service vesting terms, in which 50% of the earned 2024 RSUs vest in 2025 and 50% in 2026.

In February 2025, the Compensation Committee determined that the Company met ten out of ten performance objectives, and accordingly, 150% of the 2024 PRSUs were earned and would vest in accordance with the two-year schedule for the NEOs, assuming continuation of employment.

## **Employment and Change of Control Agreements**

***Employment Agreement with Dr. Low.*** In 2023, the Committee approved an Employment Agreement with Dr. Low that became effective in May 2023, contemporaneously with his appointment as Chief Executive Officer. Dr. Low's Employment Agreement provides for his service as the Company's CEO through January 1 of the following year, and for successive one-year periods thereafter, if not terminated by either party on notice to the other by April 1 of the preceding year. This Employment Agreement sets a minimum base salary of \$633,000 beginning in 2024 and a cash incentive target of 100% of base pay. Dr. Low's Employment Agreement also provides for severance upon a qualifying termination of employment and for participation in the Company's equity compensation plans, the 401(k) savings plan and the welfare benefit plans that we sponsor. Dr. Low's base salary and incentive opportunities may be subject to future adjustment by the Board, but not below the minimum levels in his Employment Agreement, unless mutually agreed. For the amounts due if Dr. Low had been

terminated on December 31, 2024, see “*Payments on Termination or Change of Control—Employment Agreement with Dr. Low*” below.

No changes were made to Dr. Low’s Employment Agreement in 2024.

**Executive Separation Pay Agreements.** The Company has Executive Separation Pay Agreements with each of the NEOs, other than Dr. Low, entered into when the person became an executive officer, on new hire or promotion. These agreements provide that in the event of a termination without cause occurring after the executive’s first anniversary of employment, the executive will continue to receive base salary for 12 months. If the NEO elects to continue health coverage under COBRA, the Company will waive 12 months of COBRA premiums. In addition, the Company will provide transition support having a value of \$15,000. These agreements auto-renew for each calendar year unless not later than April 1 of the preceding year, the Company or the executive had given notice not to extend the term. No change was made to the agreements with any of the NEOs in 2024. For the amounts due if each of the executive officers had been terminated on December 31, 2024, see “*Payments on Termination or Change of Control—Executive Officer Separation Pay Agreements*” below.

**Change of Control Agreements.** Each of the NEOs has a double-trigger Change of Control Agreement, having the benefits shown in the table below. These agreements do not provide any indemnification for the “Golden Parachute” excise taxes under Sections 280G and 4999 of the Internal Revenue Code. If a Change of Control Agreement applies, the NEO will receive the greater of the change of control payout or the payout under the Executive Separation Pay Agreement (or in the case of Dr. Low, under his Employment Agreement). These agreements auto-renew for each calendar year unless not later than April 1 of the preceding year, the Company or the executive had given notice not to extend the term. No change was made to these agreements in 2024. See “*Payments on Termination or Change of Control—Change of Control Agreements*” below.

#### **Other Compensation Components**

The Company has entered into Indemnification Agreements with each of its executive officers, which are in the same form as the Indemnification Agreements with each of the Company’s non-employee directors. Axcelis’ Indemnification Agreements are intended to provide protection from legal liability arising from the individual’s service as an executive to the extent typically provided by U.S. public companies. The Company indemnifies its executive officers to the fullest extent permitted by law with respect to his or her status or activities as an executive or other fiduciary of Axcelis, its subsidiaries and any other entities or committees on which the executive has been asked by the Company to serve, against all judgments, fines, amounts paid in settlement, and all reasonably incurred expenses. These Indemnification Agreements supplement the indemnification provisions in the Company’s Restated Certificate of Incorporation. As required in the Indemnification Agreements, the Company purchases director and officer liability insurance that would reimburse the Company for costs incurred under these Indemnification Agreements and for certain third party liabilities. In addition, the Company maintains “Side A” director and officer liability insurance which is for the exclusive benefit of the directors and officers, permitting direct reimbursement from the insurer if the Company was unable or unwilling to provide indemnification due to a lack of funds or other issue. The adequacy of our director and officer liability insurance coverage is reviewed, and adjusted if needed, on an annual basis.

The Company maintains no executive perquisites. Executives are entitled to service awards under a recognition program in which all employees participate, that provides gift certificates to employees on each five year work anniversary. The value of these service awards increases by tenure from \$100 to \$425, after tax, without regard to position.

Executives may elect to make contributions to a retirement account in the Company’s IRC Section 401(k) plan on the same basis as Company employees generally. For 2024, the Company

made a matching contribution to the 401(k) plan at the rate of 50% of the employee's pre-tax contributions up to the first 6% of eligible compensation contributed to the plan. Employer contributions to NEOs participating in the 401(k) plan are included in the "All other compensation" column in the Summary Compensation Table. The Company does not maintain for the NEOs either a defined benefit pension plan or any non-qualified deferred compensation plan.

NEOs may also participate in the Company's medical insurance offerings on the same basis as full time Company employees generally by electing to make payroll deductions designed to cover approximately 25% or 30% of the cost of those programs (the Company covers the remaining cost). The Company also offers dental insurance, and provides life, accidental death and dismemberment and disability insurance for all employees, with the opportunity to increase coverage levels via payroll deductions. Emergency medical coverage is included in the Company's standard business travel insurance, which would be secondary to an employee's regular medical coverage.

Finally, the Company maintains the 2020 Employee Stock Purchase Plan, a voluntary IRC Section 423 plan in which employees may purchase Axcelis shares through salary deductions. In 2024, none of the NEOs participated in our 2020 Employee Stock Purchase Plan.

### **Executive Compensation Clawback Policy**

In 2023, the Board of Directors adopted an updated Executive Compensation Clawback Policy (replacing the policy adopted in 2014) which requires executive officers to repay to the Company any "Excess Compensation" received during the three completed fiscal years preceding the date the Company is required to prepare an "Accounting Restatement." Such capitalized terms are defined in the policy and comply with the requirements of Section 10D of the Securities Exchange Act of 1934, the rules promulgated thereunder by the SEC, and the listing standards of Nasdaq Section 954. In addition, the Company's policy authorizes a clawback of 12 months of incentive compensation (including both cash and equity awards) in the event the officer violates an agreement with the Company or any policy of the Company (which would include violations of the Company's Ethics policy or any applicable law).

### **Risk Assessment of Compensation Policies and Practices**

In 2024, the Company determined, in its reasonable business judgment, that its compensation policies and practices for its employees, including the NEOs, do not give rise to risks that are reasonably likely to have a material adverse effect on the Company. In reaching this determination, management engaged in (i) a review of the Company's compensation programs, policies and practices, (ii) identification of risks, if any, related to the programs, policies and practices, (iii) consideration of the materiality of a potentially risk-related reward to the total compensation provided to the individual, and (iv) identification of those aspects of the program and its oversight that provide risk control. Although all compensation programs were considered, management's review focused on the programs with variability of payout and in which there is a potential for the participant to directly affect payout.

Based on this review, management determined that the compensation policies and practices for Axcelis' employees do not create risks that are reasonably likely to have a material adverse effect on the Company, principally because:

- (1) The structure of our executive compensation program includes a balanced mix of cash and equity compensation; and
- (2) Our incentive compensation programs are subject to appropriate risk controls in their design and oversight:

- The Company's internal controls and risk management practices restrict risk-taking that is not consistent with risks inherent in the Company's strategic plan, as approved by the Board;
- Payment of small bonuses for extraordinary effort or for achieving individual or team goals are subject to approval by direct managers, and representatives of human resources and finance departments, and, for higher amounts, a representative of senior management;
- Payment of sales incentive compensation is made pursuant to written plans, subject to calculation and approval by senior management and the finance department;
- Payouts under the Company's European and Asian annual cash incentive plan are in the discretion of senior management, which considers both qualitative and quantitative assessments of performance; and
- Payouts under the Company's U.S. annual cash incentive plan and achievement of performance goals related to executive RSUs are in the discretion of the Compensation Committee, which considers both qualitative and quantitative assessments of performance.

### **Tax Implications**

Section 162(m) of the Internal Revenue Code generally disallows a federal tax deduction to public companies for compensation in any tax year to specified executive officers to the extent that the compensation to such executive officer exceeds \$1 million. Prior to 2018, certain "qualified performance-based compensation" was exempted from the deductibility limitation under Section 162(m) of the Internal Revenue Code. Beginning in 2018, under the Tax Cuts and Jobs Act of 2017, performance-based compensation that was not under a written binding contract in effect at November 2, 2017 will not be exempted from the \$1 million deduction limitation.

The Compensation Committee believes that tax deductibility is only one of several relevant considerations in setting compensation, and that the tax deduction limitation should not be permitted to compromise the Compensation Committee's ability to structure its compensation to provide benefits to the Company that outweigh the potential benefit of the tax deduction. Accordingly, the Committee may approve compensation that is not deductible for federal income tax purposes in the future.

### **2024 Compensation Committee Report**

The Compensation Committee has reviewed and discussed the foregoing Compensation Discussion and Analysis with management and based on this review and discussion, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement.

By the Compensation  
Committee,

Jorge Titinger, Chairperson  
Gregory B. Graves  
Necip Sayiner  
Dipti Vachani

## 2024 Summary Compensation Table

Name and Principal Position	Year	Salary (\$)(1)	Stock awards (\$)(2)	Non-equity incentive plan compensation (\$)(3)	All other compensation (\$)(4)	Total (\$)
<i>Executive Officers Serving at December 31, 2024</i>						
<b>Russell J. Low, President and Chief Executive Officer (5)</b>	2024	\$633,000	\$3,217,435	\$431,706	\$11,367	\$4,293,508
	2023	\$530,102	\$3,076,368	\$519,068	\$9,900	\$4,135,438
	2022	\$372,692	\$663,254	\$416,707	\$9,150	\$1,461,804
<b>James G. Coogan, Executive Vice President and Chief Financial Officer (6)</b>	2024	\$485,000	\$1,072,478	\$231,539	\$11,367	\$1,800,384
	2023	\$123,115	\$960,528	\$382,107	\$2,238	\$1,467,989
<b>Gregory F. Redinbo, Executive Vice President, Marketing and Applications (7)</b>	2024	\$325,000	\$643,532	\$132,990	\$4,331	\$1,105,854
	2023	\$310,000	\$615,376	\$209,343	\$3,400	\$1,138,119
	2022	\$277,796	\$319,368	\$310,604	\$9,150	\$916,919
<b>Christopher J. Tatnall, Executive Vice President, Global Customer Operations (8)</b>	2024	\$325,000	\$643,532	\$132,990	\$11,231	\$1,112,754
	2023	\$310,808	\$367,365	\$209,888	\$9,900	\$897,961
<b>Gerald M. Blumenstock, Executive Vice President, Research, Development and Engineering (9)</b>	2024	\$325,000	\$643,532	\$132,990	\$11,231	\$1,112,754
	2023	\$181,250	\$714,997	\$219,473	\$81,563	\$1,197,282

- (1) Base salary is set by the Compensation Committee, based on benchmarking using our peer group or survey data. Other than Dr. Low, the named executive officers (NEOs) do not have employment agreements addressing base salary. Dr. Low's employment agreement is described under the heading "Payments on Termination or Change in Control" in this proxy statement.
- (2) Represents the grant date fair value of RSU awards received by the NEO in the year indicated, determined in accordance with the assumptions described in the Stock Award Plans and Stock-Based Compensation note to the Company's Financial Statements included in the Annual Report on Form 10-K filed with the Securities and Exchange Commission for the respective year.
- (3) Non-equity incentive plan compensation represents amounts that were paid under the Axcelis Management Incentive Plans for the respective year, as described in the "Compensation Discussion and Analysis" in this proxy statement and in the proxy statement for our 2024 and 2023 Annual Meetings, respectively.
- (4) The amounts in this column represent (A) the amount paid in cash as a matching contribution to Axcelis' 401(k) plan in respect of contributions made by the NEO during the year; (B) beginning in 2024, the dollar value of premiums paid by the Company for life insurance covering the NEO for the year; (C) the value of service awards received in the year, under a recognition program in which gift certificates are given to employees on each five year work anniversary, increasing in value from \$100 to \$425, after tax; and (D) in the case of Mr. Blumenstock, a sign on relocation bonus of \$75,000 in 2023.

- (5) Dr. Low became President and Chief Executive Officer on May 11, 2023, having served as an executive officer since 2016.
- (6) Mr. Coogan became EVP and Chief Financial Officer in September 2023, when he was first employed by the Company.
- (7) Dr. Redinbo became EVP, Marketing and Applications on September 6, 2022. Prior to that date, Dr. Redinbo served in a non-executive officer role beginning with his first employment by the Company in May 2021.
- (8) Dr. Tatnall became EVP, Global Customer Operations on September 1, 2023. Prior to that date, Dr. Tatnall served in a non-executive officer role beginning with his first employment by the Company in March 2022.
- (9) Mr. Blumenstock became EVP, Research, Development & Engineering on June 12, 2023, on which date he was first employed by the Company.

## Grants of Plan Based Awards in Fiscal 2024

Name	Grant Date(2)	Date of Compensation Committee Approval	Estimated Possible Payouts under Non-Equity Incentive Plan Awards(1)		Estimated Possible Payouts under Equity Incentive Plan Awards(2)			All Other Stock Awards: Number of Shares of Stock or Units (#)(3)	Grant Date Fair Value of Stock and Option Awards(4)
			Target (\$)	Maximum (\$)	Threshold (#)	Target (#)	Maximum (#)		
<b>Russell J. Low</b>			\$633,000	\$1,266,000					
	5/15/2024	2/29/2024					14,244	\$1,608,717	
	5/15/2024	2/29/2024			1,781	14,244	21,366	\$1,608,717	
<b>James G. Coogan</b>			\$339,500	\$ 679,000					
	5/15/2024	2/29/2024					4,748	\$ —	
	5/15/2024				594	4,748	7,122		
<b>Gregory F. Redinbo</b>			\$195,000	\$ 390,000					
	5/15/2024	2/29/2024					2,849	\$ 321,766	
	5/15/2024	2/29/2024			356	2,849	4,274	\$ 321,766	
<b>Christopher J. Tatnall</b>			\$195,000	\$ 390,000					
	5/15/2024	2/29/2024					2,849	\$ 321,766	
	5/15/2024	2/29/2024			356	2,849	4,274	\$ 321,766	
<b>Gerald M. Blumenstock</b>			\$195,000	\$ 390,000					
	5/15/2024	2/29/2024					2,849	\$ 321,766	
	5/15/2024	2/29/2024			356	2,849	4,274	\$ 321,766	

- (1) These target and maximum payouts are under the 2024 Axcelis Management Incentive Plan, discussed above in “2024 Compensation Discussion and Analysis—Annual Cash Incentive—2024 Axcelis Management Incentive Plan.” Based on the achievement of financial metrics for 2024, a payout to the NEOs was made under the 2024 AMI, as shown in the Summary Compensation Table.
- (2) The NEOs were granted performance based RSUs under the Company’s 2012 EIP effective May 15, 2024, to be earned based on the achievement of performance goals tied to long-term objectives. The threshold number of shares that could be earned was 12.5%, if only one out of eight performance goals at that level was achieved. There were two additional performance goals weighted 25% each, so that up to 150% of the target shares could be earned, if all 10 performance goals were met. Unearned performance based RSUs are forfeited. As discussed above, 150% of the 2024 performance based RSUs were earned. 50% of the NEO’s earned shares vested on February 28, 2025, with the remainder to vest on February 28, 2026. Other than future services to the Company, no consideration was paid or will be due in order to acquire these RSUs. Unvested earned 2024 performance RSUs will be forfeited if the NEO’s employment terminates prior to vesting. See “Long-Term Equity Incentive Compensation—2024 Annual Equity Grants” in “2024 Compensation Discussion and Analysis” above.
- (3) The NEOs were granted service based RSUs under the Company’s 2012 Equity Incentive Plan effective on May 15, 2024, which vest as to 25% of such shares on the each of the first four anniversaries of the date of grant, assuming continuation of employment. Other than future services to the Company, no consideration was paid or will be due in order to acquire these RSUs. The 2024 service based RSUs will be forfeited if the NEO’s employment terminates prior to vesting. See “Long-Term Equity Incentive Compensation—2024 Annual Equity Grants” in “2024 Compensation Discussion and Analysis” above.
- (4) Represents the grant date fair value of the equity awards received by the NEO in 2024, determined in accordance with the assumptions described in the Stock Award Plans and Stock Based Compensation note to the Company’s 2024 Financial Statements included in the Annual Report on Form 10-K filed with the SEC.

## Pay Versus Performance

*Note: In accordance with an instruction to the SEC regulation under which this Pay Versus Performance information is provided (Regulation S-K, Item 407(v)), this Pay Versus Performance information shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended. Specifically, this Pay Versus Performance information is not included in the executive compensation information incorporated by reference into Part III of the Company's Annual Report on Form 10-K.*

The Pay Versus Performance table below compares the total compensation amounts shown in the Summary Compensation Table in this and our prior four proxy statements to compensation “actually paid” to Dr. Low, who served as our CEO and principal executive officer (“PEO”) in 2024. The table also provides the same information as an average for the non-CEO NEOs specified in this proxy statement for 2024; the non-CEO NEOs named in our 2023 proxy statement for 2023; and the non-CEO NEOs named in our 2022 proxy statement for 2022, 2021 and 2020. The “actually paid” amounts in the Pay Versus Performance table reflect a re-valuation of equity awards granted to our PEO and other NEOs. SEC regulations instruct us to back out the grant date fair value of equity awards that is used in the Summary Compensation Table and replace it with values for unvested equity awards at each year end and values for shares on each vest date. The “actually paid” amounts also reflect the achievement of specific operational goals on the PRSUs granted to executives, which, in 2020, 2021, 2022, 2023 and 2024 increased the number of shares subject to those PRSUs. Accordingly, the “actually paid” compensation is an alternative way of calculating the value for executive equity awards that uses the stock price at year end for unvested grants and at vest dates for those that vest in the year, instead of the stock price at grant for only those awards newly granted in the year. For employees that have served for more than the current year, the “actually paid” values will almost always be higher because they include values for all prior grants, not just the current year. The Summary Compensation Table already incorporates the value of the cash incentive paid for each year, so that performance-related compensation component is unchanged in the “actually paid” amounts in the table.

Year for PEO (a)(1)(b)	Summary Compensation Table Total (a)(1)(b)	Compensation Actually Paid (“CAP”) to PEO (c)(2)	Average Summary Table Total for Non-PEO NEOs (d)	Average CAP to Non-PEO NEOs (e)(3)	Value of Initial Fixed \$100 Investment made on December 31, 2019, based on:			
					Total Shareholder Return (f)	Peer Group Total Shareholder Return (g)(3)	Net Income (h)	Revenues (i)
2024	\$4,293,508	\$1,618,794	\$1,282,936	\$ 742,827	\$289.92	\$269.24	\$201,000,000	\$1,017,900,000
2023	\$4,135,438	\$6,510,602	\$1,258,904	\$2,141,924	\$538.13	\$225.75	\$246,263,000	\$1,130,604,000
2022	\$1,461,805	\$1,751,594	\$1,463,285	\$1,728,963	\$329.34	\$137.05	\$183,100,000	\$ 920,000,000
2021	\$1,423,579	\$3,663,680	\$1,405,289	\$3,648,869	\$309.38	\$213.35	\$ 98,650,000	\$ 662,428,000
2020	\$1,307,974	\$1,582,284	\$1,356,639	\$1,620,922	\$120.83	\$151.14	\$ 49,982,000	\$ 474,560,000

- (1) The non-PEO NEOs reported for the year 2024 are the NEOs identified in this proxy statement, other than Dr. Low: James G. Coogan, Gregory F. Redinbo, Christopher J. Tatnall, and Gerald M. Blumenstock. The non-PEOs reported for the year 2023 are the NEOs identified in our 2024 proxy statement, other than Dr. Low and our former CEO: James G. Coogan, Kevin J. Brewer, Lynnette C. Fallon, Gregory F. Redinbo, and Gerald M. Blumenstock. The non-PEOs reported for the years 2022, 2021 and 2020 are the NEOs identified in our 2023 proxy statement (the first year for which this report was provided), other than our former CEO: Kevin J. Brewer, Russell J. Low, Lynnette C. Fallon, and Douglas A. Lawson.
- (2) In accordance with SEC rules, the following adjustments were made to Dr. Low's total compensation for each year to determine CAP:

Footnote (2) —Table 1				
(a)	Reported Summary Compensation Table Total for PEO (b)	Reported Value of Equity Awards (c)(i)	Equity Award Adjustments (d)(ii)	Compensation Actually Paid to PEO (e)
2024	\$4,293,508	\$3,217,435	\$ 542,721	\$1,618,794
2023	\$4,135,438	\$3,076,368	\$5,451,531	\$6,510,602
2022	\$1,461,805	\$ 663,254	\$ 953,044	\$1,751,594
2021	\$1,423,579	\$ 622,771	\$2,862,872	\$3,663,680
2020	\$1,307,974	\$ 593,410	\$ 867,720	\$1,582,284

- (i) The grant date fair value of equity awards in column (c) of Footnote (2) —Table 1 represents the total of the amounts reported in the “Stock Awards” and “Option Awards” columns in the Summary Compensation Table for the applicable year.
- (ii) The equity award adjustments in column (d) of Footnote (2) —Table 1 include the addition (or subtraction, as applicable) of the following: (1) the year-end fair value of any equity awards granted in the applicable year that are outstanding and unvested as of the end of the year; (2) the amount of change as of the end of the applicable year (from the end of the prior fiscal year) in fair value of any awards granted in prior years that are outstanding and unvested as of the end of the applicable year; and (3) for awards granted in prior years that vest in the applicable year, the amount equal to the change as of the vesting date (from the end of the prior fiscal year) in fair value. None of the years shown had any (A) awards granted and vested in same applicable year; (B) awards granted in prior years that were determined to fail to meet the applicable vesting conditions during the applicable year; or (C) dividends or other earnings paid on stock or option awards in the applicable year prior to the vesting date. The valuation assumptions used to calculate fair values did not materially differ from those disclosed at the time of grant. The amounts deducted or added in calculating the equity award adjustments are as follows:

Footnote (2) —Table 2				
Year (a)	Year End Fair Value of Equity Awards Granted in the Year (b)	Year over Year Change in Fair Value of Outstanding and Unvested Equity Awards at Year End (c)	Year over Year Change in Fair Value of Equity Awards Granted in Prior Years that Vested in the Year (d)	Total Equity Award Adjustments (e)
2024	\$2,254,775	\$(1,322,429)	\$ (389,625)	\$ 542,721
2023	\$3,662,744	\$ 785,807	\$ 1,002,980	\$5,451,531
2022	\$1,097,108	\$ 105,066	\$ (249,130)	\$ 953,044
2021	\$1,521,024	\$ 1,108,418	\$ 233,430	\$2,862,872
2020	\$ 734,698	\$ 115,682	\$ 17,340	\$ 867,720

- (3) In accordance with SEC rules, the following adjustments were made to average total compensation for the non-PEO NEOs as a group for each year to determine CAP, using the same methodology described above in Footnote 2:

Footnote (3) —Table 1				
(a)	Average Reported Summary Compensation Table Total for Non- PEO NEOs (b)	Average Reported Value of Equity Awards (c)(i)	Average Equity Award Adjustments (d)(ii)	Average Compensation Actually Paid to Non-PEO NEOs (e)
2024	\$1,282,936	\$750,769	\$ 178,699	\$ 742,827
2023	\$1,258,904	\$673,331	\$1,556,352	\$2,141,924
2022	\$1,463,285	\$639,377	\$ 905,055	\$1,728,963
2021	\$1,405,289	\$600,314	\$2,843,894	\$3,648,869
2020	\$1,356,639	\$600,125	\$ 864,408	\$1,620,922

- (i) The grant date fair value of equity awards in column (c) of Footnote (4) —Table 1 represents the average of the total of the amounts reported in the “Stock Awards” and “Option Awards” columns for each non-PEO NEO in the Summary Compensation Table for the applicable year.
- (ii) The amounts deducted or added in calculating the average equity award adjustments are as follows:

Footnote (3) —Table 2				
Year (a)	Average Year End Fair Value of Equity Awards Granted in the Year (b)	Year over Year Average Change in Fair Value of Outstanding and Unvested Equity Awards at Year End (c)	Year over Year Average Change in Fair Value of Equity Awards Granted in Prior Years that Vested in the Year (d)	Total Average Equity Award Adjustments (e)
2024	\$ 548,616	\$ (273,412)	\$ (96,504)	\$ 178,699
2023	\$ 677,608	\$ 292,321	\$ 586,423	\$1,556,352
2022	\$1,057,612	\$ 103,466	\$ (256,024)	\$ 905,055
2021	\$1,466,176	\$ 1,138,403	\$ 239,315	\$2,843,894
2020	\$ 743,011	\$ 120,704	\$ 693	\$ 864,408

(4) The Peer Group used in this chart is the Philadelphia Semiconductor Index (SOXX) which is also used in the Company's stock performance graph provided under Item 201(e) of Regulation S-K in our annual report to stockholders.

In 2024, as shown in the Pay Versus Performance table, the compensation “actually paid” (“CAP”) to our CEO and average CAP to our other NEOs is lower than the respective amounts shown in the Summary Compensation Table, primarily due to the fact that the price of the common stock was generally lower during 2024 than at year end 2023. Accordingly, the value of our equity awards at vest and the value of unvested awards at year end 2024 was generally lower than the value at grant shown in the Summary Compensation Table. Despite the lower common stock prices in 2024, the Company still outperformed on the five year (2019-2024) cumulative shareholder return in comparison to that of the SOXX Index. Axcelis' 2024 net income and revenue, as shown in the Pay Versus Performance table, were slightly below that of 2023.

The three most important financial measures that impact realized executive compensation at Axcelis are:

<b>Revenues</b>
<b>Operating Profit</b>
<b>Gross Margin</b>

These three measures are the metrics used in the Axcelis Management Incentive Program, our annual cash incentive program, discussed in the Compensation Discussion and Analysis above. We believe these measures also have a significant influence on our stock price (which is the main differential between the Summary Compensation Table amounts and the “actually paid” amounts in the Pay Versus Performance Table), along with other measures considered by investors, such as net income and earnings per share.

### Outstanding Equity Awards at Fiscal 2024 Year End

Name	Stock Awards			
	Number of Shares or Units of Stock that Have Not Vested #(1)	Market Value of Shares or Units of Stock that Have Not Vested \$(2)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that Have Not Vested #(3)	Equity Incentive Plan Awards: Market Value of Unearned Shares, Units or Other Rights that Have Not Vested \$(2)
Russell J. Low	36,351	\$ 2,539,844	14,244	\$ 995,228
James G. Coogan	9,166	\$ 640,428	4,748	\$ 331,743
Gregory F. Redinbo	11,473	\$ 801,619	2,849	\$ 199,060
Christopher J. Tatnall	8,493	\$ 593,406	2,849	\$ 199,060
Gerald M. Blumenstock	5,986	\$ 418,242	2,849	\$ 199,060

- (1) None of the NEOs held options to acquire securities of the Company stock at December 31, 2024. All of the NEOs were granted service based RSUs under the Company's 2012 EIP in 2024 and in prior years. All of the service based RSUs granted to NEOs vest as to 25% of the shares on each of the first four anniversaries of the date of grant, assuming continuation of employment. In addition, Dr. Low and Dr. Redinbo were granted Performance RSUs ("PRSUs") on May 15, 2023 that were subject to the achievement of performance goals, 135% of which were earned. Half of these 2023 PRSUs vested in February 2024 and the remaining 50% of the 2023 PRSUs vested on February 28, 2025, given the executives' continuation of employment through that date.
- (2) The market value of the unvested and unearned RSUs held by the executives at December 31, 2024 was determined by multiplying the number of shares by the closing price on December 31, 2024 (the last trading day of the year) of \$69.87.
- (3) Each of the NEOs were granted PRSUs under the Company's 2012 EIP on May 15, 2024 that could be earned based on the achievement of 10 performance goals, two of which were weighted 25% each and eight of which were weighted 12.5% each. The shares shown in the chart represent the target shares for these grants, assuming the achievement of the performance goals totaling 100%. In February 2025, the Compensation Committee determined that 150% of the 2024 performance RSUs were earned. In accordance with the terms of the grant, 50% of the earned 2024 PRSUs vested on February 28, 2025. The unvested earned 2024 PRSUs will vest on February 28, 2026, assuming continuation of employment. See "Long-Term Equity Incentive Compensation—2024 Equity Grants" in "2024 Compensation Discussion and Analysis" above.

### Option Exercises and Stock Vested During Fiscal 2024

Name	Stock Awards(1)	
	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting \$(2)
<b>Russell J. Low</b>	21,751	\$2,431,254
<b>James G. Coogan</b>	1,473	\$ 140,892
<b>Gregory F. Redinbo</b>	6,074	\$ 735,545
<b>Christopher J. Tatnall</b>	2,506	\$ 251,552
<b>Gerald M. Blumenstock</b>	1,046	\$ 144,369

- (1) None of the NEOs exercised options to acquire securities of the Company during the year ended December 31, 2024.
- (2) Represents the closing market price of Axcelis common stock on the date of vesting (or if the vesting date is not a trading day, on the next trading day after the vesting date) multiplied by the number of shares vested. A portion of the vested shares were withheld for taxes and not issued to the NEO. The actual amount received by the NEO on the sale of any of the shares acquired on vesting will depend on the market values of the Company's common stock at the time the NEO disposes of such shares.

### Payments on Termination or Change of Control

**Employment Agreement with Dr. Low.** Under his Employment Agreement, in the event Dr. Low's employment is terminated either (i) by the Company for reasons other than cause, death, disability or (ii) by a voluntary resignation by Dr. Low with "good reason" (as defined in the Employment Agreement), he is entitled to full acceleration of vesting of options and other equity rights and a cash separation payment. The cash separation payment will equal 24 months of his monthly base salary and a monthly annual bonus amount, determined in accordance with the agreement. For this purpose, Dr. Low's monthly bonus compensation equals his then effective annual base salary, divided by 12 and multiplied by the greater of (a) the percentage of his annual base salary that he actually received as a bonus for the prior fiscal year or (b) 25% of his annual base salary. Under the Employment Agreement, Dr. Low is also entitled to up to 18 months of Company-paid COBRA premiums. The following table sets forth the separation pay that would have been due to Dr. Low under his Employment Agreement if a qualifying termination occurred on December 31, 2024:

Estimated Payments under the Low Employment Agreement if due at December 31, 2024			
	Value of accelerated vesting on equity awards (2)	18 months of COBRA premiums for health coverage (3)	Total
<b>Lump sum cash payment (1)</b>			
\$2,690,883	\$2,046,338	\$ 56,534	\$4,793,755

- (1) This amount represents 24 months of Dr. Low's base salary at the highest rate in effect in the year preceding December 31, 2024 plus 24 months of a monthly bonus amount as specified in Dr. Low's Employment Agreement. The monthly rate of annual base salary (\$52,750) and monthly bonus amount (\$59,370) were calculated using his annual base salary of \$633,000 in effect at December 31, 2024, and the 2023 Axcelis Management Incentive Plan bonus percentage of 112.55%, as specified in Dr. Low's Employment Agreement. The lump sum cash payment above would be due within 30 days of termination.

- (2) This amount reflects a valuation of the acceleration of Dr. Low's outstanding equity awards using the methodology prescribed under IRC Section 280G, which provides for an excise tax on certain change of control payments. This valuation is based on the closing price of our common stock on the last trading day of 2024 (\$69.87). For the service based RSUs, the value received is reduced by a value for the forgiven service as prescribed by the calculation methodology in IRC Reg §1.280G Q&A 24(c). The actual amount received by Dr. Low on the sale of shares issued on accelerated RSUs will depend on the market values at the time of such transactions.
- (3) Dr. Low's employment agreement provides that the Company will pay for up to 18 months of COBRA premiums. This amount represents 18 months of COBRA premiums in effect during 2025 for Dr. Low's coverage elections. Actual COBRA rates will change on January 1, 2026.

**Executive Officer Separation Pay Agreements.** In May 2019, the Compensation Committee approved the execution of Executive Separation Pay Agreements with each of the NEOs other than the CEO (the "Executive Separation Pay Agreements"). Each of the NEOs in office in 2019 received an agreement at that time, and each of Dr. Redinbo and Dr. Tatnall received an agreement on his promotion to an executive officer, in 2022 and 2023, respectively. The Company provided each of Mr. Blumenstock and Mr. Coogan with an Executive Separation Pay Agreement on commencement of employment with the Company in 2023. These Executive Separation Pay Agreements provide that in the event of a termination without cause, the executive will continue to receive base salary for 12 months. If the NEO elects to continue health coverage under COBRA, the Company will waive 12 months of COBRA premiums. In addition, the Company will provide transition support having a value of \$15,000. The executive must have been employed by the Company for one year or more at the time of termination to be eligible for benefits under the agreement.

The NEO must provide a release of claims in order to receive the separation pay. The NEO will not be eligible to receive the severance payments and benefits described in the agreement in the event that (i) the executive's employment is terminated by the Company for cause or due to executive's death or disability, or (ii) the executive resigns from employment, regardless of the reason(s) for such resignation. The following table sets forth the separation pay that would have been due to these NEOs under their respective Executive Separation Pay Agreements if a qualifying termination occurred on December 31, 2024.

**Estimated Payments under the Executive Separation Pay Agreements if due at December 31, 2024**

	Cash Separation Pay (1)	Value of transition assistance (2)	12 months of COBRA premiums for health coverage (3)	Total
James G. Coogan	\$ 485,000	\$ 15,000	\$ 37,689	\$537,689
Gregory F. Redinbo	\$ 325,000	\$ 15,000	\$ 37,689	\$377,689
Christopher J. Tatnall	\$ 325,000	\$ 15,000	\$ 37,689	\$377,689
Gerald M. Blumenstock	\$ 325,000	\$ 15,000	\$ 26,886	\$366,886

- (1) This amount represents 12 months of the NEO's annual base salary in effect on December 31, 2024. This amount would be paid in 26 bi-weekly installments.

- (2) In the event separation pay is due, the Company will provide transition assistance to the NEO having a value of \$15,000. The Company will work with the executive to provide assistance that meets the needs of the executive and will offer support in accordance with the Company's practices for executive terminations generally.
- (3) The Executive Separation Pay Agreements provide that the Company will pay for up to 12 months of COBRA premiums. This amount represents 12 months of 2025 COBRA premiums for the executive's coverage elections for 2025. Actual COBRA rates will change on January 1, 2026.

**Change of Control Agreements.** Each of the NEOs is a party to a Change of Control Agreement with the Company. None of the currently effective agreements have an indemnification or gross up for excise taxes. This is consistent with our 2014 governance policy against any new commitments to reimburse excise taxes due on change of control payouts under Sections 280G and 4999 of the Internal Revenue Code. See "Corporate Governance — Governance Policies," above.

The Change of Control Agreements provide that the NEOs are entitled to severance compensation in the event there is both (1) a change in control and (2) a termination of employment within a period of time following the change in control either (A) by the Company for reasons other than cause, death, disability or (B) due to a voluntary resignation by the executive with good reason. "Good reason" includes an adverse change in the executive's role or position; a reduction in the executive's base salary; or a material change in geographic location of the executive's job. A "change of control" is defined in the agreement and covers a number of events, including a merger or acquisition involving the Company in which the persons holding the Company's shares immediately prior to the transaction hold less than a majority of the shares outstanding after the transaction. Under the Change of Control Agreements, severance compensation consists of a cash payment equal to a multiple of the executive's annual base salary and annual bonus as of the date of termination. The multiple in Dr. Low's Change of Control Agreements is two, while the multiple in the other NEOs' Change of Control Agreements is 1.5.

The amounts that would have been due to each NEO under the Change of Control Agreements in effect at December 31, 2024, in the event that a change of control and termination occurred on that date, are set forth in the table below:

Estimated Payments under the Change of Control Agreements if due at December 31, 2024			
Name	Lump sum cash payment (1)	Value of accelerated vesting on equity awards (2)	Total
<b>Russell J. Low</b>	\$ 3,165,000	\$ 2,046,338	\$ 5,211,338
<b>James G. Coogan</b>	\$ 1,576,250	\$ 524,320	\$ 2,100,570
<b>Gregory F. Redinbo</b>	\$ 975,000	\$ 444,314	\$ 1,419,314
<b>Christopher J. Tatnall</b>	\$ 975,000	\$ 326,790	\$ 1,301,790
<b>Gerald M. Blumenstock</b>	\$ 975,000	\$ 312,445	\$ 1,287,445

- (1) This amount represents separation pay equal to (A) a multiple of (i) the executive's then current annual base salary plus (ii) a target bonus amount, and (B) the executive's target AMI for 2024, prorated for the months worked during the year. Since termination for all NEOs is assumed at year end, the 2024 AMI targets have not been prorated. The multiple is 2, in the case of Dr. Low, and 1.5, in the case of the other NEOs.
- (2) These amounts reflect a valuation of the acceleration of all of the NEO's outstanding unvested RSU awards using the value of the closing price of our common stock on the last trading day

of 2024 (\$69.87) and the methods prescribed by regulations under IRC Section 280G. For the service based RSUs, the value received is reduced by a value for the forgiven service as prescribed by the calculation methodology in IRC Reg §1.280G Q&A 24(c). The actual amount received by the NEO on the sale of shares from accelerated equity awards will depend on the market values at the time of the change of control. Depending on the terms of the transaction, some or all of the executive's unvested equity awards may vest without regard to the effect of the Change of Control Agreements, in accordance with the terms of our 2012 EIP.

- (3) The Change of Control Agreement with each NEO provides that the lump sum cash value should be reduced by an amount needed to avoid the excise tax due under IRC Section 4999, if that creates the best after-tax result for the executive. If the change of control occurred on December 31, 2024, Mr. Coogan and Mr. Blumenstock would be subject to excise taxes under IRC Section 4999 if they received the full payout in the table, for which they would be personally liable. In both the case of Mr. Coogan and Mr. Blumenstock, the amount of the excise tax due on the full payout is less than the amount the payout would need to be reduced to avoid the tax, so the amount in the table is the full payout without adjustment.

### **Ratio of CEO Pay to Median Employee Pay**

Dr. Low's total 2024 compensation was \$4,293,508, as determined for the purposes of the Summary Compensation Table above. This amount was approximately 51.3 times the total 2024 compensation of the median Axcelis employee selected in 2023, calculated on the same basis. We identified our 2023 median employee starting with the annual full-time rate of pay for all employees (excluding Dr. Low) on November 30, 2023. As appropriate, we reduced the pay of regular part-time employees to reflect their schedules. Since annual salary/full time rate was used as the selection factor, no adjustment was needed for newly hired full time employees in 2023. No adjustment was made for temporary leaves of absence in 2023. The 2023 median employee's 2024 compensation, calculated on the basis required for the Summary Compensation Table, was \$83,745.

Since other companies have different employee populations and compensation practices and may utilize different methodologies, exclusions, estimates, and assumptions in calculating their own pay ratios, the pay ratios reported by other companies may not be comparable to the pay ratio reported above.

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**Appendix to the Proxy Statement for the Annual Meeting of Stockholders to be Held on  
May 7, 2025**

**AXCELIS TECHNOLOGIES, INC.**

**2012 EQUITY INCENTIVE PLAN**

*As approved by the Stockholders on May 2, 2012, May 14, 2013, May 13, 2014, May 13, 2015, and May 4, 2016; as adjusted for the reverse stock split on June 30, 2016; as amended by the Board of Directors on February 15, 2017 (Stockholder approval not required); as approved by the Stockholders on May 16, 2017; as amended by the Board of Directors on February 13, 2018 (Stockholder approval not required); as amended by the Stockholders on May 14, 2019; as amended by the Board of Directors on August 11, 2022 (Stockholder approval not required); and as amended by the Board of Directors on November 13, 2024 (subject to Stockholder approval for the share reserve increase in Section 4(a), with Stockholder approval not required for approved amendments to Sections 4(a)(v), 5(a), and 5(b)(iv).)*

**1. Purpose.**

The purpose of the Axcelis Technologies, Inc. 2012 Equity Incentive Plan (the "Plan") is to attract and retain persons who are expected to make important contributions to the Company and its Affiliates, to provide an incentive for them to achieve the Company's goals, and to enable them to participate in the growth of the Company by granting Awards with respect to the Company's Common Stock. Certain capitalized terms used herein are defined in Section 7 below.

**2. Administration.**

The Plan shall be administered by the Committee; provided, that the Board may in any instance perform any of the functions of the Committee hereunder. The Committee shall have authority to adopt, alter and repeal such administrative rules, guidelines and practices governing the operation of the Plan as it shall from time to time consider advisable, and to interpret the provisions hereof in its discretion. The Committee's determinations hereunder shall be final and binding. The Committee may, subject to applicable law, delegate to one or more Executive Officers of the Company the power to make Awards to Participants who are not Reporting Persons or Covered Employees and all determinations hereunder with respect thereto, provided that the Committee shall fix the maximum number of shares that may be subject to such Awards.

**3. Eligibility.**

All directors and all employees and consultants of the Company or any Affiliate capable of contributing to the successful performance of the Company, other than any person who has irrevocably elected not to be eligible, are eligible to be Participants in the Plan.

**4. Stock Available for Awards.**

(a) *Amount.* Subject to adjustment under subsection 4(b), up to an aggregate of 10,762,500 shares of Common Stock may be issued pursuant to Awards, including Incentive Stock Options, under the Plan. For the purposes of counting shares hereunder:

- i. The number of shares issued as, or upon settlement of, any Award other than an Option or Stock Appreciation Right shall be multiplied by 1.5;
- ii. Outstanding shares tendered by the Participant to pay for the exercise of an Option or Stock Appreciation Right, shares repurchased in the open market by the Company, and shares that are withheld by the Company to satisfy the exercise or tax withholding obligation upon exercise or vesting of an Award may not be netted out against shares of Common Stock issued pursuant to Awards hereunder;

iii. Shares subject to any Award granted under this Plan that are not issued because the Award expires, is terminated unexercised or is forfeited, in whole or in part, may be subject to new Awards without being deemed to exceed such maximum amount;

iv. Shares that are not issued under an award that is outstanding under the 2000 Stock Plan as of May 2, 2012 because such award expires, is terminated unexercised or is forfeited may be subject to new Awards under this Plan (other than Incentive Stock Options), without being deemed to exceed such maximum amount;

v. Shares subject to any Award granted under this Plan that are not issued because the Committee has permitted the minimum tax obligations required by law to be withheld in respect of Awards to be paid in whole or in part by shares retained from the Award creating the tax obligation, as contemplated by Section 6(a), may not be subject to new Awards under this Plan; and

vi. Shares issued under this Plan as a result of the assumption or substitution of outstanding grants from an acquired company shall not reduce the number of shares available for issuance under the Plan

Shares issued under the Plan may consist of authorized but unissued shares or treasury shares

(b) *Adjustments.* Upon any equity restructuring, whether a stock dividend, recapitalization, split-up or combination of shares, or otherwise, the number of shares in respect of which Awards may be made under the Plan, the number of shares subject to outstanding Awards, the exercise, purchase or conversion price with respect to any Award, and the limit on individual grants in subsection 5(c) shall be proportionately adjusted, provided that the number of shares subject to any Award shall always be a whole number. In the event the Committee determines that any other reorganization, recapitalization, merger, spin-off or other corporate transaction affects the Common Stock such that an adjustment is required in order to preserve the benefits intended to be provided by the Plan, the Committee shall equitably adjust any or all of the number and kind of shares in respect of which Awards may be made under the Plan, the number and kind of shares subject to outstanding Awards, the exercise, purchase or conversion price with respect to any Award, and the limit on individual grants in subsection 5(c), provided that the number of shares subject to any Award shall always be a whole number. If considered appropriate, the Committee may make provision for a cash payment with respect to all or part of an outstanding Award instead of or in addition to any such adjustment. Any adjustment made pursuant to this subsection shall be subject, in the case of Incentive Stock Options, to any limitation required under the Code.

##### 5. *Awards under the Plan.*

(a) *Types of Awards.* The Committee may grant Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Stock Equivalents, and Awards of shares of Common Stock, subject to the provisions of Section 5(b), including the minimum vesting provisions of Section 5(b)(iv). The effectiveness of any such grant may be conditioned on the passage of time, the achievement of any Performance Goals, or the happening of any other event.

##### (b) *Terms and Conditions of Awards.*

(i) *Participants; Terms.* The Committee shall select the Participants to receive Awards and determine the terms and conditions of each Award. Without limiting the foregoing but subject to the other provisions of the Plan and applicable law, the Committee shall determine (A) the number of shares of Common Stock subject to each Award or the manner in which such number shall be determined, (B) the price, if any, a Participant shall pay to receive or exercise an Award or the manner in which such price shall be determined, (C) the time or times when an Award may vest or be exercised, settled, or transferred, (D) any

Performance Goals, restrictions or other conditions to vesting, exercise, settlement, or transferability of an Award, (E) whether an Award may be settled in the form of cash, Common Stock or other securities of the Company, Awards or other property, and the manner of calculating the amount or value thereof, (F) the duration of any Restricted Period or any other circumstances in which an Award may be forfeited to the Company, (G) the effect on an Award of the disability, death, retirement or other termination of employment or other service of a Participant, and (H) the extent to which, and the period during which, the Participant or the Participant's legal representative, guardian or Designated Beneficiary may receive payment of an Award or exercise rights thereunder. Except as otherwise provided hereby or in a particular Award, any determination or action with respect to an Award may be made or taken by the Committee at the time of grant or at any time thereafter.

(ii) *Options and Stock Appreciation Rights.* Incentive Stock Options may only be granted to persons eligible to receive such Options under the Code. The exercise price for any Option or Stock Appreciation Right shall not be less than 100% of the Fair Market Value of the Common Stock on the Date of Grant; provided that Options granted in substitution for options granted by a former employer to persons who become eligible to receive Awards hereunder as a result of a transaction described in Section 424(a) of the Code may, consistent with such Section, have a lower exercise price. No Option or Stock Appreciation Right shall have a term longer than seven (7) years. No Incentive Stock Option may be granted more than ten years after the Effective Date. The Committee shall determine the manner of calculating the excess in value of the shares of Common Stock over the exercise price of a Stock Appreciation Right.

(iii) *Restricted Stock and Restricted Stock Units.* Shares of Restricted Stock and shares subject to Restricted Stock Units may not be sold, assigned, transferred, pledged or otherwise encumbered, except as permitted by the Committee, during the applicable Restricted Period. Restricted Stock Units may be settled in shares of Common Stock or cash as determined by the Committee.

(iv) *Minimum Vesting Requirements.* Notwithstanding Sections 5(b)(i) or Section 6(e), with respect to Awards to any grant recipient:

(A) the first vesting, settlement, or lapse of forfeiture restrictions that is solely based on continued employment, service or the passage of time shall occur not sooner than one year after the date of grant; and

(B) in the case of employee grant recipients, the completion of vesting, settlement, or lapse of forfeiture restrictions that is solely based on continued employment, service or the passage of time shall occur over not less than four years from the date of grant with respect to the full number of shares subject to such Award; and

(C) vesting, settlement, or lapse of forfeiture restrictions that is based on the achievement of Performance Goals shall occur based on a Performance Period of at least one year;

provided that the foregoing limitations shall not:

(1) apply to Awards under this Plan that do not exceed an aggregate of 5% of the Awards authorized by this Plan;

(2) apply to vesting, settlement, or lapse of forfeiture restrictions in connection with the termination of employment or other service of a Participant by the Company or due to the Participant's disability, death or retirement;

(3) preclude the Committee from exercising its discretion to accelerate the vesting of any Award upon a Transaction as contemplated by Section 5(b)(viii); or

(4) apply to Awards that are granted in exchange for (or in lieu of) the right to receive the payment of an equivalent amount of salary, bonus or other cash compensation, provided that such payment has been fully earned prior to the grant of such Awards.

(v) *Payment of Exercise Price.* The Committee shall determine the form of consideration and manner of payment of the exercise price, if any, of any Award. Without limiting the foregoing, the Committee may, subject to applicable law, permit such payment to be made in whole or in part in cash or by surrender of shares of Common Stock (which may be shares retained from the respective Award or any other Award) valued at their Fair Market Value on the date of surrender, or such other lawful consideration, including a payment commitment of a financial or brokerage institution, as the Committee may determine. The Company may accept, in lieu of actual delivery of stock certificates, an attestation by the Participant in form acceptable to the Committee that he or she owns of record the shares to be tendered free and clear of claims and other encumbrances.

(vi) *Dividends.* In the discretion of the Committee, any Award may provide that dividends or dividend equivalents on shares of Common Stock underlying the Award may be credited to the Participant prior to the issuance of such shares of Common Stock upon vesting, or upon vesting and exercise, if applicable. However, such dividends or dividend equivalents may be paid to the Participant (in cash, in shares of Common Stock, or in the form of Awards under the Plan, as specified by the Committee) with or without interest as determined by the Committee only if, when and to the extent such Award vests and shares of Common Stock are issued upon vesting or upon vesting and exercise, if applicable. The value of dividends or other distributions credited with respect to shares of Common Stock underlying an Award that are not issued prior to the expiration of the Award shall be forfeited.

(vii) *Termination and Forfeiture.* The terms of any Award may include such continuing provisions for termination of the Award and/or forfeiture or recapture of any shares, cash or other property previously issued pursuant thereto relating to competition or other activity or circumstances detrimental to the Company as the Committee may determine to be in the Company's best interests. Without limiting the foregoing, the terms of any Award shall be subject to, and shall be deemed automatically amended to incorporate, any "clawback," "recapture," or similar policy adopted by the Company and in effect before or after the grant of such Award.

(viii) *Certain Extraordinary Transactions.* The Committee may in its discretion provide, at the time of grant or at any time thereafter, that in the case of any recapitalization, stock acquisition, merger, consolidation or other form of corporate transaction in which a company other than the Company is the surviving, continuing, successor or purchasing entity (a "Transaction"), the surviving, continuing, successor or purchasing entity or a parent or subsidiary of such entity may, without the consent of the Participant, assume the Company's rights and obligations under any Award or portion thereof outstanding immediately before the Transaction or substitute for any such outstanding Award or portion thereof a substantially equivalent award with respect to such entity's own stock or other property or cash, in either case with equitable adjustments in the number and type of shares or other assets subject to the Awards and the exercise, purchase or conversion price with respect to any Award, in light of the consideration received by the Company's stockholders in the Transaction. Any such Award that is not so assumed or substituted for shall terminate upon the consummation of such Transaction on such terms, if any, as the Committee shall provide. Notwithstanding the

foregoing, if the stockholders of the Company receive consideration that is all or predominantly cash in exchange for their shares of common Stock in a Transaction, then, in order to preserve the Participants' rights under outstanding Awards, the Committee shall, without the need for consent of any Participant, either (A) cause any unexercisable or unvested portion of an Award outstanding immediately before the Transaction to become fully exercisable and vested prior to such Transaction (but effective only on consummation of the Transaction), and any Options and Stock Appreciation Rights that have not been exercised as of the consummation of the Transaction shall thereupon terminate or (B) provide for payment to the Participant of cash, stock of another entity party to the Transaction, or other property with a Fair Market Value equal to the amount, if any, that would have been received upon the vesting, exercise, settlement, or transferability of the Award had any unexercisable or unvested portion of the Award become fully exercisable and vested and the Award been exercised or paid in connection with the Transaction, reduced (but not below zero) by the exercise or purchase price per share, if any, under such Award, whereupon the Award shall terminate. If any portion of such consideration may be received by Company's stockholders in the Transaction on a contingent or delayed basis, the Committee may, in its sole discretion, determine such Fair Market Value per share as of the time of the Transaction on the basis of the Committee's good faith estimate of the present value of the probable amount of future payment of such consideration.

In the event of a recapitalization, stock acquisition, merger, consolidation or other form of corporate transaction in which the Company is the surviving, continuing, successor or purchasing entity, the Committee may make equitable adjustments to outstanding Awards pursuant to Section 4(b).

(ix) *Documentation.* Each Award under the Plan shall be evidenced by documentation in the form prescribed from time to time by the Committee and delivered to or executed and delivered by the Participant specifying the terms and conditions of the Award and containing such other terms and conditions not inconsistent with the provisions hereof as the Committee considers necessary or advisable to achieve the purposes of the Plan or to comply with applicable law and accounting principles. Any such documentation may be maintained solely in electronic format.

(x) *In General.* Any Award may be made alone, in addition to, or in relation to any other Award. The terms of Awards of each type need not be identical, and the Committee need not treat Participants uniformly. No Award shall be transferable except upon such terms and conditions and to such extent as the Committee determines, provided that no Award shall be transferable for value and Incentive Stock Options may be transferable only to the extent permitted by the Code. No Award to any Participant subject to United States income taxation shall provide for the deferral of compensation that does not comply with Section 409A of the Code. The achievement or satisfaction of any Performance Goals, restrictions or other conditions to vesting, exercise, settlement, or transferability of an Award shall be determined by the Committee.

(c) *Limit on Individual Grants.* The maximum number of shares of Common Stock subject to Options, Stock Appreciation Rights and other Awards intended to satisfy the requirements for "performance-based compensation" within the meaning of Section 162(m) of the Code that may be granted to a Participant in any fiscal year may not exceed 312,500 shares, subject to adjustment under subsection 4(b). In the case of any performance-based Awards settled in cash, no more than \$1,000,000 may be paid to any Participant with respect to any one year of a Performance Period.

## 6. *General Provisions.*

(a) *Tax Withholding.* A Participant shall pay to the Company or make provision satisfactory to the Committee for payment of any taxes required by law to be withheld in respect of Awards under

the Plan no later than the date of the event creating the tax liability. The Company and its Affiliates may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind due to the Participant under the Plan or otherwise. In the Committee's discretion, the minimum tax obligations required by law to be withheld in respect of Awards may be paid in whole or in part in shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value on the date of retention or delivery.

(b) *Legal Compliance.* The Company shall not be required to issue any shares of Common Stock or take any other action pursuant to the Plan unless the Company is satisfied that all requirements of law, or of any stock exchange on which the Common Stock is then listed, in connection therewith have been or will be complied with, and the Committee may impose any restrictions on the rights of Participants hereunder as it shall deem necessary or advisable to comply with any such requirements.

(c) *Non-US Participants.* Awards may be made to Participants who are non-US nationals or employed outside the United States on such terms and conditions different from those specified herein as the Committee considers necessary or advisable to achieve the purposes of the Plan or to comply with applicable laws. To the extent necessary or desirable, the Committee may adopt sub-plans under this Plan, addressing Awards to non-US nationals or employees.

(d) *Awards Not Includable for Benefit Purposes.* Awards and other payments received by a Participant pursuant to the provisions of the Plan shall not be included in the determination of benefits under any pension, group insurance or other benefit plan applicable to the Participant which is maintained by the Company or any of its Affiliates, except as may be provided under the terms of such plans or determined by the Board.

(e) *Amendment, Exchange and Repurchase of Awards.*

(i) Subject to clauses (ii) and (iii) below, the Committee may amend, modify or terminate any outstanding Award, including without limitation changing the dates of vesting, exercise or settlement, causing the Award to be assumed by another entity, and substituting therefor another Award of the same or a different type, provided that the Participant's consent to such action shall be required unless the terms of this Plan or the Award permit such action, the Committee determines that such action is required by law or stock exchange rule, or the Committee determines that the action, taking into account any related action, would not materially and adversely affect the Participant.

(ii) Notwithstanding the attainment of Performance Goals in the case of any Award intended to satisfy the requirements for "performance-based compensation" within the meaning of Section 162(m) of the Code, the Committee may reduce (but not increase) the amount payable at a given level of performance to take into account additional factors that the Committee may deem relevant.

(iii) The foregoing notwithstanding, without further approval of the stockholders of the Company, (A) the Committee shall not authorize the amendment of any outstanding Option or Stock Appreciation Right to reduce the exercise price, (B) no Option or Stock Appreciation Right shall be canceled and replaced with an Award exercisable for Common Stock at a lower exercise price, and (C) no Award shall be canceled in exchange for a cash payment from the Company to the Award owner, except under the limited circumstances described above in Section 5(b)(viii) relating to Transactions.

7. *Certain Definitions.* As used in this Plan:

"Affiliate" means any business entity in which the Company owns directly or indirectly 50% or more of the total voting power or has a significant financial interest as determined by the Committee.

“Award” means any award of shares of Common Stock or right with respect to shares described in Section 5(a).

“Board” means the Board of Directors of the Company.

“Code” means the Internal Revenue Code of 1986, as amended from time to time, or any successor law.

“Committee” means one or more committees appointed by the Board to administer the Plan or a specified portion thereof. Each such committee shall be comprised of not less than two members of the Board who shall meet such criteria as the Board may specify from time to time.

“Common Stock” means the Common Stock, \$0.001 par value of the Company.

“Company” means Axcelis Technologies, Inc., a Delaware corporation.

“Covered Employee” means a “covered employee” within the meaning of Section 162(m) of the Code.

“Date of Grant” means the date on which all requirements under applicable law and the Company’s certificate of incorporation and bylaws for the effective grant of an Award have been satisfied.

“Designated Beneficiary” means the beneficiary designated by a Participant, in a manner determined by the Committee, to receive amounts due or exercise rights of the Participant in the event of the Participant’s death. In the absence of an effective designation by a Participant, “Designated Beneficiary” means the Participant’s legal representative.

“Effective Date,” from time to time, means the most recent date that the Plan was adopted or, if earlier, that it was approved by the stockholders (including approval of the Plan as amended), as such terms are used in the regulations under Section 422 of the Code.

“Exchange Act” means the Securities Exchange Act of 1934, as amended from time to time, or any successor law.

“Executive Officer” has the meaning given in Rule 3b-7 under the Exchange Act, or any successor provision.

“Fair Market Value” with respect to the Common Stock or other property means the fair market value thereof determined by such methods as shall be established by the Committee from time to time. Unless otherwise determined by the Committee in good faith, the per share Fair Market Value of the Common Stock as of any date shall mean (a) if the Common Stock is then listed or admitted to trading on a national securities exchange, (i) the last reported sale price on such date on the principal national securities exchange on which the Common Stock is then listed or admitted to trading, (ii) if no such reported sale took place on such date, the average of the closing bid and asked prices on such exchange on such date, or (iii) if neither (i) nor (ii) applies, the last reported sale price on the next preceding date on which trading took place, or (b) if the Common Stock is then traded in the over-the-counter market, the average of the closing bid and asked prices on such date, as reported by The Wall Street Journal or other appropriate publication selected by the Committee, for the over-the-counter market.

“Incentive Stock Option” means an Option complying with the requirements of Section 422 of the Code or any successor provision and any regulations thereunder.

“Option” means a right to purchase shares of Common Stock and may be an Incentive Stock Option if specified by the Committee.

“Participant” means a person selected by the Committee to receive an Award under the Plan.

“Performance Goals” means, in the case of Awards intended to satisfy the requirements for “performance-based compensation” within the meaning of Section 162(m) of the Code, one or more objective performance goals established by the Committee, based on one or more of the following criteria: revenue; revenue growth; sales; expenses; margins; net income; earnings or earnings per share; cash flow; stock price; shareholder return; return on investment; return on invested capital, assets, or equity; profit before or after tax; operating profit; operating margin; return on research and development investment; market capitalization; quality improvements; market share; cycle time reductions; customer satisfaction measures; strategic positioning or marketing programs; market penetration or expansion; business / information systems improvements; expense management; infrastructure support programs; human resource programs; customer programs; technology development programs; goals relating to acquisitions or divestitures, or any combination of the foregoing, including without limitation goals based on any of such measures relative to peer groups or market indices, and may be particular to a Participant or may be based, in whole or in part, on the performance of the division, department, line of business, subsidiary, or other business unit, whether or not legally constituted, in which the Participant works or on the performance of the Company generally.

“Performance Period” means any period of service of at least one year designated by the Committee as applicable to an Award intended to satisfy the requirements for “performance-based compensation.”

“Reporting Person” means a person subject to Section 16 of the Exchange Act.

“Restricted Period” means any period during which an Award or any part thereof may be forfeited to the Company.

“Restricted Stock” means shares of Common Stock that are subject to forfeiture to the Company.

“Restricted Stock Unit” means the right, subject to forfeiture, to receive the value of a share of Common Stock in the future, payable in the form of cash, Common Stock or other securities of the Company, Awards or other property, and is an unfunded and unsecured obligation of the Company.

“Stock Appreciation Right” means the right to receive any excess in value of shares of Common Stock over the exercise price of such right.

“Stock Equivalent” means the right to receive payment from the Company based in whole or in part on the value of the Common Stock, payable in the form of cash, Common Stock or other securities of the Company, Awards or other property, and may include without limitation phantom stock, performance units, and Stock Appreciation Rights.

“Termination of employment or other service of a Participant” means the voluntary or involuntary termination of a Participant’s employment with the Company or an Affiliate for any reason, including death, disability, retirement or as the result of the divestiture of the Participant’s employer or any similar transaction in which the Participant’s employer ceases to be the Company or one of its Affiliates. Whether entering military or other government service shall constitute “termination of employment or other service,” or whether a “termination of employment or other service” shall occur as a result of disability, shall be determined in each case by the Committee in its sole discretion before or after the grant of the respective Award. In the case of a member of the Board or consultant who is not an employee of the Company or an Affiliate, “termination of employment or other service” shall mean the voluntary or involuntary termination of Board service or the consulting relationship, as the case may be, for any reason.

“Transferable for value” means a transfer on terms that would prevent the Company from relying on Securities and Exchange Commission Form S-8 (or any successor form) with respect to the issuance of the Common Stock underlying the respective Award.

8. *Miscellaneous.*

(a) *No Rights with Respect to Service.* No person shall have any claim or right hereunder to be granted an Award. Neither the adoption, maintenance, or operation of the Plan nor any Award hereunder shall confer upon any person any right with respect to the continuance of his or her employment by or other service with the Company or any Affiliate nor shall they interfere with the rights of the Company or any Affiliate to terminate or otherwise change the terms of such service at any time, including, without limitation, the right to promote, demote or otherwise re-assign any person from one position to another within the Company or any Affiliate. Unless the Committee otherwise provides in any case, the service of a Participant with an Affiliate shall be deemed to terminate for purposes of the Plan when such Affiliate ceases to be an Affiliate of the Company.

(b) *No Rights as Stockholder.* Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be issued under the Plan until he or she becomes the holder thereof. A Participant to whom Common Stock is awarded will be considered the holder of such Common Stock at the time of the Award, except as otherwise provided in the applicable Award.

(c) *Amendment of Plan.* The Board may amend, supplement via a sub-plan adopted under Section 6(c), suspend or terminate the Plan or any portion thereof at any time, subject to such stockholder approval as the Board determines to be necessary or advisable to comply with any tax or regulatory requirement.



# 2025 Annual Meeting Admission Ticket

2025 Annual Meeting of Axcelis Technologies, Inc. Stockholders

Wednesday, May 7, 2025, 11:00 am ET  
To be held at the offices of  
Axcelis Technologies, Inc.  
108 Cherry Hill Drive  
Beverly, Massachusetts 01915

Upon arrival, please present this admission ticket and photo identification at the registration desk.

	<p><b>Small steps make an impact.</b></p> <p>Help the environment by consenting to receive electronic delivery, sign up at <a href="http://www.investorvote.com/acls">www.investorvote.com/acls</a></p>	
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▼ IF VOTING BY MAIL, SIGN, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

## Proxy – Axcelis Technologies, Inc.



### Notice of 2025 Annual Meeting of Stockholders

To be held at the offices of Axcelis Technologies, Inc.  
Beverly, Massachusetts 01915

Proxy Solicited by Board of Directors for Annual Meeting – Wednesday, May 7, 2025

Russell J. Low, James G. Coogan, Eileen J. Evans, and any one or more of them each with the power of substitution, are hereby authorized to represent and vote the shares of the undersigned, with all the powers which the undersigned would possess if personally present, at the Annual Meeting of Stockholders of Axcelis Technologies, Inc. to be held on May 7, 2025 or at any postponement or adjournment thereof.

Shares represented by this proxy will be voted by the Proxies as directed by the stockholder. If no such directions are indicated, the Proxies will have authority to vote FOR all nominees, and FOR Proposals 2, 3 and 4.

In their discretion, the Proxies are authorized to vote upon such other business as may properly come before the meeting.

(Items to be voted appear on reverse side)

## C Non-Voting Items

Change of Address – Please print new address below.

Comments – Please print your comments below.

Meeting Attendance  
Mark box to the right if  
you plan to attend the  
Annual Meeting.

