

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

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

Date of Report (Date of earliest event reported): **January 15, 2011**

Axcelis Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

000-30941
(Commission
File Number)

34-1818596
(IRS Employer
Identification No.)

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

01915
(Zip Code)

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

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

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

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

Item 1.01 Entry into a Material Definitive Agreement

Stephen G. Bassett

On January 17, 2011, the Company entered into an Executive Retirement Agreement (the "Retirement Agreement") with Stephen G. Bassett, our former Chief Financial Officer. Pursuant to the Retirement Agreement, Mr. Bassett will retire as an employee of the Company effective March 31, 2011. Pursuant to the agreement, Mr. Bassett will:

- continue to receive base salary payments for 39 weeks after the date of his retirement;
- receive a waiver of COBRA premiums until the earlier of (i) the date Executive begins full-time employment or full-time self-employment; or (ii) December 31, 2011; and
- receive reimbursement for certain executive outplacement services.

Certain of Mr. Bassett's unvested restricted stock units and stock options will vest as of March 31, 2011 and Mr. Bassett will have until March 31, 2012 to exercise vested options. Under the terms of the agreement, Mr. Bassett agreed to certain non-competition and non-solicitation terms with the Company that extend through March 31, 2011 and he executed a release in favor of the Company.

The foregoing description of the retirement agreement is qualified in its entirety by reference to the actual Retirement Agreement, which is attached hereto as Exhibit 10.1 and is incorporated herein by reference.

Jay Zager

In connection with the election of Jay Zager as the Company's Executive Vice President, Chief Financial Officer and Treasurer, discussed in Item 5.02 below, on January 17, 2011, the Company and Mr. Zager entered into (A) a Change of Control Agreement in the form filed as Exhibit 10.4 of the Company's report on Form 10-Q for the quarter ended September 30, 2007 on November 8, 2007 and (B) an Indemnification Agreement in the form filed as Exhibit 10.2 of the Company's Registration Statement on Form S-1 (Registration No. 333-36330).

Item 1.02 Termination of a Material Definitive Agreement

Pursuant to the Retirement Agreement discussed above under Item 1.01, the Change of Control agreement between Mr. Bassett and the Company, the form of which was filed as Exhibit 10.4 of the Company's report on Form 10-Q for the quarter ended September 30, 2007 on November 8, 2007, has been terminated effective January 17, 2011.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers

Appointment of Chief Financial Officer

At a meeting held on January 7, 2011, the Board of Directors of Axcelis Technologies, Inc. appointed Jay Zager as the Company's Executive Vice President, Chief Financial Officer and Treasurer, effective on Mr. Zager's commencement of employment on January 15, 2011.

Mr. Zager, age 61, was most recently employed as Executive Vice President, Chief Financial Officer of 3Com Corporation, a global networking company, from 2007 until 3Com's acquisition by Hewlett Packard in April 2010. Prior to that, Mr. Zager held chief financial officer positions at Gerber Scientific, a global integrated automation systems provider, from 2005 to 2007 and at Helix Technology Corporation, a supplier to the semiconductor equipment industry, from 2002 to 2005.

2

Mr. Zager will be paid a base salary of \$350,000 per year and he will be eligible to earn a performance-based bonus under the Axcelis Management Incentive Plan in a target amount equal to 60% of his actual base pay during the year. Mr. Zager was granted restricted stock units for 50,000 shares and a stock option for 200,000 shares on January 18, 2011. These grants will vest in four equal installments on each of the first four anniversaries of the date of grant.

The Company has entered into a Change of Control Agreement with Mr. Zager in the same form executed with each of the Company's other executive officers. This Change of Control Agreement provides that the executive officer is entitled to severance compensation in the event there is both (1) a change in control and (2) a termination of employment within three years of that change in control for reasons other than cause, death, disability or voluntary resignation without Good Reason. Under the Change of Control Agreement, "Good Reason" can be a material diminution in the executive's authority, a material reduction in base pay 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 75% of the shares outstanding after the transaction.

In the Change of Control Agreement, Mr. Zager has agreed not to be engaged by, or own, any business competing with any of the businesses conducted by the Company for a period of 12 months following any termination of employment (whether or not following a change of control). The executive also agreed not to solicit employees of the Company to leave employment with the Company or solicit or induce customers of the Company to cease doing business with the Company during such period.

If severance compensation is payable, it would consist of a cash payment equal to the sum of (a) the Company's accrued obligations for base pay and incentive compensation and (b) the amount determined by multiplying the executive's then salary and average bonus by three. For this purpose, an executive's average bonus is his or her current bonus opportunity multiplied by the average of the individual performance scores given to the executive in the last three years, but without taking into account company performance scores. In the event such severance is payable, all unvested restricted stock units and options held by the executive will become vested until termination or expiration in accordance with their terms. The Company will also reimburse the executive for the effects, including federal, state and local income tax consequences, of any excise tax due on severance compensation due under Sections 280G and 4999 of the Internal Revenue Code of 1986, as amended.

The foregoing description of the Change of Control Agreement is qualified in its entirety by reference to the actual form of Change of Control Agreement, which was filed as Exhibit 10.4 of the Company's report on Form 10-Q for the quarter ended September 30, 2007 on November 8, 2007 and incorporated herein by reference.

Former Chief Financial Officer Appointed Executive Vice President, Finance

Coincident with the commencement of Mr. Zager's employment on January 15, 2011, Mr. Stephen Bassett, our former Chief Financial Officer, assumed the position of Executive Vice President, Finance, a position he is expected to hold until his previously announced retirement date of March 31, 2011.

3

Item 9.01 Financial Statements and Exhibits

(c) Exhibits

See Exhibit Index attached hereto.

4

Exhibit Index

Exhibit No.	Description
10.1	Executive Retirement Agreement between Axcelis Technologies, Inc. and Stephen G. Bassett, dated January 17, 2011. Filed herewith.

SIGNATURE

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

Date: January 18, 2011

Axcelis Technologies, Inc.

By: /s/ MARY G. PUMA

Mary G. Puma

Chairman, Chief Executive Officer and President

AXCELIS TECHNOLOGIES, INC.

EXECUTIVE RETIREMENT AGREEMENT

THIS EXECUTIVE RETIREMENT AGREEMENT, dated as of January 17, 2011, is made by and between Axcelis Technologies, Inc. (hereinafter referred to as the "Company") and Stephen G. Bassett (hereinafter referred to as "Executive"). In consideration of the mutual covenants contained herein, the parties agree as follows:

1. **Retirement Date.** Executive's employment with the Company will terminate on March 31, 2011 (the "Termination Date"). As described in Section 2, Executive will receive the separation pay and benefits under this Agreement. Prior to the Termination Date, the Executive shall cooperate with the reasonable requests of the Company to support the transition of the Executive's duties to other Company personnel.

2. **Retirement Compensation.**

2.1. **Accrued Obligations.** Employee has been or will be as of the Termination Date paid in full for any and all wages, including accrued but unused vacation time.

2.2. **Separation Pay.** The Company will make 39 weeks of Executive's full base pay at the weekly rate of \$5,769.23, less legally required payroll taxes, payable bi-weekly in accordance with the Company's usual payroll cycle.

2.3. **Axcelis Time Management (ATM).** After the Termination Date, Executive will receive a lump sum amount for his accrued ATM balance, if any. Overdrawn ATM time will be deducted from Executive's final paycheck.

2.4. **COBRA Payments.** If Executive elects to continue health coverage under the Company's health plan in accordance with COBRA, the Company will pay for the full cost of such coverage until the earlier of (i) the date Executive begins full-time employment or full-time self-employment; or (ii) the end of the ninth month after the Date of Termination (December 31, 2011).

2.5. **2010 Axcelis Management Incentive Plan Payments.** To the extent not already paid in full as of the Termination Date, the Company will make on or before the Termination Date, any payments due to Executive under the Company's 2010 Axcelis Management Incentive Plan without regard to the payment terms of the plan or Executive's termination of employment.

2.6. **Benefits.** Detailed information on the impact of Executive's separation on Company-provided benefits is set forth on **Attachment A** which is attached hereto and incorporated herein.

2.7. **Transition Assistance.** During the period (the "Transition Period") from the Date of Termination until September 30, 2011 (the date 6 (six) months after the Date of Termination), the following provisions will apply:

(a) **Email.** The Company agrees to allow Executive to maintain webmail access to the Executive's Axcelis email account until the earlier of the end of the Transition Period or the date on which Executive commences other employment.

(b) **Cell Phone.** The Company agrees to assign to the Executive the mobile phone owned by the Company and used by the Executive as of the Date of Termination and pay the Executive a lump sum amount to cover six months' of cell phone premiums at the Executive's plan level (but not more than \$99 per month).

(c) **Outplacement.** At the request of Executive, the Company will pay up to \$12,500 for an outplacement service for services rendered in assisting Executive in locating other employment, provided such payments are contingent upon Executive's cooperation with the outplacement service and upon active efforts by Executive to locate another position.

2.8. **Equity Actions.** The following modifications to equity grants held by the Executive will be effective on the Termination Date:

(a) **Acceleration of Vesting of Stock Options.** The Compensation Committee of the Board of Directors has resolved, in accordance with Section 6.03(c) of the 2000 Stock Plan, to accelerate the vesting of certain non-qualified stock options held by the Executive as set forth on **Schedule 1** hereto.

(b) **Retirement Exercisability of Stock Options.** As provided in Section 6.03(e)(i) (B) of the 2000 Stock Plan, in light of Executive's retirement, the vested non-qualified stock options held by the Executive remain exercisable until March 31, 2012, which is the first anniversary of the Executive's termination of employment, as set forth on **Schedule 1** hereto.

(c) **Acceleration of Vesting of Restricted Stock Units.** The Compensation Committee of the Board of Directors has resolved, in accordance with Section 7.04(c) of the 2000 Stock Plan, to accelerate the vesting of certain Restricted Stock Units held by the Executive as set forth on **Schedule 1** hereto.

3. **Executive Acknowledgement of Compensation.** The Executive acknowledges that in exchange for entering into this Agreement the Executive has received good, sufficient and valuable consideration in excess of that to which the Executive would otherwise have been entitled in the absence of this Agreement. The Executive acknowledges that the Executive has been paid in full for any and all wages, including accrued unused vacation pay. Unless otherwise provided for expressly in this Agreement, all other benefits have ceased as of the Termination Date.

4. **Effect of Breach on Compensation.** The Executive agrees that the compensation and benefits contained in this Agreement and which flow to the Executive from

the Company are subject to termination, reduction or cancellation in the event that the Executive takes any action or engages in any conduct deemed by the Company to be in violation of this Agreement, provided however, that prior to any such termination, the Company will notify the Executive of the particular concern and provide the Executive with a reasonable opportunity to cure.

5. Executive Obligations.

5.1. Return of Property. The Executive shall return all papers, files, documents, computers, reference guides, equipment, keys, identification, credit cards, software, computer access codes, disks and institutional manuals, or other property belonging to the Company within one week after the Termination Date; provided the Executive shall return the laptop computer referenced in Section 2 above not later than the end of the Transition Period. The Executive shall not retain any copies, duplicates, reproductions or excerpts of any of the Company's property. The Executive may retain copies of all agreements between the Executive and the Company and other documents relating to his personal performance.

5.2. Nondisclosure of Confidential Information. During the course of the Executive's employment with the Company, the Executive has become acquainted with and/or developed confidential information belonging to the Company and its customers. The Executive agrees not to use or to disclose to any person or entity any confidential information of the Company or of any past or present customer of the Company, including but not limited to financial data or projections, customer lists, projects, economic information, systems, plans, methods, procedures, operations, techniques, know-how, trade secrets or merchandising or marketing strategies. In addition, Executive shall continue to be bound by the terms of Employee Invention Assignment, and Confidentiality Agreement, which the Executive executed in connection with his employment. That Agreement is affixed hereto and incorporated by reference as **Attachment B**. The provisions of this Section 5.2 shall not apply to any such confidential information that is (a) presently publicly available or a matter of public knowledge or public domain generally without breach of this Agreement, or (b) lawfully received by the Executive from a third party who is or was not bound in any confidential relationship to the Company, or (c) required to be disclosed by the Executive pursuant to judicial or government order, provided the Executive shall give the Company reasonable notice prior to such disclosure and shall comply with any applicable protective order.

5.3. Nondisparagement. Provided the Executive is not in breach of his obligations under this Agreement, the Company agrees not to disparage or make negative statements about the Executive. The Executive agrees not to disparage or make negative statements about the Company or any of its officers, directors, agents, employees, successors and assigns.

5.4. Non-Compete and Non-Solicitation. The Executive hereby agrees with the Company that for a period of 12 months following the Termination Date:

3

(a) The Executive shall not, without the prior written consent of the Chief Executive Officer of the Company, directly or indirectly, engage in, be employed by, act as a consultant or advisor to, be a director, officer, owner or partner of, or acquire an interest in, any business engaged in manufacturing implant or dry strip semiconductor processing systems (a "competitive business"), nor directly or indirectly have any interest in, own, manage, operate, control, be connected with as a stockholder, lender, joint venturer, officer, employee, partner or consultant, or otherwise engage, invest or participate in any competitive business; provided, however, that nothing contained in this Section 5.4 shall prevent the Executive from investing or trading in publicly traded stocks, bonds, commodities or securities or in real estate or other forms of investment for Executive's own account and benefit (directly or indirectly);

(b) The Executive shall not actively solicit any employee of the Company or any of its subsidiaries or affiliates to leave the employment thereof; and the Executive shall not enter onto Company property without prior written consent from the Chief Executive Officer of the Company or other executive officer of the Company;

(c) The Executive shall not induce or attempt to induce any customer, supplier, licensor, licensee or other individual, corporation or business organization having a business relationship with the Company or its subsidiaries or affiliates to cease doing business with the Company or its subsidiaries or affiliates or in any way interfere with the relationship between any such customer, supplier, licensor, licensee or other individual, corporation or business organization and the Company or its subsidiaries or affiliates. Solicitation of customers for the purposes of this obligation refers to existing and/or contemplated products as of the time of this Agreement;

(d) The applicable time periods set forth in this Section 5.4 shall be extended by the time of any breach by the Executive of any terms of this Agreement;

(e) The provisions of Section 5.4 contain the sole and exclusive obligations of the Executive with respect to non-competition and non-solicitation other than those provided by law, if any; and

(f) The Company acknowledges that negotiations or discussions between or among Executive and any third party about prospective employment, business ventures, or other opportunities shall not, alone, constitute a breach of Section 5.4(a) of this Agreement.

5.5. Resignations from Corporate Office. Not later than the Termination Date, the Executive will execute and deliver to the Company his resignation as Executive Vice President and Chief Financial Officer of the Company, attached hereto as **Attachment C**. From time to time on or after the Termination Date, the Executive will execute such resignations from offices held in the Company's subsidiaries, as the Company may reasonably request. Executive expressly acknowledges that the compensation payable to Executive under this Agreement is in full satisfaction of any compensation due to him in connection with his corporate positions described in this Section 5.5. It is understood that the force and effect of **Attachment C** arises exclusively in the context of, and as part of, this Agreement.

5.6. Cooperation. The Executive will cooperate fully with the Company in its defense of or other participation in any administrative, judicial or other proceeding arising from any charge, complaint or other action which has been or may be filed against the Company and with respect to which Executive has knowledge, provided, however, that the Company will pay all reasonable costs associated with such cooperation, including compensation for the Executive's time at the Executive's usual, and reasonable, rate. The Executive agrees to be responsive to requests for information related to the smooth transition of a successor to his position.

6. SEC Reporting and Applicability of the Company's Insider Trading Policy.

6.1. Rule 144. For the purposes of Rule 144 promulgated by the Securities Exchange Commission, the Executive shall cease to be an "affiliate" of the Company on the Termination Date.

6.2. Section 16 Reporting. The Executive shall cease to be a reporting person under the Securities Exchange Act of 1934, as amended, as of the Termination Date, provided however, the Executive must file a Form 4 with the SEC to report any purchase, sale, or option exercise after the Termination Date if the transaction occurs within six months following a Form 4 transaction going the opposite way (e.g., sale vs. purchase) prior to the Termination Date.

7. Insider Trading Policy. Assuming the Executive does not acquire material non-public information after the Termination Date, beginning on the date two trading days after the Company's public announcement of its earnings for the first fiscal quarter ending after the Termination Date, the Executive will no longer be subject to restrictions on trading arising under the Company's insider trading policy.

8. General Release and Covenant Not to Sue.

8.1. Release. In consideration of the Company's covenants in this Agreement, the Executive hereby releases and discharges the Company and its officers, directors, agents, employees, successors and assigns ("Released Parties") from any and all claims by the Executive arising before the signing of this Agreement, including all claims arising out of the Executive's employment with the Company or the termination thereof (except (1) those relating to performance of this Agreement and (2) the Company's obligations under the Indemnification Agreement between the Executive and the Company dated June 26, 2003, a copy of which is attached hereto as **Attachment D** (the "Indemnification Agreement")) and claims arising under common law and claims arising under federal or state labor and employment laws and laws prohibiting discrimination on the basis of age, sex, race, national origin or disability. The laws referred to in the preceding sentence include Title VII of the Civil Rights Act of 1964, as amended; the Equal Pay Act of 1963, as amended; the Age Discrimination in Employment Act of 1967 (ADEA), as amended; the Fair Labor Standards Act of 1938, as amended; the Americans With Disabilities Act of 1990, as amended; the Rehabilitation Act of 1973, as amended; the Family and Medical Leave Act of 1993, as amended; Chapter 151B of the Massachusetts General Laws, Chapter 149 of the

5

Massachusetts General Laws; the Massachusetts Civil Rights Act and the Massachusetts Equal Rights Law; the Worker Adjustment and Retraining Notification ("WARN") Act; Maryland Ann. Code Article 100 Sections 88-94, and Maryland Ann. Code Article 49B, Sections 1 *et seq*; or any other state or federal law, order, public policy or regulation affecting or relating to the rights and/or claims of employees. Nothing in this Agreement shall be construed to be a release of certain ADEA and Title VII rights that is not allowed by law, except that the Executive waives and shall not accept any damages from any such claims.

8.2. Covenant Not to Sue. The Executive represents and warrants that he has not filed any complaints, charges, or claims for relief against the Released Parties with any local, state or federal court or administrative agency. The Executive agrees and covenants not to sue or bring any claims or charges against the Released Parties with respect to any matters arising out of or relating to the Executive's employment with or separation from the Company, other than enforcement of the terms of this Agreement or the Indemnification Agreement. In the event that the Executive institutes any such action, that claim shall be dismissed upon presentation of this Agreement and he shall reimburse the Company for all legal fees and expenses incurred in defending such claim and obtaining its dismissal.

8.3. No Implied Admission. It is understood and agreed that this Agreement does not constitute any admission by the Company that any action taken with respect to the Executive was unlawful or wrongful, or that such action constituted a breach of contract or violated any federal or state law, policy, rule or regulation.

9. Compliance with Federal Older Workers Benefit Protection Act of 1990.

9.1. Time to Consider Agreement. The Executive acknowledges that he has been advised in writing to consult with an attorney and has had ample opportunity to consult with and review this Agreement with an attorney of his choice, and has been given a period of at least forty-five (45) days within which to consider whether to sign this Agreement. If the Executive has signed this Agreement prior to the end of this forty-five (45) day period, he represents that he has done so knowingly and voluntarily.

9.2. Revocation Right. It is agreed and understood that for a period of seven (7) days following the execution of this Agreement, which period shall end at 5:00 p.m. on the seventh day following the date of execution by the Executive, he may revoke this Agreement. This Agreement will not become effective until this revocation period has expired. This seven (7) day revocation period cannot be shortened by agreement of the parties or by any other means.

10. Miscellaneous.

10.1. Availability of Equitable Remedies. The Executive agrees and warrants that the covenants contained herein are reasonable, that valid consideration has been and will be received therefor and that the agreements set forth herein are the result of arms-length negotiations between the parties hereto. The Executive recognizes and acknowledges that the provisions of Section 5 are vitally important to the continuing welfare of the Company, and its subsidiaries and

6

affiliates, and that money damages constitute a totally inadequate remedy for any violation thereof. Accordingly, in the event of any such violation by the Executive, the Company, and its subsidiaries and affiliates, in addition to any other remedies they may have, shall have the right to institute and maintain a proceeding to compel specific performance thereof or to obtain an injunction restraining any action by the Executive in violation of Section 5.

10.2. Severability. In the event that any provision of this Agreement is found by a court, arbitrator or other tribunal to be illegal, invalid or unenforceable, then such provision shall not be voided, but shall be enforced to the maximum extent permissible under applicable law, and the remainder of this Agreement shall remain in full force and effect.

10.3. Entire Agreement. This Agreement and its Exhibits constitutes the entire agreement between the parties about or relating to the Executive's termination of employment from the Company, or the Company's obligations to the Executive with respect to his termination and fully supersedes any and all prior agreements (including but not limited to the Change of Control Agreement between the Company and the Executive dated May 12, 2005) or understanding between the parties, other than the Indemnification Agreement. The Company represents and warrants that there has been no Change of Control as defined in the above-mentioned Change of Control Agreement prior to the date hereof and that no Change of Control transaction is contemplated by the Company as of the date hereof. Upon execution of this Agreement, the obligations of the Executive and the Company relating to the Executive's employment by the Company will arise solely and exclusively out of this Agreement and the Indemnification Agreement.

10.4. Binding Benefit. This Agreement shall be binding on the parties and upon their heirs, administrators, representatives, executors, successors and assigns and shall inure to their benefit and to that of their heirs, administrators, representatives, executors, successors and assigns.

10.5. Amendments. This Agreement may not be altered, amended or modified, except by a further written document signed by the Executive and the Company.

10.6. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Massachusetts, without regard to or application of choice-of-law rules or principles.

10.7. Limitations on Recovery. In the event that the Executive institutes legal proceedings to enforce this Agreement, he agrees that the sole remedy available shall be enforcement of the terms of this Agreement and/or a claim for damages resulting from the breach of this Agreement, but that under no circumstances shall the Executive be entitled to receive or collect any damages for claims that Executive has released under this Agreement.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first set forth above.

AXCELIS TECHNOLOGIES, INC.

By: /s/ Lynnette C. Fallon
 Title: Lynnette C. Fallon, EVP HR/Legal and
 General Counsel

/s/ Stephen G. Bassett
 Stephen G. Bassett

Attachments

Schedule 1	Equity Actions for Stephen G. Bassett
Attachment A	Benefits after Termination Date
Attachment B	Employee Invention Assignment and Confidentiality Agreement
Attachment C	Resignation from Office
Attachment D	Indemnification Agreement dated June 26, 2003

Schedule 1

Equity Actions for Stephen G. Bassett

Grant Date	Exercise Price	Expiration Date	Vested Shares as of March 31, 2011	Unvested Shares as of March 31, 2011	Effect of Retirement Package
Options					
12/18/2003	\$ 9.90	12/18/2013	20,000	—	Exercisable until 3/31/2012
6/25/2004	\$ 11.87	6/25/2014	25,000	—	Exercisable until 3/31/2012
12/27/2004	\$ 7.97	6/25/2014	25,000	—	Exercisable until 3/31/2012

11/17/2008	\$	0.70	11/17/2018	62,500	62,500	Eliminate stock price condition and accelerate so 125,000 shares are fully vested and exercisable until 3/31/2012
						Accelerate 31,250 so 62,500 are vested and exercisable until
11/16/2009	\$	1.16	11/16/2019	31,250	93,750	3/31/2012; 62,500 expire
7/15/2010	\$	1.60	7/15/2020	—	125,000	Expires
Restricted Stock						
Units						
7/1/2005				40,058	—	Fully vested, no impact
7/3/2006				46,000	—	Fully vested, no impact Accelerate so fully vested on
7/16/2007				29,628	14,816	3/31/2011
2/16/2010				33,488	—	Fully vested, no impact

9

**List of Attachments Omitted from the Executive Retirement Agreement by and between
Axcelis Technologies, Inc. (“Axcelis”) and Stephen G. Bassett, dated January 17, 2011
as filed with the Securities Exchange Commission (the “Commission”) on Form 8-K**

- Attachment A A document providing detail on the status of Mr. Bassett’s employee benefits following his termination of employment.
- Attachment B A copy of the Employee Invention Assignment and Confidentiality Agreement between the Company and Mr. Bassett signed on December 19, 2003.
- Attachment C The form of resignation from office to be signed by Mr. Bassett
- Attachment D A copy of the Indemnification Agreement between the Company and Mr. Bassett dated June 26, 2003

Axcelis will furnish supplementally a copy of any omitted attachment to the Commission upon request.

10