

Axcelis Technologies, Inc.

Technology and New Product Development Committee Charter

As adopted by the Board of Directors on February 15, 2017

Purpose

The Technology and New Product Development Committee (the "Committee") of Axcelis Technologies, Inc. (the "Company") was established by the Company's Board of Directors (the "Board") on November 2, 2011 to assist the Board in its oversight of critical technology and product development initiatives, both through internal development of ion implanters or through other new products pursuing adjacent growth opportunities ("Technology Projects") and to advise the Board and the Company's senior management in regard to the company's new product processes and execution of same and these Technology Projects.

Committee Membership

The Technology Committee shall consist of two or more independent members of the Board. The members of the Technology Committee shall be appointed by the Board upon the recommendation of the Nominating and Governance Committee. Members shall serve at the pleasure of the Board and for such term or terms as the Board may determine. The compensation of Committee members shall be as determined by the Board. The Board shall elect one member to serve as Chair of the Committee. The Board may remove members from the Committee at any time, with or without cause.

Committee Responsibilities

The Committee shall address the following topics on behalf of the Board, and make recommendations to the full Board on any necessary Board actions:

- Develop an understanding of near-term industry, market and technological trends which are driving the new product development portfolio as well as those which are being addressed through Technology Projects;
- Develop an understanding of the risks and opportunities relating to the Technology Projects;
- Assess the effectiveness of the performance of the Company in executing on new products under development and any Technology Projects, taking into account the desired timetable, project deliverables, customer expectations and the competitive landscape;

- Assess the staffing, development processes, facilities and infrastructure supporting management's development efforts
- Assess the intellectual property protection programs that relate to Technology and new product development activities; and
- Make recommendations to the Board and management on actions that are pro-actively responsive to these risks and opportunities.

Committee Authority and Scope

The Committee shall undertake its responsibilities by evaluating management reports and presentations, industry reports, and any other available information. The Technology Committee shall discharge its responsibilities and shall assess information provided by the Company's management according to its business judgment.

1. Independent Advisors. The Committee shall have the authority to engage such independent technical and other advisors as it deems necessary or appropriate to carry out its responsibilities. Such independent advisors may be regular advisors to the Company. The Committee is empowered, without further action by the Board, to cause the Company to pay the compensation of such advisors as established by the Committee.
2. Investigations. The Committee shall have the authority to conduct or authorize investigations into any matters relating to a Technology Project as it shall deem appropriate, including the authority to request that any officer, employee, or advisor of the Company meet with the Committee or any advisors engaged by the Committee.

Committee Structure and Operations

The Technology Committee shall meet in person or telephonically as needed to address the Technology Projects. Meetings will be held at the convenience of the members, but, preferably, in advance of meetings of the Board of Directors. Minutes of each meeting shall be kept. The Committee may also act by unanimous written consent in lieu of a meeting. The Technology Committee shall report to the full Board at each in-person meeting as to matters relating to the Technology Projects that were undertaken since the last in-person meeting.

The Committee shall, from time to time as it deems appropriate, review and reassess the adequacy of this Charter and recommend any proposed changes to the Board for approval.