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VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20459

Attention: Amanda Ravitz
Geoff Kruczek
Heather Percival

Re: **FormFactor, Inc.**
Registration Statement on Form S-4
File No. 333-210549

Ladies and Gentlemen:

We are submitting this letter on behalf of FormFactor, Inc. (the “**Company**”) in response to comments from the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) received by letter dated April 26, 2016 (the “**Comment Letter**”) and through additional discussions with the Staff on May 16, 2016 and May 17, 2016 (the “**Oral Comments**”), each relating to the above-referenced registration statement on Form S-4 of the Company, filed April 1, 2016 (the “**Registration Statement**”) and Amendment no. 1 to the registration statement on Form S-4, filed May 10, 2016 (the “**Amended Registration Statement**”). The Company is simultaneously submitting a request that the effectiveness of the Amended Registration Statement be accelerated to 4:00 p.m., Eastern Time, on Thursday, May 19, 2016, or as soon thereafter as practicable.

For ease of review, we have set forth below in italics comments 2 and 4, as set forth in the Comment Letter, together with paraphrases of the Staff’s Oral Comments and the Company’s

responses thereto. All page references in the Company's responses are to the Amended Registration Statement.

Exchange Ratio Adjustment, page 11

2. *We note the references to possible adjustments to the exchange ratio and changes to the amount of stock and cash to be received. Please revise to clarify how those changes may alter the amount of each type of consideration to be received on a per-share basis under a reasonable range of scenarios.*

The Staff has additionally requested through Oral Comment that the Company provide further explanation of the relationship between the FormFactor closing VWAP and any exchange ratio adjustment.

RESPONSE: Confirming the Company's discussion with the Staff, the Company respectfully advises the staff that the existence and magnitude of any exchange ratio adjustment depends, in part, upon the FormFactor closing VWAP for the following reason. In order to comply with Section 409A of the U.S. Internal Revenue Code of 1986, as amended, the number of shares of FormFactor common stock underlying assumed unvested Cascade Microtech, Inc. ("**Cascade Microtech**") equity awards (the "**assumed award exchange ratio**") will vary depending on the FormFactor closing VWAP. All else being equal, a decrease in the FormFactor closing VWAP will result in an increase in the assumed award exchange ratio, such that the fair market value of the assumed awards approximates the fair market value of the consideration received by Cascade Microtech shareholders in the merger on a per-share basis (i.e., as the price of FormFactor's stock decreases, the holders of unvested Cascade Microtech equity awards receive additional shares of FormFactor common stock in their assumed awards to compensate). However, any increase in the assumed award exchange ratio will, all else being equal, result in a decrease in the number of shares of FormFactor stock that can be issued to Cascade Microtech shareholders, because the total number of shares of FormFactor stock issued to Cascade Microtech shareholders plus the number of shares of FormFactor stock underlying assumed Cascade Microtech equity awards cannot exceed 19.9% of FormFactor's then-outstanding common stock pursuant to Section 2.02 of the merger agreement and the related definitions in the merger agreement, which are designed to track NASDAQ Rule 5635(d). Thus, a decrease in the FormFactor closing VWAP may, depending on the values of the other three factors described on Pages 95-96 of the Amended Registration Statement, result in an exchange ratio adjustment.

Background of the Merger, page 60

4. *As a related matter, we note the reference here to a preliminary analysis by Stifel, and similar references throughout this section. Please revise to provide the disclosures required by Item 4(b) to Form S-4 and file the reports, opinions or appraisals as exhibits, as required by Item 21(c) to Form S-4. Please also provide us with copies of any board books prepared by the financial advisors and related to the transaction.*

The Staff has additionally requested through Oral Comment that the Company provide further explanation of why the presentations and preliminary analyses referenced in the Background of the Merger section of the Amended Registration Statement are not required to be further described in the Amended Registration Statement and filed as exhibits to the Amended Registration Statement as reports, opinions or appraisals described in Item 4(b) and Item 21(c) of Form S-4.

RESPONSE: Confirming the Company's discussion with the Staff, the Company continues to believe that the materials prepared by Stifel, Nicolaus & Company, Incorporated ("**Stifel**") do not constitute "report[s], opinion[s] or appraisal[s] materially relating to the transaction" within the meaning of Item 4(b) of Form S-4. The information presented in the materials falls into three general categories: (1) preliminary valuation information that was updated in, and superseded by, the information included in the fairness opinion delivered to the Cascade Microtech board on February 3, 2016; (2) information presented at the April 28, 2015 meeting of the Cascade Microtech board, which related to a proposal from the Company that was significantly different from that which the Cascade Microtech shareholders are being asked to vote upon; and (3) discrete data, information and analyses that was provided to the Cascade Microtech board in connection with its deliberations. The Company views the materials in categories (1) and (2) above not to be material to the decision being made by the Cascade Microtech shareholders with respect to this transaction, since they were either superseded by more current and relevant information or related to a completely different proposal. The information in category (3) was referred to in the proxy/prospectus for completeness in describing the Cascade Microtech board's deliberative process and not because the Company regarded the materials that included that information to be material themselves. In addition, where specific information included in the materials was potentially material to the Cascade Microtech shareholders' decision, the Company characterized, in the "Background of the Merger" section, the information that was presented. Further, the information in categories (1) and (3), and the methodologies and analyses underlying that information, were substantially consistent with the final analysis conducted by Stifel in connection with its opinion delivered to Cascade Microtech's board on February 3, 2016, which is fully described in the Amended Registration Statement. Accordingly, the Company does not consider these materials to have been material "reports, opinions or appraisals" requiring further disclosure.

The Company acknowledges the following and will also include acknowledgement of the following in any request for acceleration of the effective date of the registration statement relating to this offering:

- should the Commission or the Staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Company may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

We appreciate your assistance in this matter. Please do not hesitate to call me at 650-752-2011 with any questions you may have respecting the foregoing.

Very truly yours,

/s/ Sarah K. Solum

Sarah K. Solum

cc: Michael Slessor (FormFactor, Inc.)
Michael Ludwig (FormFactor, Inc.)
Jason Cohen (FormFactor, Inc.)
Roy Tucker (Perkins Coie LLP)
David Matheson (Perkins Coie LLP)