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August 6, 2009

Via EDGAR and Overnight Courier

Securities and Exchange Commission
Division of Corporation Finance
Attention: Tim Buchmiller, Senior Attorney
Mail Stop 3030
100 F Street, N.E.
Washington, D.C. 20549

Re: FormFactor, Inc.
Form 10-K for the fiscal year ended December 27, 2008
Form 10-Q for the fiscal quarter ended March 28, 2009
File No. 000-50307

Ladies and Gentlemen:

We write to provide FormFactor, Inc. (the "*Company*")'s responses to the comments of the staff of the Securities and Exchange Commission (the "*Commission*") on the Company's above-referenced Forms 10-K and 10-Q as contained in the Commission letter dated July 27, 2009. Please note that, for convenience, the numbered paragraphs set forth below correspond to the numbered comments in the July 27 letter, and that the Commission comments are presented in bold type.

Form 10-K for the fiscal year ended December 27, 2008

Item 1. Business, page 3

1. We understand from your disclosure under the second risk factor on page 21 that, in order to increase the market acceptance of your technologies and products, you will need to work with semiconductor manufacturers so that they migrate from concentrating final test at the individual device level to increasing the amount of test they conduct at the wafer level. In order for your investors to better understand your business and market strategy, please enhance your disclosure in future filings to describe the then currently known industry practice of the semiconductor manufacturers you target in terms of testing. For example, describe, if known, the percentage of your targeted market that conducts test at the wafer level as compared to the test at the chip or final device level; also discuss known trends in such manufacturers migrating from test at the chip or final device level to test at the wafer level. Please disclose whether, and the extent to which, test at the wafer level eliminates or reduces the need for test at the chip or final device level, and, if not, provide enhanced disclosure so that your investors may better understand what advantages and disadvantages your wafer level test products and technologies provide. Please also discuss and analyze under "Management's Discussion and Analysis of Financial Condition and Results of Operation — Overview" the effect, if any, those known trends have had, or may have on your operating results and financial condition.

The Company agrees to enhance its disclosure in its future filings to describe the then currently known industry practice of the semiconductor manufacturers that the Company targets with respect to migration of elements of final test from the individual device level to the wafer level, and whether, and the extent to which, test at the wafer level eliminates or reduces the need for test at the individual device level, and, if not, what advantages and disadvantages the Company's wafer level test products and technologies provide. For completeness, the Company notes that each semiconductor manufacturer treats its own specific test strategies and implementations and technology roadmaps as highly confidential, but the Company will be able to disclose semiconductor manufacturer industry trends and practices. In addition, the Company agrees to discuss and analyze in its future filings under "Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview" the effect, if any, any known trends have had, or may have on the Company's operating results and financial condition in accordance with Commission regulations and guidance.

2. We also understand from your third risk factor on page 21 that if semiconductor manufacturers implement chip designs that include increased built-in self-test capabilities or similar functions or methodologies that increase test throughput, it could negatively impact your sales or the migration of elements of final test to the wafer level. In order for your investors to better understand your business and market strategy, please enhance your disclosure in future filings to describe then currently known industry practice of the semiconductor manufacturers you target in terms of implementing built-in self-test capabilities. For example, describe, if known, the percentage of your targeted market that implements built-in self-test capabilities and any known trends in such manufacturers migrating towards the usage of built-in self-test capabilities and how such trends are impacting the adoption of test at the wafer level. Please also discuss and analyze under "Management's Discussion and Analysis of Financial Condition and Results of Operation — Overview" the effect, if any, those known trends have had, or may have, on your operating results and financial condition.

The Company agrees to enhance its disclosure in its future filings to describe the then currently known industry practice of the semiconductor manufacturers that the Company targets with respect to implementation of built-in self-test capabilities, or BIST, or similar functions or methodologies. In addition, the Company agrees to discuss and analyze in its future filings under "Management's Discussion and Analysis of Financial Condition and Results of

Operations — Overview” the effect, if any, known trends have had, or may have, on the Company’s operating results and financial condition in accordance with Commission regulations and guidance.

Item 1A. Risk Factors, page 14

3. We understand from your disclosure that the number of shares available for issuance under your 2002 Equity Incentive Plan is increased on each January 1st by an amount equal to 5% of the total amount of your outstanding shares of common stock as of the preceding date (which, since the plan was adopted in 2002, now includes shares issued in your follow-on public offering in 2005, and all shares issued upon the exercise of previously granted options). In your future filings, please include risk factor disclosure that clearly discloses the compounding effect of the 5% increase on the total number of shares available for issuance under the 2002 Plan, and indicate the amount of shares that were added and made available for issuance under the 2002

Plan in the most recent fiscal year as a result of the evergreen provision. Please also disclose the dilution that may result from such increases in the amount of shares available to be issued under your 2002 Plan. Please also disclose that due to the evergreen provision, it is more likely that your shareholders will not be asked to approve or disapprove further additions to your current equity plan, or to approve or disapprove the adoption of new equity compensation plans in the future, given the presence of the evergreen provision in your current plan.

The Company agrees to include a new risk factor in its future filings that discloses (i) the compounding effect of the 5% increase on the total number of shares available for issuance under its 2002 Equity Incentive Plan, (ii) the amount of shares that were added and made available for issuance under its 2002 Equity Incentive Plan in the most recent fiscal year as a result of the plan’s evergreen provision, (iii) the dilution that may result from such increase in the amount of shares available to be issued under its 2002 Equity Incentive Plan and (iv) that until the 2002 Equity Incentive Plan’s termination, it is more likely that the Company’s stockholders will not be asked to approve or disapprove further additions to its 2002 Equity Incentive Plan, or to approve or disapprove the adoption of new equity compensation plans in the future, due to the plan’s evergreen provision.

Item 15. Exhibits, Financial Statements and Schedules, page 63

4. Please tell us why you continue to include the agreements filed as Exhibits 4.02 through 4.06 as exhibits to your annual report. If there are any outstanding rights or obligations under any of those agreements, please revise your future filings, as applicable, to disclose such rights and obligations.

The Company initially filed the stockholders agreements included as Exhibits 4.02 through 4.06 to its Form 10-K because these agreements contained various rights in favor of certain holders of the Company’s common stock. The Company included these stockholders agreements as exhibits to its Form 10-K for fiscal year 2008 because:

- (i) with respect to Exhibit 4.02, the registration and related indemnification rights set forth in that agreement may have continued to be outstanding for certain stockholders that entered into that agreement until their definitive termination in June 2008, and
- (ii) with respect to Exhibits 4.03 through 4.06, the registration and related indemnification rights set forth in those agreements continue to be outstanding.

Please note that the Company has most recently disclosed these stockholders agreements in the Company’s Proxy Statement for its 2009 annual meeting of stockholders under the heading “Certain Relationships and Related Transactions,” which information is incorporated by reference into the Company’s Form 10-K for fiscal year 2008, and in the Company’s Form S-8 Registration Statement under Part II — Item 6: Indemnification of Directors and Officers, which the Company filed with the Commission on February 27, 2009.

The Company agrees to enhance its disclosure regarding the surviving rights and obligations under the stockholders agreements filed as Exhibits 4.03 through 4.06 in its future filings. The Company will remove the Exhibit 4.02 stockholders agreement as an exhibit to its Form 10-K for fiscal year 2009.

Form 10-Q for the fiscal quarter ended March 28, 2009

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations — Three Months Ended March 28, 2009 and March 29, 2008

Selling, General and Administrative, page 25

5. We note that your outside legal and other professional fees increased by approximately \$2.0 million in the quarter over quarter presentation (almost entirely offsetting the decreased personnel costs during the period due to your recent work force reductions). In your future filings, as applicable, please clarify the reasons for any significant increases in your costs, such as your costs associated with your outside legal and other professional fees. If the increases are related to your ongoing intellectual property and other litigation matters, please also expand your related risk factor and other disclosure to describe in more detail the costs you are incurring in connection with those matters and why.

The Company agrees to clarify the reasons for any significant increases in its costs, including costs associated with its outside legal and other professional fees, in its future filings. The increase in outside legal and other professional fees for the quarter was primarily due to the timing of a hearing, February 23-March 6, 2009, at the International Trade Commission. The Company did disclose the timing and scope of the ITC hearing in its Form 10-Q filing, and in prior filings. In addition, if the significant increases are related to the Company’s intellectual property and other litigation matters, the Company agrees to expand its risk factor and other disclosure in its future filings to describe in more detail the costs that it is incurring and the reasons for the costs.

As requested in the July 27 letter and in connection with this response to the comments in that letter, the Company acknowledges that:

- (i) the Company is responsible for the adequacy and accuracy of the disclosure in its filings,
 - (ii) staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to its filings and
 - (iii) the Company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.
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Please contact me at the above address or by telephone at 925-290-4028 if you have any questions or comments regarding the above.

Very truly yours,

FORMFACTOR, INC.

/s/ Stuart L. Merkadeau

Stuart L. Merkadeau
Senior Vice President,
General Counsel and Secretary

cc: FormFactor, Inc.
Jean B. Vernet
PricewaterhouseCoopers
Rishi Jobanputra
Davis Polk & Wardwell
William M. Kelly
