#### [FormFactor Logo]

September 21, 2005

*Via EDGAR and Overnight Courier* Securities and Exchange Commission Division of Corporation Finance Mail Stop 6010 100 F Street, NE Washington, D.C. 20549

Attention: Dennis Hult, Staff Accountant

Re: FormFactor, Inc. Form 10-K for the fiscal year ended December 25, 2004 Filed March 14, 2005 File No. 0-50307

Ladies and Gentlemen:

I am writing, on behalf of FormFactor, Inc. (the "*Company*"), to respond to the comments of the staff of the Securities and Exchange Commission (the "*Commission*") to the above-referenced Form 10-K of the Company, which comments are contained in the staff's letter dated August 12, 2005. Please note that the numbered paragraphs set forth below correspond to the numbered comments in the staff's letter, and that the staff's comments are presented in bold type.

### Managements Discussion and Analysis, page 15

### Fiscal Years Ended December 25, 2004 and December 27, 2003, page 20

1. We see that you have elected to present stock based compensation expense as a separate line item on the face of the income statement. If material in future filings, please expand your discussions of the various expense categories to also discuss variances in line items inclusive of related stock compensation charges. Also, the selective financial data and quarterly information should include the allocation as well.

The Company will expand discussions in future filings to include variances in line items inclusive of related stock compensation charges, if material. The Company will include in future filings the allocation of stock based compensation in the selective financial data and quarterly information.

2. We note the significant inventory and inventory reserve balances at December 25, 2004. Please discuss these balances and the related turnover rates on a comparative basis and the reasons for the significant increase in the reserve for excess and obsolete inventory in the current year. Also,

# explain the basis for your conclusions regarding the recoverability of inventory as of the most recent balance sheet date. Revise future filings to clarify.

Gross inventories were \$17,442,536 and \$24,117,170 as of December 27, 2003 and December 25, 2004, respectively. Inventory reserves at December 27, 2003 and December 25, 2004 were \$9,417,824 and \$12,885,658, respectively. The increases in both gross inventories and inventory reserves are a result of increased volume in business. While inventory and inventory reserve balances have increased in 2004, inventory turns have increased as well from 8.3 turns in 2003 to 9.3 turns in 2004. Inventory reserves, as a percentage of gross inventories, remained relatively constant at 54.0% in fiscal 2003 compared to 53.4% in fiscal 2004.

We record inventory reserve for estimated obsolete or non saleable inventories equal to the difference between the cost of inventories and the estimated market value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those projected by management, additional inventory reserve would be required. Once established, the original cost of our inventory less the related inventory reserve represents the new cost basis of such products. Reversal of these reserves is recognized only when the related inventory has been scrapped or sold.

As discussed in the MD&A Overview under the captions "Cost of Revenues" and "Trends, Risks and Uncertainties" and in Note 2 to the financial statements, our advanced wafer probe cards are complex products that are custom to a specific chip design and must be delivered on relatively short lead-times as compared to our overall manufacturing process. Probe cards are manufactured in low volumes; therefore, raw material purchases are often subject to minimum purchase order quantities in excess of actual demand. It is therefore not uncommon for the Company to acquire production materials and start certain production activities in advance of the Company's receipt of an actual purchase order. Consequently, inventory reserve can result from a change in forecasted demand. Further, as discussed in the MD&A under the caption "Trends, Risks and Uncertainties," our manufacturing process includes steps that have historically been subject to fluctuating production yields. This requires us to place purchase order quantities that contemplate yield. These factors make inventory valuation adjustments a recurring element of our cost of revenue. The Company will include a more detailed discussion of significant inventory and inventory reserve balances and related movements in future filings.

### Consolidated Balance Sheets, page 52

3. We see from disclosures at Note 3 that approximately \$112.2 million of your marketable securities at December 25, 2004 mature after one year. Please tell us why these amounts are not classified as non-current assets in your balance sheet. Revise future filings to correctly classify your marketable securities as either current or non-current. Refer to paragraph 17 of FAS 115.

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As of December 25, 2004, the Company held \$156.6 million of marketable securities, all of which are considered available-for-sale and have immediate marketability. The \$112.2 million of securities with contractual maturities longer than 12 months you referred to consisted primarily of auction rate securities. The Company views all of its marketable securities as "available for current operations," regardless of the stated maturity dates and therefore, classifies them as current assets on the consolidated balance sheet. The Company's intention is to be able to liquidate the securities as needed in the ordinary course of business. The Company actively manages risk by purchasing primarily AAA rated securities. The auction rate securities that the Company has typically purchased perform an auction every 28 to 35 days. The Company believes that there is a reasonable expectation of completing a successful auction within the subsequent twelve-month period based on its past experience in selling such securities. Based upon the historical industry success of such auctions and the Company's specific experience with auction rate securities, the Company had determined the risk of non-redemption of auction rate securities within a year was minimal. Therefore, the Company believes it is appropriate to classify these available-for-sale securities as short-term investments.

### Note 12. Related Party Transactions, page 76

## 4. Significant related party transactions should be disclosed on the face of the financial statements, pursuant to Rule 4-08(k) of Regulation S-X. Revise future filings to disclose separately the transactions with related parties or advise us why this disclosure is not necessary.

The Company will present significant related party transactions on the face of the financial statements in future filings.

As requested in the staff's letter and in connection with this response to the staff's comments to the above-referenced Form 10-K filing, the Company acknowledges that: (i) the Company is responsible for the adequacy and accuracy of the disclosure in the filing; (ii) staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

Should you have any questions or comments regarding the above, please feel free to contact me at the above address or via telephone at 925-290-4023, or in my absence, Richard Mittermaier at 925-290-4097.

Thank you.

With best regards, /s/ Ron C. Foster Ron C. Foster Chief Financial Officer

cc:

FormFactor Mike Ludwig Debbie James Richard Mittermaier Stuart L. Merkadeau

PricewaterhouseCoopers Betty Jo Charles

Davis Polk & Wardwell Bruce Dallas