

Mail Stop 6010

February 28, 2006

Mr. Simon Biddiscombe
Senior Vice President, Chief Financial Officer and Secretary and
Treasurer
Mindspeed Technologies, Inc.
4000 MacArthur Boulevard, East Tower
Newport Beach, California 92660-3095

RE: Mindspeed Technologies, Inc.
Form 10-K for the fiscal year ended September 30, 2005
Filed November 22, 2005
File No. 0-50499
Form 8-K filed 1/23/06

Dear Mr. Biddiscombe:

We have reviewed your filing and have the following comments.
We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in future filings in response to these comments.
If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM 10-K for the period ending September 30, 2005

Management's Discussion and Analysis, page 26

1. We refer to your revenue and Selling, General and Administrative disclosure. We note in your analysis and discussion that changes were the result of numerous factors, some offsetting others. In future annual and interim filings, to more clearly comply with Item 303 of Regulation S-X, each individually significant factor contributing to the change is to be quantified to the extent practicable and an explanation should be given as to why that factor changed. Management's assessment as to how these changes are expected to affect future operations is to be presented where possible. To this end, when material changes in net sales or revenues exist, the discussion should also address the extent to which these changes result from changes in pricing and changes in volume.

Restructuring Charges, page 34

2. Please expand your disclosures in future filings to more fully comply with the guidance set forth in SAB Topic 5-P. Specifically, when you engage in restructuring activities, you should quantify the expected effects of these activities on future earnings and cash flows and indicate the period or periods in which the effects are expected to be recognized. You should identify the various types of expense items impacted, such as depreciation expense, salaries expense and other similar items and quantify the anticipated impact upon the individual line items of the financial statements. If cost savings are expected to be offset by anticipated increases in other expenses or by reduced revenues, this fact should be disclosed, as well. In later periods, you should quantify the actual savings realized. If anticipated savings are not achieved, or are achieved in later periods, MD&A should discuss that outcome, its reasons, and its likely effects on future operating results and liquidity.

Notes to Financial Statements, page 47

Note 5 Convertible Senior Notes, page 56

3. We note you conclude that the contingent obligation to issue additional shares or make an additional cash payment upon conversion following a fundamental change is an "embedded derivative." Please give us your analysis of how you are required to account for the referenced contingent obligation. Also, tell us how FAS Statement 133, EITF Issue 00-19 and EITF Issue 05-02 impacts how you are required to account for and present the embedded conversion feature of your debt. Finally, since the debt agreement includes registration rights for the underlying stock the debt is convertible into, tell us how EITF 05-04 impacts your accounting and presentation for the registration rights and convertible debt. We may have further comments after reviewing your response.

4. To this regard, please provide us with your calculation of the estimated fair value of the liability under the fundamental change adjustment.

Note 9 Warrants, page 59

5. Please tell us and in future filings explain how you arrived at the fair value of the warrant issued to Jazz Semiconductor, Inc.

Note 13 Segment and Other Information, page 61

6. Disclosure of long-lived assets by geographic area under SFAS 131 should present tangible assets only and should not include intangibles or investments. See question 22 to the FASB publication "Segment Information: Guidance on Applying Statement 131." Please revise your future filings to comply with the referenced disclosure requirements.

7. We see you indicate you operate in a single segment but also see you have multiple product lines. Please provide us with a detailed analysis of how your current segment disclosures comply with paragraph 16 of Statement 131, including other paragraphs of the Statement referenced therein. Tell us (1) the number and identity of your operating units, (2) how the units fit within your current segment classifications, (3) the nature of the financial information management reviews and (4) whether the reviewers qualify as chief

operating decision makers under Statement 131. Note paragraph 12 of the Statement indicates the chief operating decision makers don't have to be CEO's or COO's. We may have further comments after reviewing your response.

Form 8-K filed 1/23/06

8. We see that you present certain non-GAAP information in the form of an income statement. That adjusted income statement presents numerous non-GAAP amounts and sub-totals. Disclosures about non-GAAP measures should fully conform to the requirements of Item 10(e)(1)(i) to Regulation S-K and Question 8 to the FAQ Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003. Either delete the non-GAAP income statement from all future press releases or expand to present detailed and specific disclosure of the following for each non-GAAP measure:

- * The substantive reasons why management believes the non-GAAP measure provides useful information to investors;
- * The specific manner in which management uses the non-GAAP measure to conduct or evaluate its business;
- * The economic substance behind management's decision to use the measure; and
- * The material limitations associated with the use of the non-GAAP measure as compared to the use of the most directly comparable GAAP measure, including the manner in which management compensates for these limitations when using the non-GAAP measure.

Expanded disclosure should not be generic or cookie-cutter. The existing disclosures do not provide sufficient information. Show us how you plan to implement this comment. We may have further comment upon review of that response.

9. To this regard we note you refer to your presentation as Pro Forma Consolidated Condensed Statements of Operations. Using the term "pro forma" can be confusing to investors, as it has a very specific meaning under Article 11. Please do not refer to your adjusted non-GAAP presentation as pro forma in your future filings.

10. We note that through out your press release you give great prominence to non-GAAP information. In future filings, please revise to give your GAAP results of operations equal or greater prominence than any non-GAAP information presented. For example, you refer to "pro forma gross margins" before GAAP gross margins and present a non-GAAP statement of operations before a GAAP presentation and reconciliation to the non-GAAP information.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that they have provided all information investors require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that

- * the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- * staff comments or changes to disclosure in response to staff comments in the filings reviewed by the staff do not foreclose the

Commission from taking any action with respect to the filing; and
* 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Dennis Hult, Staff Accountant, at (202) 551-3618 or me at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Angela J. Crane, Accounting Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb
Reviewing Accountant

Simon Biddiscombe
Mindspeed Technologies, Inc.
February 28, 2006
Page 5