Mail Stop 4561

December 30, 2008

Mr. Walden C. Rhines Chief Executive Officer Mentor Graphics Corporation 8005 SW Boeckman Road Wilsonville, Oregon 97070-7777

> Re: Mentor Graphics Corporation Form 10-K for fiscal year ended January 31, 2008, filed March 19, 2008 Form 10-Q for the quarter ended October 31, 2008, filed December 5, 2008 Definitive Proxy Statement on Schedule 14A filed May 9, 2008 File No. 0-13442

Dear Mr. Rhines:

We have reviewed the above-referenced filings and have the following comments. If indicated, we think you should revise your document 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 supplemental 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 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

Business, page 3

1. In future filings, ensure that you have provided the information required by Item 101(c)(1)(iii) of Regulation S-K in regard to the sources and availability of raw materials, including a discussion of the terms of your purchase contracts. We note the risk factor on page 9 in which you state that you obtain hardware components from a limited number of suppliers.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Business Environment, page 16

2. We note your general discussion and your statement that you believe that you are well positioned among your competitors to continue your trend of growing at, or above, EDA market growth rates. In future filings, please expand your discussion to provide insight into not only material opportunities, but also challenges and risks, such as those presented by known material trends and uncertainties, on which your executives are most focused for both the short and long term, and how they intend to address such challenges and risks. We note, for example, that your CEO in the earnings conference call for your fourth quarter of 2008 indicated that you intended to cut costs to address the anticipated slow down in fiscal 2009. See Section III.A of SEC Release 33-8350 (Dec. 29, 2003).

Results of Operations, page 20

- 3. In future filings, ensure that you provide a narrative discussion of the extent to which increase in revenues are attributable to increases in prices, volume or the introduction of new products or services. Additionally, quantify the extent to which increases in revenues are attributable to organic growth versus acquisitions. Refer to Item 303(a)(3)(iii) of Regulation S-K. As an example, you indicate that system and software revenues were higher in 2008 due to the increase in sales of certain products. Explain the reasons for the increase in product sales. State whether you expect this trend to continue. Under Service and Support revenues, you indicate that due to your acquisition of Sierra Design Automation, your new Olympus-SoC place and route product contributed to increased revenues. Quantify the amount of revenues attributable to the new product.
- 4. Throughout this section, and also in the Liquidity and Capital Resources section, you sometimes refer to two or more factors that contributed to material changes over the reported periods. In future filings, revise to quantify the amount of the changes contributed by each of the factors or events that you identify as they relate to revenues, operating expenses and other income or expenses. Instead of simply using the term "primarily" to describe changes, quantify the amount of the change that is attributable to the primary source you identify. See Section III.D of SEC Release 33-6835 (May 18, 1989). As an example, you indicate that service and support revenues increased primarily from growth in the installed base of customers under support contracts related to certain products, and that you also had growth from new and emerging markets. Quantify the amounts attributable to each factor.

Form 10-Q

Liquidity and Capital Resources

Capital Resources, page 39

5. Ensure that you have described all of the material terms of your revolving credit facility. We note that you must satisfy certain financial covenants in order to borrow under the facility. Describe the financial covenants and state whether you are in compliance as of the most recent fiscal period.

Definitive Proxy Statement

Information Regarding Executive Officer Compensation, page 9

6. In future filings move your CD&A to the front of this section, so that it puts into perspective for investors the numbers and narrative that follow it. Refer to Section II.B.1 of Release No. 34-54302A (Nov. 7, 2006)

Compensation Discussion and Analysis

Elements and Objectives of our Compensation Program

Use of Benchmark Data, page 17

7. You indicate that each year your VP of Human Resources selects a peer group of companies. In future filings, describe the methodology used for selecting the companies in the peer group. To the extent that the peer group changes from year to year, the rationale for this change should be discussed. Additionally, discuss the extent to which you considered the comparative performance of the peer group companies and, if you did, how your performance compares to them.

Base Salaries, page 18

- 8. You indicate that salary ranges are determined with the midpoint of the range largely based on the average of the 50th percentile of salaries paid for comparable positions by the peer group, if there is sufficient data. In future filings, explain what occurs if there is not sufficient data.
- 9. You indicate that prior to the increase in Dr. Rhines' salary it was slightly below the 50th percentile for CEO's in the peer group, and also that you do not use peer group data to set Mr. Hinckley's salary, as it is kept at about 80% of Dr. Rhines' salary. In future filings, state how Dr. Rhines' increased salary and Mr. Hinkley's salary compares to the peer group.

10. You refer to Mr. Hinkley's "unusually strong" role as your President, and also to a subjective evaluation of the individual performance of the Messrs. Derrick, Maulsby and Potts as factors in setting their salary. In addition we note that the Compensation Committee awarded stock options to each NEO in excess of the matrix amount created by the HR department. In future filings, provide meaningful and concise descriptive information regarding the individual accomplishments that resulted in awards of bonuses or other forms of compensation to each NEO to enable shareholders to better understand the nature of the NEO's accomplishments and how they benefited the company. Refer to Item 402(b)(2)(vii) of Regulation S-K.

Annual Variable Incentive Plan, page 19

- 11. We note that the Compensation Committee has the discretion to increase target bonus percentages during the year and to reduce or augment stock option grants in relation to the matrix created by the HR department. In future filings, discuss in general the circumstances that would result in the use of the discretion and whether such discretion could also be used to decrease target bonus percentages during the year.
- 12. In future filings, discuss how the data from the peer group survey is used to set bonus amounts.
- 13. You indicate that in order for NEOs to earn 75% of the target bonus payout for fiscal year 2008, you had to achieve adjusted operating income of \$77 million, and that since you achieved adjusted operating income of \$87 million the payout was 108%. In future filings, specify how you determined the amount of the bonus you paid pay by providing, preferably in a tabular format, the levels of adjusted operating income that must be achieved in order to receive various increments of the bonus. Provide similar information for the bonuses paid to Messrs. Derrick and Potts. Refer to Item 402(b)(1)(v) of Regulation S-K.
- 14. You indicate that a portion of Messrs. Derrick and Potts' bonus requires their respective divisions to achieve certain levels of performance. As a result, it appears that the targets you set for evaluating performance are a material part of your compensation policy. In future filings, please disclose the targets, or tell us why you have not disclosed them. If you disclose the targets, discuss whether, for each executive, he met those targets, including a discussion of by what margin or amount the targets were, or were not, met. If you do not disclose the targets, we presume that you have a detailed analysis supporting exclusion of the targets. Refer to Instruction 4 of the Instructions to Item 402(b) of Regulation S-K. In that event, discuss how difficult it will be for the executive, or how likely it will be for you, to achieve the undisclosed target level.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. If you amend your filing(s), you may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter that keys your response to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing any amendment and your response to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 filing;
- 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
- 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.

If you have any questions you may contact Donna Levy, Staff Attorney, at (202) 551-3292 or, in her absence, me at (202) 551-3730.

Sincerely,

Barbara Jacobs Assistant Director