

Mail Stop 4561

May 30, 2008

Michael J. Fister  
President and Chief Executive Officer  
Cadence Design Systems, Inc.  
2655 Seely Avenue, Building 5  
San Jose, CA 95134

**Re: Cadence Design Systems, Inc.  
Form 10-K for the Fiscal Year Ended December 29, 2007  
Filed February 26, 2008  
Form 10-Q for the Quarterly Period Ended March 29, 2008  
Filed April 25, 2008  
Definitive Proxy Statement Filed March 25, 2008  
File No. 001-10606**

Dear Mr. Fister:

We have reviewed the above-referenced filing[s] 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 for the Fiscal Year Ended December 29, 2007

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview, page 27

1. Please consider expanding this section to provide a balanced, executive-level discussion that identifies the most important themes or other significant matters

with which management is concerned primarily in evaluating the company's financial condition and operating results. This should include, but is not limited to, discussing economic or industry-wide factors relevant to you; providing further information about how you earn revenues and income and generate cash; and giving insight into material opportunities, 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, as well as the actions they are taking to address these opportunities, challenges and risks. See Item 303(a) of Regulation S-K and SEC Release No. 33-8350. For example, consider discussing how management is responding to specific challenges facing your industry, such as the migration to nanometer design which you discuss in your Part I disclosure but refer to only briefly in this section.

Revenue by Year, page 35

2. Your discussion of your results of operations should include a narrative discussion of the extent to which material increases in revenues from one period to the next were attributable to increases in prices, increases in volume, or product innovations. See Item 303(a)(3)(iii) of Regulation S-K. Furthermore, please tell us what consideration you gave to quantifying the extent of contribution of each source of a material change you have identified in this subsection, pursuant to the interpretive guidance in Section III.D of SEC Release 33-6835 Interpretation: Management's Discussion and Analysis of Financial Condition and Results of Operations. The chart appearing in the next subsection under the heading "Revenue by Product Group" sets forth the relative increases and decreases between product groups, but does not provide any information regarding absolute increases or decreases in dollar or percentage terms.

Note 6. Convertible Notes, page 82

3. We note in your disclosure related to your Senior Convertible Notes due 2023 (2023 Notes) that due to the conversion feature being linked to the trading price of the 2023 Notes which are traded in an observable market that differs from the one in which the Company's common stock is traded, the conversion feature meets the definition of a derivative that must be accounted for separately at fair value. We also note that you issued Convertible Senior Notes due 2011 and 2013 (2011 and 2013 Notes) with a similar conversion feature that is linked to the trading price of the 2011 and 2013 Notes although you have not accounted for this conversion feature separately at fair value. Clarify why you are accounting for this conversion feature differently for the 2023 Notes and the 2011 and 2013 Notes. In this regard, clarify how you determined that the 2023 Notes were not indexed to the Company's common stock and how you determined that the 2011 and 2013 Notes were indexed to the Company's common stock.

Note 8. Income Taxes, page 86

4. We note that upon adoption of FIN 48 the Company recognized a decrease of \$102.0 million in the liability for unrecognized tax benefits. Please provide more insight as to the reasons for the benefit recognized upon adoption of FIN 48. For instance, tell us what threshold was applied in recognizing your tax liability prior to the adoption of FIN 48 and tell us to which tax positions these adjustments relate.
5. We note in your disclosures on page 88 that the IRS proposed to assess an aggregate tax deficiency for the tax years 2000 through 2002 of approximately \$318 million and that you have filed a protest with the IRS through the Appeals Office since you believe that the proposed adjustments are inconsistent with the applicable tax laws. Tell us whether you have accrued and/or paid any portion of this deficiency and provide us with your analysis under FIN 48 as it relates to this uncertainty. In your response, tell us how you considered the December 2007 settlement with the IRS related to transfer pricing arrangements with a foreign subsidiary in determining your accrual, if any, since a portion of the \$318 million deficiency relates to transfer pricing arrangements with foreign subsidiaries. Also, considering a portion of the assessment relates to the “deferred recognition” of proceeds received from restitution and settlement in connection with litigation, tell us the amount, if any, that is included in deferred taxes related to such income or tell us how you accounted for the taxes applicable to this “deferred recognition.” Also, tell us what amount, if any, of the \$152 million assessment relates to penalties and interest.
6. Please tell us why the deferred tax asset for tax credit carryforwards (\$79.1 million) is greater than the actual tax credits of \$29.2 million (federal \$10.3 million, California \$14.3 million and other states \$4.1 million).

Definitive Proxy Statement filed March 25, 2008

Compensation Discussion and Analysis

Annual Cash Incentive, page 27

7. Your disclosure indicates that the Compensation Committee establishes the target bonus for each of the company’s named executive officers based on the methodology outlined in the “Compensation Determinations” discussion appearing on page 25. However, the narrative discussion following your Summary Compensation Table appears to indicate that the target bonuses for each of your named executive officers are specified in each officer’s employment agreement. Please explain. Also, to the extent that the target bonus established for any of your named executive officers for 2007 differs from the target bonus

specified in that officer's employment agreement, please disclose that target bonus.

Cadence Group Modifier, page 27

8. In future filings, consider disclosing the value of the Cadence Group Modifier, and how it was calculated, with respect to each named executive officer. While you disclose the target levels underlying the company performance modifier, you do not disclose how the actual annual bonuses were calculated for each named executive officer, based on the company performance modifier and the business objectives modifier, as applicable. See Item 402(b)(1)(v) of Regulation S-K.

Long-Term Equity Incentive Compensation, page 28

9. You do not appear to disclose how you calculated the actual long-term equity incentive awards paid to your named executive officers in 2007. Please tell us how these awards were determined for 2007, with a view towards including this type of disclosure in future filings.

Form 10-Q for the Quarterly Period Ended March 29, 2008

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures, page 34

10. We note your statement that your principal executive officer and principal financial officer have concluded that the company's disclosure controls and procedures are "sufficiently" effective. The inclusion of such qualifying language does not conform to the requirements of Item 307 of Regulation S-K. Please confirm that your disclosure controls and procedures were effective as of the end of the period covered by this report and revise your future filings to remove this qualification. You must clearly state whether the officers concluded that the company's disclosure controls and procedures were effective.

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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.

Michael Fister  
Cadence Design Systems, Inc.  
May 30, 2008  
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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.

You may contact Patrick Gilmore, Senior Staff Accountant, at (202) 551-3406 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Matthew Crispino, Staff Attorney, at (202) 551-3456 or David Orlic, Special Counsel at (202) 551-3503. If you need further assistance, you may contact me at (202) 551-3499.

Sincerely,

Kathleen Collins  
Accounting Branch Chief