Mail Stop 4561 via fax (408) 944-7026

July 21, 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 Definitive Proxy Statement Filed March 25, 2008 File No. 001-10606

Dear Mr. Fister:

We have reviewed your response letter dated June 13, 2008 in connection with the above-referenced filing[s] and have the following comment. If indicated, we think you should revise your document in response to this comment. 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 our comment, 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. Unless otherwise noted, where prior comments are referred to they refer to our letter dated May 30, 2008.

Definitive Proxy Statement filed March 25, 2008

Compensation Discussion and Analysis

Annual Cash Incentive Compensation, page 27

1. We note your response to comment 7. In your response, you do not state whether the target bonuses established for your named executive officers for 2007 differed from the target bonuses specified in the officers' employment agreements. Please tell us if the target bonuses for your officers for 2007 were those set forth in their employments agreements or whether the targets were modified by the compensation committee. If the latter, please tell us what the target bonuses were Michael Fister Cadence Design Systems, Inc. July 21, 2008 Page 2

> for 2007 and the specific factors the compensation committee considered in determining to modify the target bonuses from those set forth in the employment agreements. Please also confirm that you will include a similar discussion in future periods in which the target bonuses are modified from the disclosed figures.

> > * * * * * * *

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.

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