



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

May 15, 2012

Via E-mail

Mr. Kevin P. March

Senior Vice President, Chief Financial Officer and Chief Accounting Officer

Texas Instruments Incorporated

12500 TI Boulevard, P.O. Box 660199

Dallas, Texas 75266-0199

**Re: Texas Instruments Incorporated
Form 10-K for the Fiscal Year Ended December 31, 2011
Filed February 24, 2012
Response Letter Dated April 27, 2012
File No. 1-3761**

Dear Mr. March:

We have reviewed your response letter and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2011

1. Please expand your response to prior comments 6 and 7 to clarify how you determined the products and product lines within your segments are “groups of similar products” for purposes of Regulation S-K Item 101(c)(1)(i) given that your disclosures appear to indicate such product lines perform different functions and have different life cycles.

Mr. Kevin P. March
Texas Instruments Incorporated
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Notes to Financial statements, page 6

Note 17 – Segment and geographic area data, page 36

2. We note your response to prior comment 4 that although depreciation expense is included in the measure of segment profit, you are unable to determine the specific amount of depreciation expense allocated to each segment as required by FASB ASC 280-10-50-22. Considering this fact, and in order to provide investors with a better understanding of your allocations, please revise future filings to disclose the reasons why you are unable to provide the amount of depreciation expense allocated to each segment.

You may contact Gary Newberry at (202) 551-3761 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Mary Beth Breslin at (202) 551-3625 or Geoffrey Kruczek at (202) 551-3641 if you have questions on other comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn
Accounting Branch Chief