Via Federal Express

Mr. Tim Buchmiller Senior Attorney, Division of Corporation Finance U.S. Securities and Exchange Commission 100 F Street, NE Washington, DC 20549

Re: Texas Instruments Incorporated

Annual Report for the Fiscal Year Ended December 31, 2006 on Form 10-K File No. 001-3761

Dear Mr. Buchmiller:

I am writing in response to your letter dated October 30, 2007 to Texas Instruments Incorporated containing comments on our Form 10-K for the year ended December 31, 2006. As you will note below, we have addressed your comments in our Form 10-Q for the quarter ended September 30, 2007, and will do so in our Form 10-K for the year ended December 31, 2007, as appropriate. We intend to include similar disclosures, revised as appropriate, in our filings for relevant subsequent periods.

Management's Discussion and Analysis

Financial Condition; and Liquidity and Capital Resources

COMMENT: It appears from footnote 3 to your financial statements for the fiscal year ended December 31, 2006 that a significant portion of your cash equivalents and short-term investments were held in "asset-backed fixed income securities." In future filings, please clearly discuss the nature of the material components of those assets as necessary to provide your investors with information necessary for a clear understanding of your financial condition. Also, if these securities are reasonably likely to affect your financial condition in a material way, please expand your discussion and analysis in applicable future filings to provide your investors with information necessary for a clear understanding of the trend or uncertainty. Refer to Item 303(a) of Regulation S-K. For example, as appropriate, identify the percentage and nature of any mortgage-backed securities you hold, indicate what factors may affect the value of those securities and disclose any material risks. Also add any appropriate disclosure required by Item 305 of Regulation S-K.

RESPONSE: We responded to this comment in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2007, which we filed on November 1, 2007. Specifically in the Financial Condition section we disclosed:

Total cash (cash and cash equivalents plus short-term investments) decreased \$48 million from year-end 2006 to \$3.67 billion at the end of the third quarter. Total cash includes \$926 million of asset-backed fixed income securities, divided about equally between mortgage-backed securities secured by non-subprime-mortgage pools and non-mortgage-related asset-backed commercial paper. These asset-backed fixed income securities continue to be rated either AAA, A-1 or P-1. To date, we have collected all principal and interest payable on these securities and expect to continue to do so as they mature.

We intend to revise our disclosures in the notes to our financial statements and in our Quantitative and Qualitative Disclosures about Market Risk (Regulation S-K Item 305) as requested in future filings.

In addition, please note the effect of changes in interest rates on the fair value of our asset-backed fixed income securities has not been material since we filed our 2006 Form 10-K, and is not expected to be material for the foreseeable future, due to the quality and duration of our investments. In addition, our sensitivity analysis indicated that a 1% general change in the applicable interest rates associated with these investments as of the end of the third quarter of 2007 would not have resulted in a material change in the securities' fair value, thus obviating the need to update the year end disclosure on Quantitative and Qualitative Disclosures about Market Risk.

As we have previously disclosed in our notes to financial statements, we consider our investment in these securities to be held available for sale, therefore under Statement of Financial Accounting Standards No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, any changes in the fair value of these investments would be reflected as a component of other comprehensive income for the period and not as a direct entry to the income statement. Such changes have not been material and are not expected to be material in the foreseeable future.

In connection with this response to your comment regarding our Form 10-K for the year ended December 31, 2006, we acknowledge that:

- · We are responsible for the adequacy and accuracy of the disclosure in the filing;
- · Staff comments or changes to our disclosures in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- · We 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.

We trust that the above information will be sufficient for your purposes. If you have any questions, please call Charlie Miller of Texas Instruments at 214-480-6707.

/s/ Kevin P. March

Kevin P. March Senior Vice President and Chief Financial Officer