Mail Stop 6010

July 24, 2006

Mr. Kevin P. March Chief Financial Officer Texas Instruments, Inc. 12500 TI Boulevard P.O. Box 660199 Dallas, Texas 75266

Re: Texas Instruments, Inc.

Form 10-K for the Year Ended December 31, 2005 and related filings

Form 10-Q for the Quarter Ended March 31, 2006

File No. 001-03761

Dear Mr. March:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those items we have addressed in our comments. Where indicated, we think you should revise your documents in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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 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.

Texas Instruments, Inc. Mr. Kevin P. March July 24, 2006 Page 2

Form 10-K for the Year Ended December 31, 2005

Texas Instruments 2005 Annual Report

Note 1. Description of Business and Significant Accounting Policies and Procedures, page 11

-Revenue Recognition, page 12

- 1. Please revise this note in future filings to disclose the rights you grant to your distributors, such as the rights of return, the rights to price adjustments, etc. Explain how you are able to reliably estimate the expected events in order to establish allowances and recognize revenue upon delivery to the distributor.
- 2. We note that you may grant adjustments to your distributors in specific competitive situations that are applied to their accounts, but do not change the pricing to these distributors.
 - Please tell us and revise your future filings to explain the nature of the adjustments made to your distributors' accounts and how you account for these adjustments.
 - Explain to us how these adjustments do not change your pricing to the distributors.
 - Cite the accounting guidance relied upon and how you applied this guidance to your specific situation Refer to SAB Topic 13 and EITF 01-09.

Management's Discussion and Analysis of Financial Condition, page 45

-2005 Compared with 2004 - Detail of Financial Results, page 48

3. We note that you present a 2005 effective tax rate excluding discrete tax items. In future filings, when presenting similar non-GAAP measures, please provide all the disclosures required by Item 10(e) of Regulation S-K and comply fully with the guidance provided in the Division of Corporation Finance Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures. Otherwise, revise future filings to only present an effective rate based on your GAAP results and discuss the special or discrete tax events reflected in that rate

Form 10-Q for the Quarter Ended March 31, 2006

Note 1. Description of Business and Significant Accounting Policies and Practices, page 8

4. We note that you disclose that you recorded a charge of \$5 million of in-process R&D expenses based on the results of a third-party appraisal. Please note that if in future periods you intend to incorporate your Form 10-K by reference into a registration statement, you will be required to identify the appraiser and include its consent pursuant to Securities Act Rule 436. Otherwise, you may revise the filing, as appropriate.

Texas Instruments, Inc. Mr. Kevin P. March July 24, 2006 Page 3

Note 2. Discontinued Operations, page 8

- 5. We note that you entered into an agreement on January 9, 2006 to sell substantially all of assets of the Sensors & Controls segment to an affiliate of Bain Capital, LLC for \$3 billion in cash and that you reported the results of operations of the former Sensors & Controls business as discontinued operations within your statement of operations. We further note from your Form 8-K filed on January 11, 2006 that you will enter into certain cross-license agreements for technology and intellectual property with the acquirer following the closing of this transaction for purposes of continuing the conduct of their respective businesses.
 - Please tell us and revise your future filing filings to describe your level of continuing involvement in the on-going operations of the Sensors & Controls business after the completion of the transaction
 - Please also discuss if you have or will eliminate the operations and cash flows of the Sensors & Controls business from your ongoing operations. Refer to the guidance in paragraph 42 of SFAS 144.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comment and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses 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.

Texas Instruments, Inc. Mr. Kevin P. March July 24, 2006 Page 4

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3671 if you have questions regarding these comments.

Sincerely,

Martin F. James Senior Assistant Chief Accountant