

April 27, 2012

Via Federal Express

Mr. Kevin L. Vaughn
Accounting Branch Chief
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Texas Instruments Incorporated
Form 10-K for the Year Ended December 31, 2011
Filed February 24, 2012
File No. 1-3761

Dear Mr. Vaughn:

I am writing in response to your letter dated April 13, 2012, to Texas Instruments Incorporated (referred to herein as the "Company") containing comments on our Form 10-K for the year ended December 31, 2011. We will address your comments in future filings as discussed below.

COMMENT 1: We note that none of your risk factors, or other sections of your Form 10-K, specifically address any risks you may face from cyber attacks, such as attempts by third parties to gain access to your systems for purposes of acquiring your confidential information or intellectual property, including personally identifiable information that may be in your possession, or to interrupt your systems or otherwise try to cause harm to your business and operations. Given that other companies in your industry have actually encountered such risks and have disclosed that such risks may be material to their business and operations, please tell us what consideration you gave to including disclosure related to cybersecurity risks or cyber incidents in your Form 10-K. Please refer to the Division of Corporation Finance's Disclosure Guidance Topic No. 2 at <http://www.sec.gov/divisions/corpfin/guidance/cfguidance-topic2.htm> for additional information.

RESPONSE 1: Management has reviewed the risk to the Company of cyber attacks and considered Disclosure Guidance Topic No. 2. We have addressed such risk in Item 1A of our Form 10-K, where we note our reliance on global manufacturing operations and state that security risks could result in a material adverse effect on our business operations and financial results. After further review, we believe that it would be appropriate to expand Item 1A to discuss specifically our reliance on information technology (IT) systems, the disruption of which (for example, due to cyber attacks) could have a material adverse effect on our global operations. We will include that expanded discussion in our Form 10-Q for the quarter ended March 31, 2012.

COMMENT 2: To the extent that recent developments in the supply of and access to rare earth metals have affected or are likely to affect your business, provide the disclosure required by Item 101(c)(1)(iii) of Regulation S-K. In addition, if access to rare earth minerals by you, your suppliers or customers creates uncertainties or risks for your business, please provide risk factor or trends disclosure pursuant to Items 503(c) and 303 of Regulation S-K.

RESPONSE 2: In Items 1 and 1A of our 2011 10-K, we discuss our views on the availability of the raw materials needed to manufacture our semiconductor products. For example, in Item 1 we note our reliance on sole-source suppliers, and in Item 1A we state that our manufacturing requires that "certain key raw materials . . . be available." In Item 1A we also have included a risk factor concerning the exposure of our global operations to risks associated with legal, political, economic or other changes.

TI makes limited use of rare earth metals in its manufacturing process. However, some of our customers make greater use of rare earth metals in their manufacturing operations, the disruption of which could affect the demand for our products. In our Form 10-Q for the quarter ended March 31, 2012, we will expand Item 1A to note specifically our customers' reliance on the availability of raw materials.

COMMENT 3: We note your disclosures here and throughout the filing regarding your three reportable segments. Please describe to us in more detail the underlying operating segments that make up your three reportable segments. With reference to FASB ASC 280-10-50-1 through 280-10-50-9, tell us how you have identified your operating segments. To the extent that any of your reportable segments result from the aggregation of two or more operating segments, provide us with a detailed analysis that discusses how you have considered the aggregation criteria set forth in FASB ASC 280-10-50-11. Specifically address how your segment reporting has been impacted by the integration of the National Semiconductor business.

RESPONSE 3: TI periodically evaluates its segment reporting disclosures based on information utilized by our chief operating decision maker (CODM) to assess performance and allocate resources of the Company and makes changes as needed to the segment disclosures as information utilized by the CODM changes. For example, in 2008 we revised our segment disclosures to disaggregate our Semiconductor operations from one reportable segment into three reportable segments (Analog, Embedded Processing and Wireless) reflecting how the CODM evaluates the performance of our businesses and allocates the resources of the Company.

In preparing our segment disclosures, there has been no aggregation of any separate operating segment into a "reportable" segment. We have 3 operating segments that meet the 10% threshold of ASC 280-10-50-12 – Analog, Embedded Processing and Wireless – and are therefore separately disclosed in our segment footnote. In addition, the sum of these three reportable segments' revenue is greater than 75% of consolidated revenue for each of the last three years. We also have various other operating segments that are each below the 10% threshold and are therefore included in the "Other" category in our segment reporting, such as Education Technology. We also receive royalty payments and have revenue from transitional supply agreements reported in the Other category, neither of which is an operating segment as defined in ASC 280. Unlike the separately disclosed segments, the operating segments included in the Other category are not a strategic focus of the Company.

We identified our operating segments by applying the criteria of ASC 280-10-50-1 through ASC 280-10-50-9 as follows:

We determined that our CODM is our President and Chief Executive Officer. We considered the following factors:

1. The discrete financial information that is used by our CODM to assess performance and allocate resources of the Company;
2. The nature of the business activities of each component;
3. Our organizational structure;
4. The existence of managers responsible for each operating segment; and
5. The information presented to the Board of Directors.

We reviewed the discrete financial information that is regularly made available to the CODM and used by him to assess performance and allocate resources of the Company. We determined that the Analog, Embedded Processing and Wireless business units are the lowest level at which discrete financial information is regularly used by the CODM to assess performance and allocate resources at the operating segment level. While the CODM may review financial information at multiple levels, the financial information below the operating segment level is less reliable for assessing performance beyond revenue and standard gross margin calculations. The CODM relies principally on the operating segment information to manage the Company and utilizes lower-level information to better understand the overall segment allocations that are made. We also reviewed the level of detail of the financial information provided to the Board of Directors, noting that the information regularly provided is consistent with the Company's determination of its reportable segments.

Our internal reporting structure reflects our management organization. Each of our reportable segments is headed by a senior vice president who is (a) directly accountable to and maintains regular contact with the CODM, (b) assigned to a specific business entity based on a major category of products, and (c) responsible for managing the entity and assessing the performance of those within it. The CODM allocates resources of the Company to the individual segments after reviews with the segment managers. The segment managers then allocate those resources within the segments.

Based on this review process, our presentation of segments is consistent with the way the CODM evaluates the businesses (i.e. segments) for performance and allocates resources of the Company to the segments. The acquisition of National Semiconductor (National) was made for the purpose of adding to our portfolio of analog semiconductor products. The National portfolio brought over 10,000 analog products complementary to TI's existing analog portfolio. Because of the similarity between TI's and National's analog design and development requirements, manufacturing processes, end customers and distribution channels, we have included the financial results of National, now known as Silicon Valley Analog (SVA), within TI's Analog segment. The Analog segment manager is responsible for managing SVA's results in addition to the results of the rest of the Analog segment. The CODM continues to assess the operating performance of the Company at the segment level, including the Analog segment with SVA.

COMMENT 4: Tell us where you have disclosed the amount of depreciation, depletion, and amortization expense included in each segment's results as required by FASB ASC 280-10-50-22. While you disclose that your CODM does not evaluate operating segments using discrete asset information, we note that one of the measures used to evaluate segment results is operating profit, of which depreciation and amortization expense is a component. If you concluded that the disclosure was not required, please tell us why and explain how you considered ASC 280-10-55-12 through 55-15 in reaching your conclusion.

RESPONSE 4: TI uses a centralized manufacturing organization to provide products to our operating segments and a centralized organization that manages our facilities. Our manufacturing equipment and facilities are not dedicated to individual segments, but rather used to produce thousands of products across different segments. As a result, the assets and liabilities associated with the manufacturing and facilities organizations are not assigned to the operating segments. The costs incurred by these organizations (e.g., depreciation, direct materials and labor) are aggregated then charged out to the segments on a per-unit basis. The individual cost components lose their identity as a result of our total charge-out methodology. Consequently, depreciation expense is not an independently identifiable component within the segments' results, and is therefore unable to be provided to our CODM. The CODM assesses depreciation at the total company level because the majority of the fixed assets are utilized across all segments.

COMMENT 5: Please tell us whether any individual countries in Asia are attributed a material amount of your total revenues. Refer to FASB ASC 280-10-

RESPONSE 5: Our shipments of products into China (including Hong Kong), the largest semiconductor market in the world, represented approximately 40% of our revenue for the year ended December 31, 2011. Our current geographic disclosures go beyond a single non-U.S. sales figure as required by ASC 280-10-50-41 and provide information by region, as we believed this more detailed categorization would be useful to investors. However, given the extent to which we sell into China, in future annual filings we will disclose revenue for that country, as well as any other individual country that might account for a similar level of sales.

COMMENT 6: We note your disclosures on pages 39 and 40 regarding your product information, which appears to include discussion of various groups of products. For example, within the Analog reportable segment, you refer to your High Volume Analog & Logic (HVAL), Power Management (Power), High Performance Analog (HPA) and Silicon Valley Analog (SVA) product lines. We note discussions of different products in your other reportable segments as well. Please explain to us how you have considered the requirements of FASB ASC 280-10-50-40, which requires separate reporting of revenues from each product or group of similar products.

RESPONSE 6: TI has over 80,000 products that we sell to over 90,000 customers worldwide. We also manufacture and ship over 20 billion units of product annually. This broad portfolio of products has already been categorized into groups of similar products through our segment reporting process. Analog, Embedded Processing and Wireless represent categories of products that are meaningful to investors, consistent with the markets they serve, and consistent with our internal reporting structure as described in our response to comment 3 above.

We believe that our current disclosure of revenue by reportable segment meets the requirements of ASC 280-10-50-40 because our reportable segments are themselves major categories of products (i.e., they are groups of similar products that are combined on the basis of similar design and development requirements, product characteristics, manufacturing processes, end customers and distribution channels). We believe this level of presentation also complies with the required disclosures of each "class of similar products" in accordance with Item 101(c)(1)(i) of Regulation S-K. (See Response to item 8 below.)

We make reference in our MD&A to our product lines in order to help investors understand the product lines in each segment (pp. 39-40) and provide insight into the segment's performance (pp. 44-46). This product-line view of our segments is consistent with how information is aggregated for review by the segment managers, but does not negate the fact that these product lines are groups of similar products when considered in the context of the Company's total product portfolio.

It should be noted that we typically have little enterprise exposure into any one or group of products that would be meaningful to investors because of the nature of our products and the semiconductor cycle in general as discussed on pages 40 and 41 of our Annual Report under "Manufacturing," "Product Cycle," and "Market Cycle." Where we do have exposure that is relevant to investors, such as in the case of our wireless baseband product line, we provide more specificity.

COMMENT 7: Please tell us, and revise future filings to clarify, the underlying causes for each of the material changes you say occurred in each of your segments and in your consolidated results of operations. For example, you mention “weaker demand” on page 44 and a “downturn in the semiconductor industry” on page 42, but it is unclear what caused the weaker demand or the downturn. It is also unclear if the downturn has continued or what its effect on you has been. Likewise, you attribute changes in line items to “increased shipments” and the “effect of the mix of products,” but it is unclear why shipments increased compared to the prior year period or how product mix shifted compared to that period. In this regard, please tell us how the product lines you mention affect average selling prices and the effect each line has on margins. Also include, or tell us where you included, the three-year revenue history of those lines and the effect of new product introductions on product mix during the periods presented. See Regulation S-K Item 101(c)(1)(i).

RESPONSE 7: The underlying causes for material changes in our segments and consolidated results were cyclical factors in the semiconductor market, global economic uncertainty, the acquisition of National Semiconductor Corporation, the earthquake in Japan, and the Company’s decision to exit the market for wireless baseband semiconductors. In the MD&A, we have discussed each of these factors. Please see, for example, the discussion on pages 39 and 42-43 (National acquisition), 40 (baseband products), 41 (semiconductor market cycle) and 46 (Japan earthquake).

As noted in the MD&A we have over 80,000 products and a customer base of more than 90,000 customers. To avoid making our MD&A “unnecessarily lengthy, difficult to understand and confusing” (therefore inconsistent with SEC Interpretive Release No. 33-8350), we have included statements in our Overview to streamline the discussion of our results of operations.

Accordingly, with regard to changes in product shipments, we state in the Overview (page 41) that “changes in our shipments are caused by changing demand for our products unless otherwise noted.” With respect to new product introductions, we state (page 41) that “new products tend not to have a significant revenue impact for one or more quarters after their introduction,” as they are initially produced in limited quantities and ramp to high-volume production over time. These statements clarify the underlying causes for changes in our segments and results of operations.

For operations where we have a limited number of products and customers, we provide, when meaningful, more detailed disclosure of the causes for changes in our segments and results of operations. For example, in the discussion of the results of our Wireless segment, we provide details on the decline in baseband revenue (pages 40 and 45).

With reference to the semiconductor market cycle, we discuss on page 41 the strengthening and weakening of demand for semiconductor products. We do not refer expressly to market “upturns” and “downturns,” even though (as noted in your question) we have used that terminology when discussing our results of operations. In future filings, we will include that terminology in the MD&A Overview so that investors may more easily relate our results of operations to the information provided in the Overview.

With regard to the three-year revenue history of our product lines, in the MD&A (page 42) we have provided such information for each “class of similar products,” namely, Analog, Embedded Processing and Wireless, in accordance with Item 101(c)(1)(i) of Regulation S-K. Please see the response to Comment 6. We respectfully submit that a more detailed presentation of three-year revenue would not provide material information, but instead would be “unnecessarily lengthy, difficult to understand and confusing.”

COMMENT 8: Further to the above, we note throughout your management’s discussion and analysis that you attribute changes in your revenue to (i) the acquisition of National Semiconductor Corporation, (ii) volume changes and (iii) pricing changes. These explanations appear to be overly general and do not provide investors with a quantified analysis and sufficient insight into the reasons for changes in your results, as discussed in section III.B.4 of SEC Interpretive Release No. 33-8350. Please revise future filings to provide a clear and quantified discussion of the underlying material factors that impacted your results of operations for the periods presented in this Form 10-K. Provide us with a sample of your proposed revised disclosure. Refer to Item 303(A)(3) of Regulation S-K.

RESPONSE 8: As noted in our response to Comment 7, we have a very broad product portfolio and customer base. In our MD&A, we have combined the discussion of our business activities to provide meaningful information to our investors. We respectfully submit that our MD&A in its entirety provides the appropriate level of discussion and analysis envisioned by SEC Interpretive Release No. 33-8350.

For example, with regard to changes in our revenue due to our National acquisition, we quantify the revenue contribution that Silicon Valley Analog (how we now refer to National’s operations) has on our Analog segment. Please see page 42-43 (citing note 2 to the financial statements) under the heading “Impact of National acquisition,” where we specifically identified the amount of revenue National contributed to our 2011 results of operations. We also discuss the impact of the acquisition-related charges, including how they affect TI’s financial condition. Please see pages 43 and 44.

Further, with regard to volume changes, the “product cycle” discussion in the MD&A specifically states that “changes in our shipments are caused by changing demand for our products unless otherwise noted.” We also note that in 2011 our orders decreased compared to 2010 due to lower demand across a broad range of products. Please see pages 41 and 44.

Finally, with regard to pricing changes, the “product cycle” discussion in the MD&A specifically states that “semiconductor prices and manufacturing costs tend to decline over time as manufacturing processes and product life cycles mature.” Where lower revenue was attributable to price changes (such as in our Analog revenue discussion), we specifically noted it was due to “normal price declines.” Please see pages 41 and 45.

In connection with this response to your comments regarding our Form 10-K for the year ended December 31, 2011, 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 214-3707.

Very truly yours,

/s/ KEVIN P. MARCH
Kevin P. March

Senior Vice President and
Chief Financial Officer