UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

| X | QUARTERLY RE 1934 | PORT PURSUANT TO SECTION 13 OR 15 | (d) OF THE SECURITIES EXCHANGE A | CT OF |
|-------|---|--|---|-----------|
| | | For the quarterly period ended | June 30, 2017 | |
| | TRANSITION RE 1934 | PORT PURSUANT TO SECTION 13 OR 15 | (d) OF THE SECURITIES EXCHANGE A | CT OF |
| | | For the transition period from | to | |
| | | Commission File Number | 001-03761 | |
| | TEX | XAS INSTRUMENTS (Exact Name of Registrant as Speci | | |
| | (S | Delaware State of Incorporation) | 75-0289970 (I.R.S. Employer Identification No.) | |
| | | Boulevard, Dallas, Texas of principal executive offices) | 75243 (Zip Code) | |
| | | Registrant's telephone number, including a | rea code 214-479-3773 | |
| durin | | er the Registrant (1) has filed all reports required to be file s (or for such shorter period that the Registrant was require ys. Yes No | | |
| be su | ibmitted and posted pursua | er the registrant has submitted electronically and posted or ant to Rule 405 of Regulation S-T ($\S 232.405$ of this chapt nit and post such files). Yes \boxtimes No \square | | |
| emer | | er the registrant is a large accelerated filer, an accelerated to the definitions of "large accelerated filer," "accelerated detact. | | |
| Large | e accelerated filer | \boxtimes | Accelerated filer | |
| Non- | accelerated filer rging growth company | \square (Do not check if a smaller reporting company) \square | Smaller reporting company | |
| | 0 00 1 | ny, indicate by check mark if the registrant has elected not g standards provided pursuant to Section 13(a) of the Exch | 1 100 | h any new |
| Indic | rate by check mark whethe | er the registrant is a shell company (as defined in Rule 12th 990,038,629 | | |
| | | Number of shares of Registrant's commor July 25, 2017 | stock outstanding as of | |
| | | | | |
| | | | | |
| | | | | |

PART I - FINANCIAL INFORMATION

ITEM 1. Financial Statements.

| Consolidated Statements of Income | F | or Three M June | nded | For Six Months Ended June 30, | | | | |
|---|----|--------------------|------|----------------------------------|----|-------|----|-------|
| (Millions of dollars, except share and per-share amounts) | | 2017 | | 2016 | | 2017 | | 2016 |
| Revenue | \$ | 3,693 | \$ | 3,273 | \$ | 7,095 | \$ | 6,281 |
| Cost of revenue (COR) | | 1,319 | | 1,266 | | 2,577 | | 2,445 |
| Gross profit | - | 2,374 | | 2,007 | | 4,518 | | 3,836 |
| Research and development (R&D) | | 378 | | 341 | | 747 | | 663 |
| Selling, general and administrative (SG&A) | | 434 | | 454 | | 873 | | 895 |
| Acquisition charges | | 79 | | 79 | | 159 | | 159 |
| Restructuring charges/other | | 3 | | 2 | | 7 | | 4 |
| Operating profit | | 1,480 | | 1,131 | | 2,732 | | 2,115 |
| Other income (expense), net (OI&E) | | 26 | | (8) | | 47 | | (20) |
| Interest and debt expense | | 20 | | 21 | | 38 | | 43 |
| Income before income taxes | | 1,486 | | 1,102 | | 2,741 | | 2,052 |
| Provision for income taxes | | 430 | | 283 | | 688 | | 522 |
| Net income | \$ | 1,056 | \$ | 819 | \$ | 2,053 | \$ | 1,530 |
| Earnings per common share (EPS): | | | | | | | | |
| Basic | \$ | 1.05 | \$ | .81 | \$ | 2.04 | \$ | 1.50 |
| Diluted | \$ | 1.03 | \$ | .79 | \$ | 2.00 | \$ | 1.48 |
| Average shares outstanding (millions): | | | | | | | | |
| Basic | | 994 | | 1,004 | | 996 | | 1,005 |
| Diluted | | 1,015 | | 1,020 | | 1,017 | | 1,021 |
| | \$ | .50 | \$ | .38 | \$ | 1.00 | \$ | .76 |

| Net income | \$ 1,056 | \$ 819 | \$ 2,053 | \$ 1,530 |
|--|-------------|-----------|-------------|-------------|
| Income allocated to RSUs | (10) | (10) | (20) | (19) |
| Income allocated to common stock for diluted EPS | \$ 1,046 | \$ 809 | \$ 2,033 | \$ 1,511 |

See accompanying notes.

| | F | or Three M | nded | For Six Months Ended | | | | |
|--|----|------------|------|----------------------|------|-------|------|-------|
| Consolidated Statements of Comprehensive Income | | June | 30, | | | June | 30, | |
| (Millions of dollars) | | 2017 | 2 | 016 | 2017 | | 2016 | |
| Net income | \$ | 1,056 | \$ | 819 | \$ | 2,053 | \$ | 1,530 |
| Other comprehensive income (loss), net of taxes | | | | | | | | |
| Net actuarial gains (losses) of defined benefit plans: | | | | | | | | |
| Adjustments | | (3) | | (18) | | (15) | | (30) |
| Recognized within Net income | | 11 | | 13 | | 23 | | 27 |
| Prior service (cost) credit of defined benefit plans: | | | | | | | | |
| Adjustments | | _ | | 1 | | _ | | 1 |
| Recognized within Net income | | (1) | | (1) | | (2) | | (2) |
| Other comprehensive income (loss) | | 7 | | (5) | | 6 | | (4) |
| Total comprehensive income | \$ | 1,063 | \$ | 814 | \$ | 2,059 | \$ | 1,526 |

See accompanying notes.

| Consolidated Balance Sheets | June 30, 2017 | Dec | ember 31, 2016 |
|--|------------------|-----------------|-------------------|
| (Millions of dollars, except share amounts) | | | |
| Assets | | | |
| Current assets: | | | |
| Cash and cash equivalents | \$ | 1,140 \$ | 1,154 |
| Short-term investments | 1 | 1,844 | 2,336 |
| Accounts receivable, net of allowances of (\$16) and (\$17) | 1 | 1,469 | 1,267 |
| Raw materials | | 109 | 102 |
| Work in process | 1 | 1,099 | 954 |
| Finished goods | | 739 | 734 |
| Inventories | 1 | 1,947 | 1,790 |
| Prepaid expenses and other current assets | | 1,111 | 910 |
| Total current assets | | 7,511 | 7,457 |
| Property, plant and equipment at cost | | 1,656 | 4,923 |
| Accumulated depreciation | | 2,142) | (2,411) |
| Property, plant and equipment, net | | 2,514 | 2,512 |
| Long-term investments | | 250 | 235 |
| Goodwill, net | | 1,362 | 4,362 |
| Acquisition-related intangibles, net | | 1,105 | 1,264 |
| Deferred income taxes | | 412 | 374 |
| Capitalized software licenses, net | | 114 | 52 |
| Overfunded retirement plans | | 99 | 96 |
| Other assets | | 71 | 79 |
| Total assets | \$ 10 | 5,438 \$ | 16,431 |
| 10(a) a55ct5 | Ψ 10 | φ φ | 10,431 |
| Liabilities and stockholders' equity | | | |
| Current liabilities: | | | |
| Current portion of long-term debt | \$ | 499 \$ | 631 |
| Accounts payable | | 450 | 396 |
| Accrued compensation | | 489 | 710 |
| Income taxes payable | | 86 | 83 |
| Accrued expenses and other liabilities | | 353 | 444 |
| Total current liabilities | | 1,877 | 2,264 |
| Long-term debt | | 3,084 | 2,978 |
| Underfunded retirement plans | | 101 | 129 |
| Deferred income taxes | | 33 | 33 |
| Deferred credits and other liabilities | | 635 | 554 |
| Total liabilities | | 5,730 | 5,958 |
| Stockholders' equity: | | | -,,,,, |
| Preferred stock, \$25 par value. Authorized – 10,000,000 shares | | | |
| Participating cumulative preferred. None issued. | | _ | _ |
| Common stock, \$1 par value. Authorized – 2,400,000,000 shares | | | |
| Shares issued – 1,740,815,939 | - | 1,741 | 1,741 |
| Paid-in capital | | 1,683 | 1,674 |
| Retained earnings | | l,149 | 33,107 |
| Treasury common stock at cost | 3- | , | 30,107 |
| Shares: June 30, 2017 – 749,098,850; December 31, 2016 – 744,831,978 | (26 | 5,345) | (25,523) |
| Accumulated other comprehensive income (loss), net of taxes (AOCI) | (2. | (520) | (526) |
| Total stockholders' equity | 11 | 708 | 10.473 |

See accompanying notes.

Total stockholders' equity

Total liabilities and stockholders' equity

10,708

16,438

10,473

16,431

| Consolidated Statements of Cash Flows | For Six Montl June 3 | |
|--|-------------------------|----------|
| (Millions of dollars) | 2017 | 2016 |
| Cash flows from operating activities | | |
| Net income | \$ 2,053 | \$ 1,530 |
| Adjustments to Net income: | | |
| Depreciation | 273 | 316 |
| Amortization of acquisition-related intangibles | 159 | 159 |
| Amortization of capitalized software | 23 | 16 |
| Stock compensation | 143 | 148 |
| Deferred income taxes | (45) | (35) |
| Increase (decrease) from changes in: | | |
| Accounts receivable | (200) | (176) |
| Inventories | (157) | (185) |
| Prepaid expenses and other current assets | 12 | 35 |
| Accounts payable and accrued expenses | (66) | (1) |
| Accrued compensation | (225) | (175) |
| Income taxes payable | (236) | 106 |
| Changes in funded status of retirement plans | 5 | 32 |
| Other | (27) | (8) |
| Cash flows from operating activities | 1,712 | 1,762 |
| | | |
| Cash flows from investing activities | | |
| Capital expenditures | (278) | (282) |
| Proceeds from asset sales | 40 | _ |
| Purchases of short-term investments | (1,887) | (1,193) |
| Proceeds from short-term investments | 2,385 | 2,110 |
| Other | (1) | 3 |
| Cash flows from investing activities | 259 | 638 |
| | | |
| Cash flows from financing activities | | |
| Proceeds from issuance of long-term debt | 605 | 499 |
| Repayment of debt | (625) | (1,000) |
| Dividends paid | (998) | (765) |
| Stock repurchases | (1,200) | (1,157) |
| Proceeds from common stock transactions | 245 | 261 |
| Other | (12) | (3) |
| Cash flows from financing activities | (1,985) | (2,165) |
| Ü | | |
| Net change in Cash and cash equivalents | (14) | 235 |
| Cash and cash equivalents at beginning of period | 1,154 | 1,000 |
| Colon and class equivalents at segmining or period | <u></u> | A 1.225 |

See accompanying notes.

Cash and cash equivalents at end of period

1,140

1,235

Notes to financial statements

1. Description of business, including segment information

We design, make and sell semiconductors to electronics designers and manufacturers all over the world. Beginning January 2017, we reorganized the product lines within our two reportable segments – Analog and Embedded Processing – to realign our business structure with the way our customers select and buy products. These changes had no effect on either our previously reported consolidated financial statements or on our reportable segment amounts. Our two reportable segments are established along major categories of products as follows:

- Analog consisting of the following product lines: Power, Signal Chain and High Volume.
- Embedded Processing consisting of the following product lines: Connected Microcontrollers and Processors.

We report the results of our remaining business activities in Other. Other includes operating segments that do not meet the quantitative thresholds for individually reportable segments and cannot be aggregated with other operating segments. Other includes DLP® products, calculators and custom ASIC products. As of January 1, 2017, we no longer recognize royalties as revenue; instead, they are now recorded as OI&E. We continue to receive royalties from arrangements involving license rights to our patent portfolio. Although we expect royalties to continue for many years, they are of decreasing significance to our core operations. Prior period amounts were not material.

Our centralized manufacturing and support organizations, such as facilities, procurement and logistics, provide support to our operating segments, including those in Other. Costs incurred by these organizations, including depreciation, are charged to the segments on a per-unit basis. Consequently, depreciation expense is not an independently identifiable component within the segments' results and, therefore, is not provided.

Segment information

| | For Three M | Ionths e 30, | Ended | For Six Months Ended June 30, | | | |
|------------------------|-----------------|-----------------|-------|----------------------------------|-------|----|-------|
| | 2017 | | 2016 | | 2017 | | 2016 |
| Revenue: | | | | | | | _ |
| Analog | \$ 2,411 | \$ | 2,044 | \$ | 4,667 | \$ | 3,923 |
| Embedded Processing | 868 | | 755 | | 1,671 | | 1,484 |
| Other | 414 | | 474 | | 757 | | 874 |
| Total revenue | \$ 3,693 | \$ | 3,273 | \$ | 7,095 | \$ | 6,281 |
| Operating profit: | | | | | | | |
| Analog | \$ 1,077 | \$ | 781 | \$ | 2,012 | \$ | 1,469 |
| Embedded Processing | 271 | | 192 | | 511 | | 379 |
| Other | 132 | | 158 | | 209 | | 267 |
| Total operating profit | \$ 1,480 | \$ | 1,131 | \$ | 2,732 | \$ | 2,115 |

Operating profit amounts in the prior period have been recast as a result of our early adoption of a new accounting standard related to pension and other retiree benefit costs. See Note 2 for more information.

2. Basis of presentation and significant accounting policies and practices

Basis of presentation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (GAAP) and on the same basis as the audited financial statements included in our annual report on Form 10-K for the year ended December 31, 2016. The Consolidated Statements of Income, Comprehensive Income and Cash Flows for the periods ended June 30, 2017, and June 30, 2016, and the Consolidated Balance Sheet as of June 30, 2017, are not audited but reflect all adjustments that are of a normal recurring nature and are necessary for a fair statement of the results of the periods shown. Certain information and note disclosures normally included in annual consolidated financial statements have been omitted pursuant to the rules and regulations of the U.S. Securities and Exchange Commission. Because the consolidated interim financial statements do not include all of the information and notes required by GAAP for a complete set of financial statements, they should be read in conjunction with the audited consolidated financial statements and notes included in our annual report on Form 10-K for the year ended December 31, 2016. The results for the three- and six-month periods are not necessarily indicative of a full year's results.

The consolidated financial statements include the accounts of all subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. All dollar amounts in the financial statements and tables in these notes, except per-share amounts, are stated in millions of U.S. dollars unless otherwise indicated. We have reclassified certain amounts in the prior periods' financial statements to conform to the current presentation, retrospectively applying the new accounting standard related to pension and other retiree benefit costs. See *Adopted standards for current period* for further information.

Significant accounting policies and practices

Earnings per share (EPS)

Unvested share-based payment awards that contain non-forfeitable rights to receive dividends or dividend equivalents, such as our restricted stock units (RSUs), are considered to be participating securities and the two-class method is used for purposes of calculating EPS. Under the two-class method, a portion of Net income is allocated to these participating securities and, therefore, is excluded from the calculation of EPS allocated to common stock, as shown in the table below.

Computation and reconciliation of earnings per common share are as follows (shares in millions):

| | | | | Fo | or Three Mon | hs End | ed June 30, | | | | | |
|----------------------------------|---|-------|--------|-----|--------------|--------|-------------|--------|----|------|--|--|
| | | | 2017 | | | | | 2016 | | | | |
| | | Net | | | _ | | Net | | | | | |
| | Iı | ncome | Shares | | EPS | I | ncome | Shares | | EPS | | |
| Basic EPS: | | | | | | | | | | | | |
| Net income | \$ | 1,056 | | | | \$ | 819 | | | | | |
| Income allocated to RSUs | | (10) | | | | | (10) | | | | | |
| Income allocated to common stock | | | | | | | | | | | | |
| for basic EPS calculation | \$ | 1,046 | 994 | \$ | 1.05 | \$ | 809 | 1,004 | \$ | .81 | | |
| | | | | | | | | | | | | |
| Adjustment for dilutive shares: | | | | | | | | | | | | |
| Stock compensation plans | | | 21 | | | | | 16 | | | | |
| r | | | | | | | | | | | | |
| Diluted EPS: | | | | | | | | | | | | |
| Net income | \$ | 1,056 | | | | \$ | 819 | | | | | |
| Income allocated to RSUs | | (10) | | | | | (10) | | | | | |
| Income allocated to common stock | | | | | | | | | | | | |
| for diluted EPS calculation | \$ | 1,046 | 1,015 | \$ | 1.03 | \$ | 809 | 1,020 | \$ | .79 | | |
| | | | | | | | | | | | | |
| | For Six Months Ended June 30, 2017 2016 | | | | | | | | | | | |
| | | | 2017 | | | | | | | | | |
| | | Net | | | | | Net | | | | | |
| | Iı | ncome | Shares | EPS | | I | ncome | Shares | | EPS | | |
| Basic EPS: | | | | | | | | | | | | |
| Net income | \$ | 2,053 | | | | \$ | 1,530 | | | | | |
| Income allocated to RSUs | | (20) | | | | | (19) | | | | | |
| Income allocated to common stock | | | | | | | | | | | | |
| for basic EPS calculation | \$ | 2,033 | 996 | \$ | 2.04 | \$ | 1,511 | 1,005 | \$ | 1.50 | | |
| | | | | | | | | | | | | |
| Adjustment for dilutive shares: | | | | | | | | | | | | |
| Stock compensation plans | | | 21 | | | | | 16 | | | | |
| r | | | | | | | | | | | | |
| Diluted EPS: | | | | | | | | | | | | |
| Net income | \$ | 2,053 | | | | \$ | 1,530 | | | | | |
| Income allocated to RSUs | | (20) | | | | | (19) | | | | | |
| Income allocated to common stock | | | | | | | | | | | | |
| for diluted EPS calculation | \$ | 2,033 | 1,017 | \$ | 2.00 | \$ | 1,511 | 1,021 | \$ | 1.48 | | |

Potentially dilutive securities representing 6 million and 16 million shares of common stock that were outstanding during the second quarters of 2017 and 2016, and 6 million and 19 million shares outstanding during the first six months of 2017 and 2016, respectively, were excluded from the computation of diluted earnings per common share for these periods because their effect would have been anti-dilutive.

Derivatives and hedging

We use derivative financial instruments to manage exposure to foreign currency exchange risk. These instruments are primarily forward foreign currency exchange contracts, which are used as economic hedges to reduce the earnings impact that exchange rate fluctuations may have on our non-U.S. dollar net balance sheet exposures. Gains and losses from changes in the fair value of these forward foreign currency exchange contracts are credited or charged to OI&E. We do not apply hedge accounting to our foreign currency derivative instruments.

In connection with the issuance of long-term debt, we use financial derivatives such as treasury rate lock agreements that are recognized in AOCI and amortized over the life of the related debt. The results of these derivative transactions have not been material.

We do not use derivatives for speculative or trading purposes.

Fair values of financial instruments

The fair values of our derivative financial instruments were not material as of June 30, 2017. Our investments in cash equivalents, short-term investments and certain long-term investments, as well as our deferred compensation liabilities, are carried at fair value. The carrying values for other current financial assets and liabilities, such as accounts receivable and accounts payable, approximate fair value due to the short maturity of such instruments. The carrying value of our long-term debt approximates the fair value as measured using broker-dealer quotes, which are Level 2 inputs. See Note 5 for a description of fair value and the definition of Level 2 inputs.

Changes in accounting standards

Adopted standards for current period

In October 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory.* This standard requires current and deferred income taxes resulting from the intra-entity transfer of any assets other than inventory to be recognized for financial reporting purposes when the transfer occurs rather than postpone recognition until the asset has been sold to an outside party, as currently allowed. This standard is required to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings and is effective for our interim and annual periods beginning January 1, 2018. As early adoption is permitted, we elected to early adopt this standard in the first quarter of 2017. The effect on our financial position and results of operations was not material.

In March 2017, the FASB issued ASU No. 2017-07, *Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.* This standard amends the income statement presentation of the components of net periodic benefit cost for defined benefit pension and other postretirement plans. This standard requires us to: (1) disaggregate the current service cost component from the other components of net periodic benefit cost (the "other components") and present it in the same line items on the statement of income as other current compensation costs for related employees and (2) present the other components outside of operating profit (i.e., in OI&E). This standard is required to be applied retrospectively and is effective for annual and interim periods beginning after December 15, 2017. As early adoption is permitted, we elected to adopt this standard as of the beginning of the first quarter of 2017. While the adoption of this standard did not impact Revenue, Net income, Earnings per common share or Cash flows from operating activities, the following components on the Consolidated Statements of Income for the three and six months ended June 30, 2016, were affected:

| | | Months Ended 30, 2016 | | onths Ended 80, 2016 |
|------------------------|----------|--------------------------|----------|-------------------------|
| | Reported | Recast | Reported | Recast |
| COR | \$ 1,270 | \$ 1,266 | \$ 2,454 | \$ 2,445 |
| Gross profit | 2,003 | 2,007 | 3,827 | 3,836 |
| R&D | 345 | 341 | 671 | 663 |
| SG&A | 460 | 454 | 908 | 895 |
| Operating profit: | | | | |
| Analog | 771 | 781 | 1,450 | 1,469 |
| Embedded Processing | 189 | 192 | 371 | 379 |
| Other | 157 | 158 | 264 | 267 |
| Total operating profit | 1,117 | 1,131 | 2,085 | 2,115 |
| OI&E | 6 | (8) | 10 | (20) |

Standards not yet adopted

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. This standard provides a single set of guidelines for revenue recognition to be used across all industries and requires additional disclosures. It is effective for annual and interim reporting periods beginning after December 15, 2017. This standard permits early adoption and the use of either the retrospective or cumulative-effect transition method. We are currently evaluating the potential impact of this standard on our financial position and results of operations, as well as our selected transition method. Based on our preliminary assessment, we believe the new standard will not have a material impact on our financial position and results of operations, as we do not expect to change the manner or timing of recognizing revenue on a majority of our revenue transactions. We recognize revenue on sales to customers and distributors upon satisfaction of our performance obligations when the goods are shipped. For consignment sales, we recognize revenue when the goods are pulled from consignment inventory. This standard will also require additional disclosures in our consolidated financial statements, and we are currently evaluating the impact of these new disclosure requirements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities.* Under this standard, all equity investments except those accounted for under the equity method are required to be measured at fair value. Equity investments that do not have a readily determinable fair value may, as a practical expedient, be measured at cost, adjusted for changes in observable prices minus impairment. This standard is effective for our interim and annual periods beginning January 1, 2018, and should be applied on a modified retrospective basis except for the amendments related to equity securities without readily determinable fair values, which would be applied on a prospective basis. We do not expect this standard to have a material impact on our financial position and results of operations, as nearly all of our equity investments are already recorded at fair value or under the equity method.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This standard requires all leases that have a term of over 12 months to be recognized on the balance sheet with the liability for lease payments and the corresponding right-of-use asset initially measured at the present value of amounts expected to be paid over the term. Recognition of the costs of these leases on the income statement will be dependent upon their classification as either an operating or a financing lease. Costs of an operating lease will continue to be recognized as a single operating expense on a straight-line basis over the lease term. Costs for a financing lease will be disaggregated and recognized as both an operating expense (for the amortization of the right-of-use asset) and interest expense (for interest on the lease liability). This standard will be effective for our interim and annual periods beginning January 1, 2019, and must be applied on a modified retrospective basis to leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. We do not plan to adopt this standard early. We are currently evaluating the potential impact of this standard on our financial position, but we do not expect it to have a material impact on our results of operations.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.* This standard requires entities to use a current lifetime expected credit loss methodology to measure impairments of certain financial assets. Using this methodology will result in earlier recognition of losses than under the current incurred loss approach, which requires waiting to recognize a loss until it is probable of having been incurred. There are other provisions within the standard that affect how impairments of other financial assets may be recorded and presented, and that expand disclosures. This standard will be effective for our interim and annual periods beginning after December 15, 2019, and permits earlier application but not before December 15, 2018. The standard will be applied using a modified retrospective approach. We are currently evaluating the potential impact of this standard, but we do not expect it to have a material impact on our financial position and results of operations.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, which affects areas of accounting such as acquisitions, disposals and goodwill. This standard provides guidance to evaluate whether transactions should be accounted for as an acquisition (or disposal) of assets or as a business combination. Under this new standard, if substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, it may be treated as an asset acquisition rather than a business combination. This standard is to be applied on a prospective basis and will be effective for us for annual periods beginning after December 15, 2017, including interim periods within those periods. Early adoption is permitted. The impact of this standard on our financial position, results of operation and related disclosures will be dependent upon the specific terms of any applicable future acquisitions or dispositions.

In February 2017, the FASB issued ASU No. 2017-05, *Other Income – Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets.* This standard provides guidance on the recognition and measurement of gains and losses from the transfer, sale or partial sale to noncustomers of nonfinancial assets (such as intangible assets, property, plant and equipment) or an ownership interest in a consolidated subsidiary that is not a business. This standard is to be applied on either a retrospective basis to all periods presented or on a modified retrospective basis (i.e., cumulative catch up as of the beginning of the earliest period presented) and will be effective for us for annual periods beginning after December 15, 2017, including interim periods within those periods. Earlier application is permitted. We are currently evaluating the timing of adoption and the potential impact of this standard on our financial position and results of operations, but we do not expect it to have a material impact.

3. Restructuring charges/other

Restructuring charges/other are recognized in Other for segment reporting purposes.

Restructuring charges

Beginning January 2017, we reorganized the product lines within our two reportable segments. We recognized \$18 million of restructuring charges for severance and benefit costs in the fourth quarter of 2016 and an additional \$3 million in the first half of 2017. Any further charges are not expected to be material. As of June 30, 2017, \$5 million has been paid to terminated employees for severance and benefits.

For the three and six months ended June 30, 2017, we incurred restructuring charges of \$2 million and \$4 million, respectively, related to the phase-out of a manufacturing facility in Greenock, Scotland. These charges were primarily comprised of severance and benefits costs, as well as accelerated depreciation. Total restructuring charges, primarily severance and benefit costs, are estimated to be about \$40 million, of which \$28 million has been recognized through June 30, 2017. The remaining charges are expected to be recognized through the end of 2018.

Changes in accrued restructuring balances

| Balance, December 31, 2016 | \$ 40 |
|----------------------------|----------|
| Restructuring charges | 7 |
| Payments | (10) |
| Non-cash items (a) | (1) |
| Balance, June 30, 2017 | \$ 36 |

(a) Reflects charges for impacts of accelerated depreciation and changes in exchange rates.

4. Income taxes

Our Provision for income taxes was \$430 million and \$283 million in the second quarters of 2017 and 2016, respectively. The increase was due to higher income before income taxes. Our Provision for income taxes was \$688 million and \$522 million in the first six months of 2017 and 2016, respectively. The increase was due to higher income before income taxes, partially offset by discrete tax items, which were primarily related to stock-based compensation.

Our estimated annual effective tax rate is about 31 percent, which does not include discrete tax items. This differs from the 35 percent statutory corporate tax rate due to the effect of U.S. tax benefits and lower statutory tax rates applicable to our operations in many of the jurisdictions in which we operate. These lower non-U.S. tax rates are generally statutory in nature, without expiration and available to companies that operate in those taxing jurisdictions.

Provision for income taxes is based on the following:

| | For Three Months Ended June 30, | | | | | For Six Months Ended June 30, | | | |
|--|---------------------------------|------|----|------|----|----------------------------------|----|------|--|
| | 2017 | | | 2016 | | 2017 | | 016 | |
| Taxes calculated using the estimated annual effective tax rate | \$ | 458 | \$ | 325 | \$ | 840 | \$ | 606 | |
| Discrete tax items | | (28) | | (42) | | (152) | | (84) | |
| Provision for income taxes | \$ | 430 | \$ | 283 | \$ | 688 | \$ | 522 | |
| | | | | | | | | | |
| Estimated annual effective tax rate | | 31% | | 30% | | 31% | | 30% | |
| Actual effective tax rate | | 29 % | | 26% | | 25 % | | 25% | |

5. Valuation of debt and equity investments and certain liabilities

Debt and equity investments

We classify our investments as available for sale, trading, equity method or cost method. Most of our investments are classified as available for sale.

Available-for-sale and trading securities are stated at fair value, which is generally based on market prices or broker quotes. See the fair-value discussion below. Unrealized gains and losses on available-for-sale securities are recorded as an increase or decrease, net of taxes, in AOCI on our Consolidated Balance Sheets. We record other-than-temporary impairments on available-for-sale securities in OI&E in our Consolidated Statements of Income.

We classify certain mutual funds as trading securities. These mutual funds hold a variety of debt and equity investments intended to generate returns that offset changes in certain deferred compensation liabilities. We record changes in the fair value of these mutual funds and the related deferred compensation liabilities in SG&A.

Our other investments are not measured at fair value but are accounted for using either the equity method or cost method. These investments consist of interests in venture capital funds and other non-marketable equity securities. Gains and losses from equity-method investments are reflected in OI&E based on our ownership share of the investee's financial results. Gains and losses on cost-method investments are recorded in OI&E when realized or when an impairment of the investment's value is warranted based on our assessment of the recoverability of each investment.

Details of our investments are as follows:

| | | June | June 30, 2017 | | | | December 31, 2016 | | | | | | | |
|-------------------------------------|--|------|---------------|-------------------------|-----|-----------------------|-------------------|---------------------|-------|----|-----|--|--|--|
| | Cash and Cash Short-Term Long-Term Equivalents Investments Investments | | | n and Cash uivalents | | ort-Term restments | | ng-Term estments | | | | | | |
| Measured at fair value: | | | | | | | | | | ' | | | | |
| Available-for-sale securities: | | | | | | | | | | | | | | |
| Money market funds | \$ 376 | \$ | _ | \$ | _ | \$ | 346 | \$ | _ | \$ | _ | | | |
| Corporate obligations | 24 | | 459 | | _ | | 107 | | 544 | | _ | | | |
| U.S. government agency and Treasury | | | | | | | | | | | | | | |
| securities | 550 | | 1,385 | | _ | | 490 | | 1,792 | | _ | | | |
| Trading securities: | | | | | | | | | | | | | | |
| Mutual funds | _ | | _ | | 218 | | _ | | _ | | 201 | | | |
| Total | 950 | | 1,844 | | 218 | | 943 | | 2,336 | | 201 | | | |
| | | | | | | | | | | | | | | |
| Other measurement basis: | | | | | | | | | | | | | | |
| Equity-method investments | _ | | _ | | 23 | | _ | | _ | | 25 | | | |
| Cost-method investments | _ | | _ | | 9 | | _ | | _ | | 9 | | | |
| Cash on hand | 190 | | _ | | _ | | 211 | | _ | | _ | | | |
| Total | \$ 1,140 | \$ | 1,844 | \$ | 250 | \$ | 1,154 | \$ | 2,336 | \$ | 235 | | | |

As of June 30, 2017, and December 31, 2016, unrealized gains and losses associated with our available-for-sale investments were not material. We did not recognize any credit losses related to available-for-sale investments for the six months ended June 30, 2017, and June 30, 2016.

For the six months ended June 30, 2017, and June 30, 2016, the proceeds from sales, redemptions and maturities of short-term available-for-sale investments were \$2.39 billion and \$2.11 billion, respectively. Gross realized gains and losses from these sales were not material.

The following table presents the aggregate maturities of investments in debt securities classified as available for sale as of June 30, 2017:

| Due | Fair Value |
|------------------|-------------|
| One year or less | \$ 2,784 |
| One to two years | 10 |

Other-than-temporary declines and impairments in the values of these investments recognized in OI&E were not material in the six months ended June 30, 2017, and June 30, 2016.

Fair-value considerations

We measure and report certain financial assets and liabilities at fair value on a recurring basis. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

The three-level hierarchy discussed below indicates the extent and level of judgment used to estimate fair-value measurements.

- Level 1 Uses unadjusted quoted prices that are available in active markets for identical assets or liabilities as of the reporting date.
- Level 2 Uses inputs other than Level 1 that are either directly or indirectly observable as of the reporting date through correlation with market data, including quoted prices for similar assets and liabilities in active markets and quoted prices in markets that are not active. Level 2 also includes assets and liabilities that are valued using models or other pricing methodologies that do not require significant judgment since the input assumptions used in the models, such as interest rates and volatility factors, are corroborated by readily observable data. We utilize a third-party data service to provide Level 2 valuations. We verify these valuations for reasonableness relative to unadjusted quotes obtained from brokers or dealers based on observable prices for similar assets in active markets.
- *Level 3* Uses inputs that are unobservable, supported by little or no market activity and reflect the use of significant management judgment. These values are generally determined using pricing models that utilize management estimates of market participant assumptions. As of June 30, 2017, and December 31, 2016, we had no Level 3 assets or liabilities, other than certain assets held by our postretirement plans.

The following are our assets and liabilities that were accounted for at fair value on a recurring basis. These tables do not include cash on hand, assets held by our postretirement plans, or assets and liabilities that are measured at historical cost or any basis other than fair value.

| | June 30, 2017 | | | | | December 31, 2016 | | | | | | |
|--|---------------|--------|----|--------|----|-------------------|----|--------|----|--------|----|-------|
| | L | evel 1 | L | evel 2 | , | Total | L | evel 1 | L | evel 2 | | Total |
| Assets: | | | | | | | | | | | | |
| Money market funds | \$ | 376 | \$ | _ | \$ | 376 | \$ | 346 | \$ | _ | \$ | 346 |
| Corporate obligations | | _ | | 483 | | 483 | | _ | | 651 | | 651 |
| U.S. government agency and Treasury securities | | 1,935 | | _ | | 1,935 | | 2,042 | | 240 | | 2,282 |
| Mutual funds | | 218 | | _ | | 218 | | 201 | | _ | | 201 |
| Total assets | \$ | 2,529 | \$ | 483 | \$ | 3,012 | \$ | 2,589 | \$ | 891 | \$ | 3,480 |
| | | | | | | | | | | | | |
| Liabilities: | | | | | | | | | | | | |
| Deferred compensation | \$ | 234 | \$ | _ | \$ | 234 | \$ | 218 | \$ | _ | \$ | 218 |
| Total liabilities | \$ | 234 | \$ | | \$ | 234 | \$ | 218 | \$ | | \$ | 218 |

6. Goodwill and acquisition-related intangibles

Goodwill, net, was \$4.36 billion as of June 30, 2017, and December 31, 2016. There was no impairment of goodwill during the six months ended June 30, 2017, or June 30, 2016.

The components of Acquisition-related intangibles, net, are as follows:

| | Amortization | | June 30, 2017 | | | | | | December 31, 2016 | | | | | | |
|------------------------|--------------|----|----------------------------|----|-----------------|----------------|-------|----|-------------------|----|--------|--------------|-------|------|--|
| | Period | G | Gross Carrying Accumulated | | | Gross Carrying | | | Accumulated | | | | | | |
| | (Years) | | Amount | | Amortization Ne | | Net | | Net | | Amount | Amortization | | tion | |
| Developed technology | 7 - 10 | \$ | 2,130 | \$ | 1,252 | \$ | 878 | \$ | 2,130 | \$ | 1,144 | \$ | 986 | | |
| Customer relationships | 8 | | 810 | | 583 | | 227 | | 810 | | 532 | | 278 | | |
| Total | | \$ | 2,940 | \$ | 1,835 | \$ | 1,105 | \$ | 2,940 | 9 | 1,676 | \$ | 1,264 | | |

Amortization of acquisition-related intangibles was \$79 million for the second quarters of both 2017 and 2016, and \$159 million for the first six months of both 2017 and 2016, primarily related to developed technology. Fully amortized assets are written off against accumulated amortization.

7. Postretirement benefit plans

Expense related to defined benefit and retiree health care benefit plans is as follows:

| | | U. | S. | | U. | 5. | | Non- | U.S. | |
|--|---------|---------|--------|------|------------|--------|------|----------|------|------|
| | | Defined | Benefi | t | Retiree He | alth C | are | Defined | Bene | fit |
| For Three Months Ended June 30, | 2 | 017 | 2 | 016 | 2017 | 2 | 2016 | 2017 | | 2016 |
| Service cost | \$ | 6 | \$ | 6 | \$ 1 | \$ | 2 | \$ 9 | \$ | 8 |
| Interest cost | | 11 | | 11 | 5 | | 5 | 11 | | 13 |
| Expected return on plan assets | | (10) | | (11) | (5) | | (5) | (15) | | (17) |
| Recognized net actuarial loss | | 3 | | 5 | 1 | | 1 | 7 | | 7 |
| Amortization of prior service credit | | _ | | _ | (1) | | (1) | (1) | | (1) |
| Net periodic benefit costs | <u></u> | 10 | | 11 | 1 | | 2 | 11 | | 10 |
| Settlement losses | | 4 | | 7 | _ | | _ | 1 | | _ |
| Total, including other postretirement losses | \$ | 14 | \$ | 18 | \$ 1 | \$ | 2 | \$ 12 | \$ | 10 |

| | U.S. Defined Benefit | | | | | U. Retiree He | Care | Non-U.S. Defined Benefit | | | |
|--|-------------------------|------|----|------|----|------------------|----------|-----------------------------|------|----|------|
| For Six Months Ended June 30, | | 2017 | 2 | 016 | | 2017 | 2016 | 2 | 2017 | | 2016 |
| Service cost | \$ | 11 | \$ | 11 | \$ | 2 | \$ 3 | \$ | 18 | \$ | 16 |
| Interest cost | | 21 | | 22 | | 9 | 10 | | 22 | | 26 |
| Expected return on plan assets | | (20) | | (21) | | (9) | (10) | | (31) | | (34) |
| Recognized net actuarial loss | | 7 | | 10 | | 2 | 3 | | 14 | | 13 |
| Amortization of prior service credit | | _ | | _ | | (2) | (2) | | (1) | | (1) |
| Net periodic benefit costs | | 19 | | 22 | | 2 | 4 | | 22 | | 20 |
| Settlement losses | | 10 | | 13 | | _ | _ | | 1 | | 1 |
| Total, including other postretirement losses | \$ | 29 | \$ | 35 | \$ | 2 | \$ 4 | \$ | 23 | \$ | 21 |

With our early adoption of ASU 2017-07, all defined benefit and retiree health care benefit plan expense components other than service cost are recognized in OI&E in our Consolidated Statements of Income. Service cost is recognized within Operating profit. See Note 2 for additional information.

8. Debt and lines of credit

Short-term borrowings

We maintain a line of credit to support commercial paper borrowings and to provide additional liquidity through bank loans. As of June 30, 2017, we had a variable-rate revolving credit facility from a consortium of investment-grade banks that allows us to borrow up to \$2 billion until March 2022. The interest rate on borrowings under this credit facility, if drawn, is indexed to the applicable London Interbank Offered Rate (LIBOR). As of June 30, 2017, our credit facility was undrawn, and we had no commercial paper outstanding.

Long-term debt

We retired \$250 million of maturing debt in March 2017 and another \$375 million in June 2017.

In May 2017, we issued an aggregate principal amount of \$600 million of fixed-rate long-term debt. The offering consisted of the reissuance of \$300 million of 2.75% notes due in 2021 at a premium and the issuance of \$300 million of 2.625% notes due in 2024 at a discount. We incurred \$3 million of issuance and other related costs, which are amortized to Interest and debt expense over the term of the debt. The proceeds of the offerings were \$605 million, net of the original issuance discount and premium, and were used for the repayment of maturing debt and general corporate purposes.

Long-term debt outstanding is as follows:

| | J | June 30, 2017 | Dec | ember 31, 2016 |
|---|----|------------------|-----|-------------------|
| Notes due 2017 at 0.875% | \$ | | \$ | 250 |
| Notes due 2017 at 6.60% (assumed with National acquisition) | | _ | | 375 |
| Notes due 2018 at 1.00% | | 500 | | 500 |
| Notes due 2019 at 1.65% | | 750 | | 750 |
| Notes due 2020 at 1.75% | | 500 | | 500 |
| Notes due 2021 at 2.75% | | 550 | | 250 |
| Notes due 2022 at 1.85% | | 500 | | 500 |
| Notes due 2023 at 2.25% | | 500 | | 500 |
| Notes due 2024 at 2.625% | | 300 | | _ |
| Total debt | | 3,600 | | 3,625 |
| Net unamortized discounts, premiums and debt issuance costs | | (17) | | (16) |
| Total debt, including net unamortized discounts, premiums and debt issuance costs | | 3,583 | | 3,609 |
| Current portion of long-term debt | | (499) | | (631) |
| Long-term debt | \$ | 3,084 | \$ | 2,978 |

Interest and debt expense was \$20 million and \$21 million for the second quarters of 2017 and 2016, respectively, and \$38 million and \$43 million for the first six months of 2017 and 2016, respectively. This was net of the amortization of the debt discounts, premiums and debt issuance costs. Capitalized interest was not material.

9. Contingencies

Indemnification guarantees

We routinely sell products with an intellectual property indemnification included in the terms of sale. Historically, we have had only minimal, infrequent losses associated with these indemnities. Consequently, we cannot reasonably estimate any future liabilities that may result.

Warranty costs/product liabilities

We accrue for known product-related claims if a loss is probable and can be reasonably estimated. During the periods presented, there have been no material accruals or payments regarding product warranty or product liability. Historically, we have experienced a low rate of payments on product claims. Although we cannot predict the likelihood or amount of any future claims, we do not believe they will have a material adverse effect on our financial condition, results of operations or liquidity. Our stated warranties for semiconductor products obligate us to repair, replace or credit the purchase price of a covered product back to the buyer. Product claim consideration may exceed the price of our products.

General

We are subject to various legal and administrative proceedings. Although it is not possible to predict the outcome of these matters, we believe that the results of these proceedings will not have a material adverse effect on our financial condition, results of operations or liquidity.

10. Supplemental financial information

Acquisition charges

Acquisition charges represent the ongoing amortization of intangible assets resulting from the acquisition of National Semiconductor Corporation (National). These amounts are included in Other for segment reporting purposes, consistent with how management measures the performance of its segments. See Note 6 for additional information.

Details on amounts reclassified out of Accumulated other comprehensive income (loss), net of taxes, to Net income

Our Consolidated Statements of Comprehensive Income include items that have been recognized within Net income during the periods ended June 30, 2017, and June 30, 2016. The table below details where these transactions are recorded in our Consolidated Statements of Income.

| | F | or Three Mo June | | For Six Months Ended June 30, | | | Impact to Related |
|---|----|---------------------|-----------|-------------------------------|------|------|--|
| Details about AOCI Components | | 2017 | 2016 | 2017 | 2016 | | Statement of Income Lines |
| Net actuarial gains (losses) of defined benefit plans | : | | | | | | |
| Recognized net actuarial loss and Settlement | | | | | | | |
| losses (a) | \$ | 16 | \$ 20 | \$ 34 | \$ | 40 | Decrease to OI&E |
| Tax effect | | (5) | (7) | (11) | | (13) | Decrease to Provision for income taxes |
| Recognized within Net income, net of taxes | \$ | 11 | \$ 13 | \$ 23 | \$ | 27 | Decrease to Net income |
| | | | | | | - | |
| Prior service (cost) credit of defined benefit plans: | | | | | | | |
| Amortization of prior service credit (a) | \$ | (2) | \$ (2) | \$ (3) | \$ | (3) | Increase to OI&E |
| Tax effect | | 1 | 1 | 1 | | 1 | Increase to Provision for income taxes |
| Recognized within Net income, net of taxes | \$ | (1) | \$ (1) | \$ (2) | \$ | (2) | Increase to Net income |

(a) Detailed in Note 7.

Stock compensation

Total shares of 2,057,729 and 10,938,502 were issued from treasury shares during the second quarter and first six months of 2017, respectively, related to stock compensation.

ITEM 2. Management's discussion and analysis of financial condition and results of operations.

Overview

We design, make and sell semiconductors to electronics designers and manufacturers all over the world. Our business model is carefully constructed around the following attributes:

- Industry's broadest portfolio of differentiated analog and embedded processing semiconductors. Our customers need multiple chips for their systems. The breadth of our portfolio means we can solve more of these needs than can our competitors, which gives us access to more customers and the opportunity to generate more revenue per system. We invest more than \$1 billion each year to develop new products for our portfolio.
- A strong foundation of manufacturing technology and low-cost production. We invest in manufacturing technologies that differentiate the features of our semiconductors, and we do most of our own production in-house, as opposed to outsourcing it. This ability to directly control our manufacturing helps ensure a consistent supply of products for our customers. We produce billions of semiconductors each year on a mixture of 150-, 200- and 300-millimeter wafers, and we are able to keep costs low for manufacturing facilities and equipment because our Analog and much of our Embedded Processing semiconductors can be made using mature assets that we acquire ahead of demand when their prices are most attractive. In 2016, we increased factory loadings by about 15 percent for our Analog semiconductors on 300-millimeter wafers, which have about a 40 percent cost advantage per unpackaged chip over 200-millimeter wafers. The majority of our Analog growth will be produced on 300-millimeter wafers, which will be meaningful to the growth of our cash flow over the long term.
- *Industry's largest market channels*. Our global sales force is larger than those of our competitors. The breadth of our portfolio attracts an increasing number of visits to our website, where customers often begin their initial product searches and design-in journey. Our web presence, together with our global sales force, provides us unique access to about 100,000 customers.
- *Diversity and longevity in our products and in the markets we serve.* Together, the attributes above result in diverse and long-lived positions that deliver high terminal value to our shareholders. Because of the breadth of our portfolio we are not dependent on any single product, and because of the breadth of our markets we are not dependent on any single application or customer. Some of our products generate revenue for decades, which strengthens the return on our investments.

The combined effect of these attributes is that over time we have grown free cash flow and gained market share in Analog and Embedded Processing. These attributes put us in a unique class of companies with the ability to grow, generate cash and return that cash to shareholders.

Management's discussion and analysis of financial condition and results of operations (MD&A) should be read in conjunction with the financial statements and the related notes that appear elsewhere in this document. In the following discussion of our results of operations:

- All dollar amounts in the tables are stated in millions of U.S. dollars.
- When we discuss our results:
 - O Unless otherwise noted, changes in our revenue are attributable to changes in customer demand, which are evidenced by fluctuations in shipment volumes.
 - O New products tend not to have a significant impact on our revenue in any given period because we sell such a large number of products.
 - From time to time, our revenue and gross profit are affected by changes in demand for higher-priced or lower-priced products, which we refer to as changes in the "mix" of products shipped.
 - O Because we own much of our manufacturing capacity, a significant portion of our operating cost is fixed. When factory loadings decrease, our fixed costs are spread over reduced output and, absent other circumstances, our profit margins decrease. Conversely, as factory loadings increase, our fixed costs are spread over increased output and, absent other circumstances, our profit margins increase. Increases and decreases in factory loadings tend to correspond to increases and decreases in demand.
 - Over time, we have been allocating resources from areas like manufacturing support and SG&A into R&D activities. As a result, R&D expense will continue increasing in 2017.

- Our segments represent groups of similar products that are combined on the basis of similar design and development requirements, product characteristics, manufacturing processes and distribution channels, and how management allocates resources and measures results. See Note 1 to the financial statements for more information regarding our segments.
- In the first quarter of 2017, we adopted ASU 2017-07 related to certain pension and other retiree benefit costs. We applied the new standard on a full retrospective basis for all periods presented in the Consolidated Statements of Income, which have been recast as a result. See Note 2 to the financial statements for more details.
- As of January 1, 2017, we no longer recognize royalties as revenue; instead, they are recorded as OI&E. We continue to receive royalties from arrangements involving license rights to our patent portfolio. Although we expect royalties to continue for many years, they are of decreasing significance to our core operations.

Beginning January 2017, we reorganized the product lines within our two reportable segments – Analog and Embedded Processing – to realign our business structure with the way our customers select and buy products. These changes had no impact on our previously reported consolidated financial statements or on our reportable segment amounts.

Our Analog segment includes the following major product lines: Power, Signal Chain and High Volume.

Power

Power includes products that help customers manage power in electronic systems. Our broad portfolio is designed to manage power requirements across different voltage levels using battery management solutions, portable components, power supply controls, point-of-load products, switches and interfaces, integrated protection devices, high-voltage products, and mobile lighting and display products.

Signal Chain

Signal Chain includes products that sense, condition and measure real-world signals to allow information to be transferred or converted for further processing and control. Our Signal Chain products, which serve a variety of end markets, include amplifiers, data converters, interface products, motor drives, clocks and sensing products.

High Volume

High Volume includes high-volume integrated analog products that are primarily sold into markets such as personal electronics and automotive. These products support applications like touch screens and automotive safety systems. High Volume also includes standard products sold primarily into the industrial market.

Our Embedded Processing segment includes the following major product lines: Connected Microcontrollers (Connected MCU) and Processors.

Connected MCU

Connected MCU includes microcontrollers, wireless connectivity solutions and microcontrollers with integrated wireless capabilities. Microcontrollers are self-contained systems with a processor core, memory and peripherals that are designed to control a set of specific tasks for electronic equipment. Microcontrollers tend to have minimal requirements for memory, program length and software complexity. Our products are used in a wide range of applications and incorporate both wired and wireless communication with integrated analog functions to enable electronic equipment to sense, connect, log and transfer data, which is increasingly important as electronics become smarter and more connected.

Processors

Processors includes digital signal processors (DSPs) and applications processors. DSPs perform mathematical computations almost instantaneously to process or improve digital data. Applications processors are designed for specific computing activity.

Performance summary

Our second-quarter revenue was \$3.69 billion, net income was \$1.06 billion and earnings per share (EPS) were \$1.03.

Revenue increased 13 percent from the same quarter a year ago. Demand for our products continued to be strong in the automotive market and continued to strengthen in the industrial market.

In our core businesses, Analog revenue grew 18 percent and Embedded Processing revenue grew 15 percent from the same quarter a year ago. Operating margin increased in both businesses.

Gross margin of 64.3 percent reflected the quality of our product portfolio, as well as the efficiency of our manufacturing strategy, including the benefit of 300-millimeter Analog production.

Our cash flow from operations of \$4.6 billion for the trailing 12 months again underscored the strength of our business model. Free cash flow for the trailing 12 months was \$4.0 billion and represents 28.5 percent of revenue.

We have returned \$4.1 billion to owners in the past 12 months through stock repurchases and dividends.

Our balance sheet remains strong with \$3.0 billion of cash and short-term investments at the end of the quarter, about 80 percent of which was owned by the company's U.S. entities. Inventory ended the quarter at 133 days.

Free cash flow is a non-GAAP financial measure. For reconciliation to GAAP and an explanation of the reason for providing this non-GAAP measure, see the Non-GAAP financial information section after the Liquidity and capital resources section.

Results of operations – second-quarter 2017 compared with second-quarter 2016

Revenue increased \$420 million, or 13 percent, due to higher revenue from Analog and, to a lesser extent, Embedded Processing. Analog and Embedded Processing comprised 89 percent of revenue compared with 86 percent of revenue.

Gross profit of \$2.37 billion was up \$367 million, or 18 percent, primarily due to higher revenue. As a percentage of revenue, gross profit increased to 64.3 percent from 61.3 percent.

Operating expenses (R&D and SG&A) were \$812 million compared with \$795 million. R&D expense increased \$37 million, or 11 percent, primarily due to our ongoing allocation of resources into R&D activities.

Acquisition charges associated with our 2011 acquisition of National were \$79 million for both periods. These non-cash charges resulted from the ongoing amortization of intangible assets.

Operating profit was \$1.48 billion, or 40.1 percent of revenue, compared with \$1.13 billion, or 34.6 percent of revenue.

OI&E was \$26 million of income compared with \$8 million of expense. The change was primarily due to the inclusion of royalty income beginning with the first quarter of 2017.

Our Provision for income taxes was \$430 million compared with \$283 million. The increase was due to higher income before income taxes. Our annual operating tax rate, which does not include discrete tax items, is about 31 percent. We use "annual operating tax rate" to describe the estimated annual effective tax rate. This rate differs from the 35 percent statutory corporate tax rate due to the effect of U.S. tax benefits and lower statutory tax rates applicable to our operations in many of the jurisdictions in which we operate. These lower non-U.S. tax rates are generally statutory in nature, without expiration and available to companies that operate in those taxing jurisdictions.

The effective tax rate, which includes discrete tax items such as the benefit from stock-based compensation, will vary by quarter. Our effective tax rate could fluctuate due to factors outside of our control, such as the timing of option exercises by employees.

Net income was \$1.06 billion compared with \$819 million, and EPS was \$1.03 compared with \$0.79.

Second-quarter 2017 segment results

Our segment results compared with the year-ago quarter are as follows:

Analog (includes Power, Signal Chain and High Volume product lines)

| | 2 | Q17 | 2 | Q16 | Change |
|-------------------------------|----|-------|----|-------|--------|
| Revenue | \$ | 2,411 | \$ | 2,044 | 18% |
| Operating profit | | 1,077 | | 781 | 38% |
| Operating profit % of revenue | | 44.7% | | 38.2% | |

Analog revenue increased primarily due to Power and Signal Chain, each of which grew by about the same amount. High Volume also grew. Operating profit increased primarily due to higher revenue and associated gross profit.

Embedded Processing (includes Connected Microcontrollers and Processors product lines)

| | 20 | Q17 | 2 | Q16 | Change |
|-------------------------------|----|-------|----|-------|--------|
| Revenue | \$ | 868 | \$ | 755 | 15% |
| Operating profit | | 271 | | 192 | 41% |
| Operating profit % of revenue | | 31.2% | | 25.4% | |

Embedded Processing revenue increased in both product lines by about the same amount. Operating profit increased primarily due to higher revenue and associated gross profit.

Other (includes DLP® products, calculators and custom ASIC products)

| | 20 | Q17 | 2 | Q16 | Change |
|-------------------------------|----|-------|----|-------|--------|
| Revenue | \$ | 414 | \$ | 474 | -13% |
| Operating profit* | | 132 | | 158 | -16% |
| Operating profit % of revenue | | 31.9% | | 33.3% | |

^{*} Includes Acquisition charges and Restructuring charges/other

Revenue decreased by \$60 million, and operating profit declined by \$26 million.

Results of operations - first six months of 2017 compared with first six months of 2016

Revenue of \$7.10 billion increased \$814 million, or 13 percent, due to higher revenue from Analog and, to a lesser extent, Embedded Processing. Analog and Embedded Processing comprised 89 percent of revenue compared with 86 percent.

Gross profit of \$4.52 billion was up \$682 million, or 18 percent, primarily due to higher revenue. As a percentage of revenue, gross profit increased to 63.7 percent from 61.1 percent.

Operating expenses were \$1.62 billion compared with \$1.56 billion. R&D expense increased \$84 million, or 13 percent, primarily due to our ongoing allocation of resources to R&D activities.

Acquisition charges were \$159 million for both periods. These non-cash charges resulted from the ongoing amortization of intangible assets.

Operating profit was \$2.73 billion, or 38.5 percent of revenue, compared with \$2.12 billion, or 33.7 percent of revenue.

OI&E was \$47 million of income compared with \$20 million of expense. The change was primarily due to the inclusion of royalty income beginning with the first quarter of 2017.

Our tax provision was \$688 million compared with \$522 million. The increase was due to higher income before income taxes, partially offset by discrete tax items, which were primarily related to stock-based compensation.

Net income was \$2.05 billion compared with \$1.53 billion. EPS was \$2.00 compared with \$1.48.

Year-to-date segment results

Our segment results compared with the year-ago period are as follows:

Analog

| | YTI | 2017 | Y | ΓD 2016 | Change |
|-------------------------------|-----|-------|----|---------|--------|
| Revenue | \$ | 4,667 | \$ | 3,923 | 19% |
| Operating profit | | 2,012 | | 1,469 | 37% |
| Operating profit % of revenue | | 43.1% |) | 37.4% | |

Analog revenue increased primarily due to Power and Signal Chain, each of which grew by about the same amount. High Volume also grew. Operating profit increased due to higher revenue and associated gross profit.

Embedded Processing

| | YT | D 2017 | YT | TD 2016 | Change |
|-------------------------------|----|--------|----|---------|--------|
| Revenue | \$ | 1,671 | \$ | 1,484 | 13% |
| Operating profit | | 511 | | 379 | 35% |
| Operating profit % of revenue | | 30.6% |) | 25.5% | |

Embedded Processing revenue increased in both product lines by about the same amount. Operating profit increased primarily due to higher revenue and associated gross profit.

Other

| | YTD | YTD 2017 | | TD 2016 | Change |
|-------------------------------|-----|----------|----|---------|--------|
| Revenue | \$ | 757 | \$ | 874 | -13% |
| Operating profit* | | 209 | | 267 | -22% |
| Operating profit % of revenue | | 27.6% |) | 30.5% | |

^{*}Includes Acquisition charges and Restructuring charges/other.

Other revenue decreased by \$117 million, and operating profit declined by \$58 million

Financial condition

At the end of the second quarter of 2017, total cash (Cash and cash equivalents plus Short-term investments) was \$2.98 billion, a decrease of \$506 million from the end of 2016.

Accounts receivable were \$1.47 billion, an increase of \$202 million compared with the end of 2016. Days sales outstanding were 36 at the end of the second quarter compared with 33 at the end of 2016.

Inventory was \$1.95 billion, an increase of \$157 million from the end of 2016. Days of inventory at the end of the second quarter of 2017 were 133 compared with 126 at the end of 2016.

Liquidity and capital resources

Our primary source of liquidity is cash flow from operations. Additional sources of liquidity are Cash and cash equivalents, Short-term investments and a variable-rate revolving credit facility. Cash flows from operating activities for the first six months of 2017 was \$1.71 billion, a decrease of \$50 million from the year-ago period. Net income increased and was offset primarily by cash used for working capital, driven by an increase in income tax payments.

Our revolving credit facility is with a consortium of investment-grade banks and allows us to borrow up to \$2 billion until March 2022. This credit facility also serves as support for the issuance of commercial paper. As of June 30, 2017, our credit facility was undrawn, and we had no commercial paper outstanding.

For the first six months of 2017, investing activities provided \$259 million compared with \$638 million in the year-ago period. Capital expenditures were \$278 million compared with \$282 million in the year-ago period and were primarily for semiconductor manufacturing equipment. We had proceeds from sales of short-term investments, net of purchases, that provided cash of \$498 million compared with \$917 million in the year-ago period.

For the first six months of 2017, financing activities used \$1.99 billion compared with \$2.17 billion in the year-ago period. In 2017, we received net proceeds of \$605 million from the issuances of fixed-rate long-term debt and retired maturing debt of \$625 million. In the year-ago period, we received net proceeds of \$499 million from the issuance of fixed-rate long-term debt and retired maturing debt of \$1.00 billion. Dividends paid were \$998 million compared with \$765 million in the year-ago period, reflecting an increase in the dividend rate, partially offset by fewer shares outstanding. We used \$1.20 billion to repurchase 15.2 million shares of our common stock compared with \$1.16 billion used in the year-ago period to repurchase 21.4 million shares. Proceeds from common stock transactions, resulting from employee equity awards, were \$245 million compared with \$261 million in the year-ago period.

We had \$1.14 billion of Cash and cash equivalents and \$1.84 billion of Short-term investments as of June 30, 2017. We believe we have the necessary financial resources and operating plans to fund our working capital needs, capital expenditures, dividend and debt-related payments, and other business requirements for at least the next 12 months.

Non-GAAP financial information

This MD&A includes references to free cash flow and ratios based on that measure. These are financial measures that were not prepared in accordance with generally accepted accounting principles in the United States (GAAP). Free cash flow was calculated by subtracting Capital expenditures from the most directly comparable GAAP measure, Cash flows from operating activities (also referred to as cash flow from operations).

We believe that free cash flow and the associated ratios provide insight into our liquidity, our cash-generating capability and the amount of cash potentially available to return to shareholders, as well as insight into our financial performance. These non-GAAP-based measures are supplemental to the comparable GAAP measures.

Reconciliation to the most directly comparable GAAP measures is provided in the table below.

| | For 12 Months Ended June 30, | | | | |
|--|---------------------------------|--------|----|--------|--------|
| | | | | | |
| | | 2017 | | 2016 | Change |
| Cash flow from operations (GAAP) | \$ | 4,564 | \$ | 4,624 | -1% |
| Capital expenditures | | (527) | | (585) | |
| Free cash flow (non-GAAP) | \$ | 4,037 | \$ | 4,039 | 0% |
| | | | | | |
| Revenue | \$ | 14,184 | \$ | 12,899 | |
| | | | | | |
| Cash flow from operations as a percent of revenue (GAAP) | | 32.2% | | 35.8% | |
| Free cash flow as a percent of revenue (non-GAAP) | | 28.5% | | 31.3% | |

This MD&A also includes references to an annual operating tax rate, a non-GAAP term we use to describe the estimated annual effective tax rate, a GAAP measure that by definition does not include discrete tax items. We believe the term annual operating tax rate is useful because it more clearly communicates that discrete tax items are excluded from such rate. The term also helps differentiate from the effective tax rate, which includes discrete tax items. No adjustments are made to the estimated annual effective tax rate when using the term annual operating tax rate.

Long-term contractual obligations

Information regarding long-term debt obligations is described in the long-term contractual obligations table in Item 7 of our Form 10-K for the year ended December 31, 2016. Additionally, in May 2017 we issued \$300 million principal amount of 2.75 percent notes maturing in 2021 and \$300 million principal amount of 2.625 percent notes maturing in 2024. We retired \$250 million of maturing debt in March 2017 and another \$375 million in June 2017.

Changes in accounting standards

See Note 2 to the financial statements for detailed information regarding the status of new accounting and reporting standards.

ITEM 4. Controls and Procedures.

An evaluation as of the end of the period covered by this report was carried out under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that those disclosure controls and procedures were effective. In addition, there has been no change in our internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934) that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1A. Risk Factors.

Information concerning our risk factors is contained in Item 1A of our Form 10-K for the year ended December 31, 2016, and is incorporated by reference herein.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds.

The following table contains information regarding our purchases of our common stock during the quarter.

ISSUER PURCHASES OF EQUITY SECURITIES

| | | | Total Number | Approximate |
|--------------------------------------|--------------|-------------------|---------------------|---------------------|
| | | | of Shares | Dollar Value |
| | | | Purchased as | of Shares that |
| | | | Part of | May Yet Be |
| | Total | | Publicly | Purchased |
| | Number of | Average | Announced | Under the |
| | Shares | Price Paid | Plans or | Plans or |
| Period | Purchased | per Share | Programs(1) | Programs(1) |
| April 1, 2017 through April 30, 2017 | 2,679,009 | \$ 80.03 | 2,679,009 | \$ 5.04 billion |
| May 1, 2017 through May 31, 2017 | 3,924,610 | 80.31 | 3,924,610 | 4.72 billion |
| June 1, 2017 through June 30, 2017 | 1,466,984 | 82.09 | 1,466,984 | 4.60 billion |
| Total | 8,070,603(2) | \$ 80.54 | 8,070,603(2) | \$ 4.60 billion(3) |

⁽¹⁾ All purchases during the quarter were made under the authorization from our board of directors to purchase up to \$7.5 billion of additional shares of TI common stock announced September 17, 2015.

⁽²⁾ All purchases during the quarter were open-market purchases.

⁽³⁾ As of June 30, 2017, this amount consisted of the remaining portion of the \$7.5 billion authorized in September 2015. No expiration date has been specified for this authorization.

ITEM 6. Exhibits.

| Designation of Exhibits in This Report | Description of Exhibit |
|--|--|
| 3(a) | Restated Certificate of Incorporation of the Registrant, dated April 18, 1985, as amended (incorporated by reference to Exhibit 3(a) of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2014). |
| 3(b) | By-Laws of the Registrant (incorporated by reference to Exhibit 3 of the Registrant's Current Report on Form 8-K filed December 12, 2016). |
| 4(a) | Officer's Certificate, dated May 4, 2017 (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed May 4, 2017. |
| 31(a) | Certification of Chief Executive Officer of Periodic Report Pursuant to Rule 13a-15(e) or Rule 15d-15(e).† |
| 31(b) | Certification of Chief Financial Officer of Periodic Report Pursuant to Rule 13a-15(e) or Rule 15d-15(e).† |
| 32(a) | Certification by Chief Executive Officer of Periodic Report Pursuant to 18 U.S.C. Section 1350.† |
| 32(b) | Certification by Chief Financial Officer of Periodic Report Pursuant to 18 U.S.C. Section 1350. † |
| 101.ins | XBRL Instance Document [†] |
| 101.def | XBRL Taxonomy Extension Definition Linkbase Document [†] |
| 101.sch | XBRL Taxonomy Extension Schema Document [†] |
| 101.cal | XBRL Taxonomy Extension Calculation Linkbase Document [†] |
| 101.lab | XBRL Taxonomy Extension Label Linkbase Document [†] |
| 101.pre | XBRL Taxonomy Extension Presentation Linkbase Document [†] |

[†] Filed or furnished herewith.

Notice regarding forward-looking statements

This report includes forward-looking statements intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. These forward-looking statements generally can be identified by phrases such as TI or its management "believes," "expects," "anticipates," "foresees," "forecasts," "estimates" or other words or phrases of similar import. Similarly, statements herein that describe TI's business strategy, outlook, objectives, plans, intentions or goals also are forward-looking statements. All such forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those in forward-looking statements.

We urge you to carefully consider the following important factors that could cause actual results to differ materially from the expectations of TI or our management:

- Market demand for semiconductors, particularly in TI's end markets;
- TI's ability to compete in products and prices in an intensely competitive industry;
- Customer demand that differs from forecasts and the financial impact of inadequate or excess TI inventory that results from demand that differs from projections;
- TI's ability to develop, manufacture and market innovative products in a rapidly changing technological environment;
- Economic, social and political conditions in the countries in which TI, our customers or our suppliers operate, including security risks; global trade policies; political and social instability; health conditions; possible disruptions in transportation, communications and information technology networks; and fluctuations in foreign currency exchange rates;
- Natural events such as severe weather, geological events or health epidemics in the locations in which TI, our customers or our suppliers operate;
- Breaches or disruptions of TI's information technology systems or those of our customers or suppliers;
- Timely implementation of new manufacturing technologies and installation of manufacturing equipment, or the ability to obtain needed third-party foundry and assembly/test subcontract services;
- Availability and cost of raw materials, utilities, manufacturing equipment, third-party manufacturing services and manufacturing technology;
- Compliance with or changes in the complex laws, rules and regulations to which TI is or may become subject, or actions of enforcement authorities, that restrict TI's ability to manufacture or ship our products or operate our business, or subject TI to fines, penalties, or other legal liability;
- Product liability or warranty claims, claims based on epidemic or delivery failure, or other claims relating to TI products, manufacturing, services, design or communications, or recalls by TI customers for a product containing a TI part;
- Changes in the tax rate applicable to TI as the result of changes in tax law, the jurisdictions in which profits are determined to be earned and taxed, adverse resolution of tax audits, increases in tariff rates, and the ability to realize deferred tax assets;
- A loss suffered by a customer or distributor of TI with respect to TI-consigned inventory;
- Financial difficulties of distributors or their promotion of competing product lines to TI's detriment, or the loss of a significant number of distributors;
- Losses or curtailments of purchases from key customers or the timing and amount of distributor and other customer inventory adjustments;
- TI's ability to maintain or improve profit margins, including our ability to utilize our manufacturing facilities at sufficient levels to cover our fixed operating costs, in an intensely competitive and cyclical industry;
- TI's ability to maintain and enforce a strong intellectual property portfolio and maintain freedom of operation; or TI's exposure to infringement claims;
- Instability in the global credit and financial markets that affects TI's ability to fund our daily operations, invest in the business, make strategic acquisitions, or make principal and interest payments on our debt;

- Increases in health care and pension benefit costs;
- TI's ability to recruit and retain skilled engineering, management and technical personnel;
- TI's ability to successfully integrate and realize opportunities for growth from acquisitions, or our ability to realize our expectations regarding the amount and timing of restructuring charges and associated cost savings; and
- Impairments of TI's non-financial assets.

For a more detailed discussion of these factors see the Risk Factors discussion in Item 1A of our most recent Form 10-K. The forward-looking statements included in this report are made only as of the date of this report, and we undertake no obligation to update the forward-looking statements to reflect subsequent events or circumstances. If we do update any forward-looking statement, you should not infer that we will make additional updates with respect to that statement or any other forward-looking statement.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TEXAS INSTRUMENTS INCORPORATED

BY /s/ Rafael R. Lizardi

Rafael R. Lizardi Senior Vice President and Chief Financial Officer

Date: August 3, 2017

CERTIFICATIONS

I, Richard K. Templeton, certify that:

- 1. I have reviewed this report on Form 10-Q of Texas Instruments Incorporated;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 3, 2017

/s/ Richard K. Templeton
Richard K. Templeton
Chairman, President and
Chief Executive Officer

CERTIFICATIONS

I, Rafael R. Lizardi, certify that:

- 1. I have reviewed this report on Form 10-Q of Texas Instruments Incorporated;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 3, 2017

/s/ Rafael R. Lizardi
Rafael R. Lizardi
Senior Vice President and
Chief Financial Officer

Certification of Periodic Report Pursuant to 18 U.S.C. Section 1350

For purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned, Richard K. Templeton, the Chairman, President and Chief Executive Officer of Texas Instruments Incorporated (the "Company"), hereby certifies that, to his knowledge:

- (i) the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 3, 2017

/s/ Richard K. Templeton

Richard K. Templeton Chairman, President and Chief Executive Officer

Certification of Periodic Report Pursuant to 18 U.S.C. Section 1350

For purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned, Rafael R. Lizardi, Senior Vice President and Chief Financial Officer of Texas Instruments Incorporated (the "Company"), hereby certifies that, to his knowledge:

- (i) the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 3, 2017

/s/ Rafael R. Lizardi

Rafael R. Lizardi Senior Vice President and Chief Financial Officer