



**Consolidated Financial Statements**  
**for the six-month ended and as of September 30, 2018 (in English)**

On November 13, 2018, the Japanese version of this report was filed with the Director-General of the Kanto Local Finance Bureau of the Ministry of Finance pursuant to Japan's Financial Instruments and Exchange Act.

[This is an English translation prepared for the convenience of non-resident shareholders. Should there be any inconsistency between the translation and the official Japanese text, the latter shall prevail.]

**[Cover]**

Document to be filed:	Quarterly Report
Provisions to base upon:	Article 24-4-7, paragraph 1 of the Financial Instruments and Exchange Act
Filing to:	Director-General of the Kanto Local Finance Bureau
Date of filing:	November 13, 2018
Fiscal period:	2nd quarter of 123rd term (from April 1, 2018 to September 30, 2018)
Company name (Japanese):	<i>TDK Kabushiki-Kaisha</i>
Company name (English):	TDK CORPORATION
Title and name of representative:	Shigenao Ishiguro, President & Representative Director
Location of head office:	3-9-1, Shibaura, Minato-ku, Tokyo, Japan
Telephone number:	+81-3-6852-7116
Contact person:	Tetsuji Yamanishi, Senior Vice President & Representative Director
Place of contact:	3-9-1, Shibaura, Minato-ku, Tokyo, Japan
Telephone number:	+81-3-6852-7116
Contact person:	Tetsuji Yamanishi, Senior Vice President & Representative Director
Place where the document to be filed is available for public inspection:	Tokyo Stock Exchange, Inc. (2-1, Nihonbashi-kabutocho, Chuo-ku, Tokyo, Japan)

## **TABLE OF CONTENTS**

Consolidated Financial Statements for the six-month ended and as of  
September 30, 2018 (in English)

- 1) Consolidated balance sheets (Unaudited)
- 2) Consolidated statements of income and Consolidated statements of comprehensive income (Unaudited)
- 3) Consolidated statements of cash flows (Unaudited)
- 4) Notes to Consolidated Financial Statements (Unaudited)

## 1) Consolidated balance sheets (Unaudited)

ASSETS	Yen (Millions)	
	March 31, 2018	September 30, 2018
<b>Current assets:</b>		
Cash and cash equivalents	¥ 279,624	¥ 251,106
Short-term investments	43,613	29,624
Marketable securities (Note 2 and 7)	54	58
Net trade receivables (Note 1)	304,016	393,787
Inventories (Note 1 and 3)	207,532	230,462
Other current assets (Note 1 and 6)	65,097	63,787
<b>Total current assets</b>	<b>899,936</b>	<b>968,824</b>
<b>Investments in affiliates (Note 2)</b>	<b>143,589</b>	<b>153,639</b>
<b>Other investments in securities (Note 2 and 7)</b>	<b>11,651</b>	<b>9,457</b>
<b>Net property, plant and equipment</b>	<b>545,641</b>	<b>579,603</b>
<b>Goodwill (Note 9)</b>	<b>157,858</b>	<b>168,096</b>
<b>Intangible assets (Note 9)</b>	<b>85,531</b>	<b>87,924</b>
<b>Other assets (Note 1, 6 and 7)</b>	<b>61,003</b>	<b>60,758</b>
<b>Total assets</b>	<b>¥ 1,905,209</b>	<b>¥ 2,028,301</b>

*See accompanying notes to consolidated financial statements.*

LIABILITIES AND EQUITY	Yen (Millions)	
	March 31, 2018	September 30, 2018
<b>Current liabilities:</b>		
Short-term debt	¥ 124,573	¥ 186,922
Current installments of long-term debt (Note 7)	64,566	98,569
Trade payables	226,791	216,012
Accrued expenses	159,618	195,704
Other current liabilities (Note 6)	27,489	37,443
<b>Total current liabilities</b>	<b>603,037</b>	<b>734,650</b>
<b>Long-term debt, excluding current installments (Note 7)</b>	<b>293,880</b>	<b>232,593</b>
<b>Retirement and severance benefits</b>	<b>125,137</b>	<b>123,041</b>
<b>Other noncurrent liabilities (Note 6)</b>	<b>51,923</b>	<b>57,063</b>
<b>Total noncurrent liabilities</b>	<b>470,940</b>	<b>412,697</b>
<b>Total liabilities</b>	<b>1,073,977</b>	<b>1,147,347</b>
<b>TDK stockholders' equity:</b>		
Common stock		
Authorized 480,000,000 shares; issued 129,590,659 shares at March 31, 2018 and September 30, 2018 outstanding 126,245,079 shares at March 31, 2018 and 126,281,106 shares at September 30, 2018	32,641	32,641
Additional paid-in capital	8,738	5,890
Legal reserve	45,366	43,618
Retained earnings (Note 1)	874,563	905,440
Accumulated other comprehensive income (loss) (Note 1, 10 and 11)	(119,492)	(95,965)
Treasury stock at cost; 3,345,580 shares at March 31, 2018 and 3,309,553 shares at September 30, 2018	(17,182)	(16,998)
Total TDK stockholders' equity	824,634	874,626
<b>Noncontrolling interests (Note 10 and 11)</b>	<b>6,598</b>	<b>6,328</b>
<b>Total equity</b>	<b>831,232</b>	<b>880,954</b>
<b>Total liabilities and equity</b>	<b>¥ 1,905,209</b>	<b>¥ 2,028,301</b>

**2) Consolidated statements of income  
and Consolidated statements of comprehensive income (Unaudited)**

For the Six-month ended September 30, 2017 and 2018

**Consolidated statements of income**

	Yen (Millions)	
	Six-month ended September 30, 2017	Six-month ended September 30, 2018
Net sales (Note 1 and 16)	¥ 623,571	¥ 721,940
Cost of sales (Note 1, 4 and 6)	455,499	512,117
<b>Gross profit</b>	<b>168,072</b>	<b>209,823</b>
Selling, general and administrative expenses (Note 1 and 4)	126,768	144,966
Other operating expense (income) (Note 1)	(2,910)	2,677
<b>Operating income</b>	<b>44,214</b>	<b>62,180</b>
<b>Other income (deductions):</b>		
Interest and dividend income	3,002	3,556
Interest expense	(2,176)	(2,184)
Foreign exchange gain (loss) (Note 6)	(287)	(1,583)
Other - net (Note 1, 4 and 6)	(499)	(4,170)
<b>Total other income (deductions)</b>	<b>40</b>	<b>(4,381)</b>
<b>Income before income taxes</b>	<b>44,254</b>	<b>57,799</b>
<b>Income taxes (Note 1)</b>	<b>13,207</b>	<b>16,538</b>
<b>Net income</b>	<b>31,047</b>	<b>41,261</b>
<b>Less: Net income attributable to noncontrolling interests</b>	<b>358</b>	<b>185</b>
<b>Net income attributable to TDK</b>	<b>¥ 30,689</b>	<b>¥ 41,076</b>

**Amounts per share:**

	Yen	
	Six-month ended September 30, 2017	Six-month ended September 30, 2018
Net income attributable to TDK per share (Note 12):		
Basic	¥ 243.15	¥ 325.30
Diluted	242.56	324.46
Cash dividends paid during the period	¥ 60.00	¥ 70.00

**Consolidated statements of comprehensive income**

	Yen (Millions)	
	Six-month ended September 30, 2017	Six-month ended September 30, 2018
Net income	¥ 31,047	¥ 41,261
Other comprehensive income (loss), net of taxes		
Foreign currencies translation adjustments	14,380	24,337
Pension liability adjustments	1,956	2,137
Net unrealized gains (losses) on securities	(247)	(1)
<b>Total other comprehensive income (loss) (Note 11):</b>	<b>16,089</b>	<b>26,473</b>
<b>Comprehensive income (Note 10)</b>	<b>47,136</b>	<b>67,734</b>
Comprehensive income attributable to noncontrolling interests	404	58
<b>Comprehensive income attributable to TDK</b>	<b>¥ 46,732</b>	<b>¥ 67,676</b>

*See accompanying notes to consolidated financial statements.*

For the Three-month ended September 30, 2017 and 2018  
Consolidated statements of income

	Yen (Millions)	
	Three-month ended September 30, 2017	Three-month ended September 30, 2018
Net sales (Note 1 and 16)	¥ 334,045	¥ 378,872
Cost of sales (Note 1, 4 and 6)	242,679	263,847
<b>Gross profit</b>	<b>91,366</b>	<b>115,025</b>
Selling, general and administrative expenses (Note 1 and 4)	64,942	74,625
Other operating expense (income) (Note 1)	(1,188)	3,640
<b>Operating income</b>	<b>27,612</b>	<b>36,760</b>
<b>Other income (deductions):</b>		
Interest and dividend income	1,635	1,646
Interest expense	(1,230)	(1,066)
Foreign exchange gain (loss) (Note 6)	120	(630)
Other - net (Note 1, 4 and 6)	(819)	(2,646)
<b>Total other income (deductions)</b>	<b>(294)</b>	<b>(2,696)</b>
<b>Income before income taxes</b>	<b>27,318</b>	<b>34,064</b>
<b>Income taxes (Note 1)</b>	<b>7,445</b>	<b>9,101</b>
<b>Net income</b>	<b>19,873</b>	<b>24,963</b>
<b>Less: Net income attributable to noncontrolling interests</b>	<b>139</b>	<b>84</b>
<b>Net income attributable to TDK</b>	<b>¥ 19,734</b>	<b>¥ 24,879</b>

Amounts per share:

	Yen	
	Three-month ended September 30, 2017	Three-month ended September 30, 2018
Net income attributable to TDK per share (Note 12):		
Basic	¥ 156.35	¥ 197.03
Diluted	155.96	196.56
Cash dividends paid during the period	¥ -	¥ -

Consolidated statements of comprehensive income

	Yen (Millions)	
	Three-month ended September 30, 2017	Three-month ended September 30, 2018
Net income	¥ 19,873	¥ 24,963
Other comprehensive income (loss), net of taxes		
Foreign currencies translation adjustments	10,944	16,286
Pension liability adjustments	966	1,147
Net unrealized gains (losses) on securities	57	2
<b>Total other comprehensive income (loss) (Note 11):</b>	<b>11,967</b>	<b>17,435</b>
<b>Comprehensive income (Note 10)</b>	<b>31,840</b>	<b>42,398</b>
Comprehensive income attributable to noncontrolling interests	174	0
<b>Comprehensive income attributable to TDK</b>	<b>¥ 31,666</b>	<b>¥ 42,398</b>

See accompanying notes to consolidated financial statements.

### 3) Consolidated statements of cash flows (Unaudited)

	Yen (Millions)	
	Six-month ended September 30, 2017	Six-month ended September 30, 2018
<b>Cash flows from operating activities:</b>		
Net income	¥ 31,047	¥ 41,261
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	43,249	52,370
Impairment of long-lived assets	25	4,720
Loss (gain) on securities, net	(284)	2,841
Changes in assets and liabilities:		
Decrease (increase) in trade receivables	(72,278)	(82,321)
Decrease (increase) in inventories	(32,601)	(22,500)
Increase (decrease) in trade payables	44,881	11,761
Increase (decrease) in accrued expenses	(2,935)	(246)
Decrease (increase) in other assets and liabilities, net	(19,699)	(1,488)
Other - net	(2,251)	1,280
Net cash provided by (used in) operating activities	<u>(10,846)</u>	<u>7,678</u>
<b>Cash flows from investing activities:</b>		
Capital expenditures	(84,677)	(77,023)
Proceeds from sales of tangible and intangible assets	6,221	1,820
Proceeds from sale and maturity of short-term investments	80,804	60,771
Payment for purchase of short-term investments	(101,724)	(44,966)
Proceeds from sale and maturity of securities	23,679	232
Payment for purchase of securities	(791)	(743)
Proceeds from sale of business, net of cash transferred	18,047	7,530
Acquisition of subsidiaries, net of cash acquired	(138,847)	(1,502)
Other - net	(1,497)	(1,165)
Net cash used in investing activities	<u>(198,785)</u>	<u>(55,046)</u>
<b>Cash flows from financing activities:</b>		
Proceeds from debt with maturities longer than three months	146,811	2,053
Repayment of debt with maturities longer than three months	(43,097)	(36,641)
Net increase (decrease) in debt with maturities of three months or less	56,147	61,717
Dividends paid	(7,566)	(8,843)
Acquisition of noncontrolling interests	(8,795)	(3,590)
Other - net	(162)	34
Net cash provided by financing activities	<u>143,338</u>	<u>14,730</u>
Effect of exchange rate changes on cash and cash equivalents	6,535	4,120
Net decrease in cash and cash equivalents	<u>(59,758)</u>	<u>(28,518)</u>
Cash and cash equivalents at beginning of period	330,388	279,624
Cash and cash equivalents at end of period	<u>¥ 270,630</u>	<u>¥ 251,106</u>

See accompanying notes to consolidated financial statements.



## 4) Notes to Consolidated Financial Statements (Unaudited)

### 1. Summary of Significant Accounting Policies

#### (a) Basis of Presentation

TDK Corporation and most of its domestic subsidiaries maintain their books of account in conformity with the generally accepted accounting principles in Japan, and its foreign subsidiaries' books of accounts are mainly in conformity with those of the countries of their domicile.

The consolidated financial statements presented herein reflect certain adjustments, not recorded in the primary books of TDK Corporation and its subsidiaries, to present the financial position, results of operations and cash flows in conformity with U.S. generally accepted accounting principles ("U.S. GAAP").

#### (b) Consolidation Policy

The consolidated financial statements include the accounts of TDK Corporation, its subsidiaries and those variable interest entities where TDK is the primary beneficiary under U.S. GAAP. All significant intercompany balances and transactions have been eliminated in consolidation.

The investments in affiliates where TDK exercises significant influence over their operating and financial policies are accounted for using the equity method of accounting. All significant intercompany profits from transactions with these affiliates have been eliminated.

#### (c) Adoption of New Accounting Standards

##### Revenue from Contracts with Customers

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09 "Revenue from Contracts with Customers".

This ASU requires an entity to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. TDK adopted this ASU from April 1, 2018 by applying the modified retrospective method to all contracts and recognized the cumulative-effect as an adjustments to the opening retained earnings.

By recognizing revenue from contracts with customers based on this standard, the timing of revenue recognition has changed for certain transactions compared to the revenue recognized based on the previous revenue recognition standard. As a result, compared to the results based on the previous revenue recognition standard, net sales, cost of sales, and income taxes increased by ¥1,261 million, ¥697 million, and ¥116 million, respectively, in statements of income for the six-month ended September 30, 2018, and they increased by ¥577 million, ¥451 million, and ¥68 million, respectively, in statements of income for the three-month ended September 30, 2018. Furthermore, net trade receivables and deferred tax assets increased by ¥2,926 million and ¥40 million, respectively in the balance sheets as of September 30, 2018. On the other hand, inventories and other current assets decreased by ¥2,106 million and ¥184 million, respectively.

The cumulative-effects of the adoption of this ASU did not have a material impact on the opening retained earnings as of April 1, 2018 and TDK's results of operations and financial position. Further detail is presented in Note 16.

### Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, FASB issued ASU 2016-01 “Recognition and Measurement of Financial Assets and Financial Liabilities”. This ASU requires that equity investments that do not result in consolidation and are not accounted for under the equity method be measured at fair value with changes in fair value recognized in net income. TDK adopted this ASU from April 1, 2018 by applying the modified retrospective method to recognize a cumulative-effect adjustment to the opening retained earnings.

As a result, TDK recognized a cumulative-effect of ¥3,083 million as an increase in the opening retained earnings as of April 1, 2018 related to equity investments classified as available-for-sale securities, which was previously recognized as net of tax unrealized gain in accumulated other comprehensive income.

### Intra-Entity Transfers of Assets Other than Inventory

In October 2016, FASB issued ASU 2016-16 “Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other than Inventory”. This ASU eliminates the exception to defer the income tax consequence of intra-entity transfers of assets other than inventory until the assets are ultimately sold to an outside party and requires the recognition of tax consequence when those transfers occur. TDK adopted this ASU from April 1, 2018 by applying the modified retrospective method to recognize a cumulative-effect adjustment to the opening retained earnings.

As a result, TDK recognized a cumulative-effect adjustment of ¥6,374 million as a decrease of the opening retained earnings as of April 1, 2018.

### Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

In March 2017, FASB issued ASU 2017-07 “Recognition and Measurement of Financial Assets and Financial Liabilities”. This ASU requires an entity to disaggregate service cost component from other components of net benefit cost and report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in other income (deductions) separately from the service cost component. This ASU restricts only the service cost component to be eligible for capitalization (for example, as a cost of internally manufactured inventory). This ASU is applied retrospectively for the disaggregation of the service cost component and the other components of net benefit cost, and prospectively for the capitalization of the service cost component of net benefit cost. TDK adopted this ASU from April 1, 2018.

As a result, ¥947 million and ¥481 million from cost of sales, ¥998 million and ¥500 million from selling, general and administrative expenses and ¥399 million and ¥200 million from research and development expenses included in selling, general and administrative expenses were reclassified to other income (deductions) in the consolidated statement of income for the six-month and the three-month ended September 30, 2017. Further detail is presented in Note 4. The adoption of this ASU, which restricts only the service cost component to be eligible for capitalization, did not have a material impact on TDK’s results of operations and financial position.

**(d) Other operating expense (income)**

Other operating expense (income) for the six-month ended September 30, 2017 and 2018 are as follows:

	Yen (Millions)	
	Six-month ended September 30, 2017	Six-month ended September 30, 2018
Gain on sale of business (Note 15)	¥ (2,935)	¥ (2,043)
Impairment of long-lived assets (Note 14)	25	4,720
Other operating expense (income) total	¥ (2,910)	¥ 2,677

Other operating expense (income) for the three-month ended September 30, 2017 and 2018 are as follows:

	Yen (Millions)	
	Three-month ended September 30, 2017	Three-month ended September 30, 2018
Gain on sale of business (Note 15)	¥ (1,195)	¥ (1,080)
Impairment of long-lived assets (Note 14)	7	4,720
Other operating expense (income) total	¥ (1,188)	¥ 3,640

**(e) Subsequent Events**

TDK has evaluated the subsequent events through November 12, 2018, the date on which the consolidated financial statements are available to be issued.

**(f) Reclassifications**

Certain reclassifications have been made to the prior year's consolidated financial statements and quarterly consolidated financial statements to conform to the presentation used for the six-month and the three-month ended September 30, 2018.

## 2. Marketable Securities and Investments in Securities

Marketable securities and investments in securities as of March 31, 2018 and September 30, 2018, are as follows:

	Yen (Millions)	
	March 31, 2018	September 30, 2018
Marketable securities		
Debt securities	¥ 54	¥ 58
Total Marketable securities	54	58
Investments in affiliates	143,589	153,639
Other investments in securities:		
Debt securities	109	111
Marketable equity securities	9,581	7,350
Nonmarketable equity securities	1,961	1,996
Total other investments in securities	11,651	9,457
Total	¥ 155,294	¥ 163,154

Debt securities include available-for-sale securities. Information with respect to such securities as of March 31, 2018 and September 30, 2018, is as follows:

	Yen (Millions)			
	Cost	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Fair Value
<b>As of March 31, 2018</b>				
Marketable securities:				
Government bonds	¥ 54	¥ -	¥ 0	¥ 54
Investments:				
Commercial papers	7	102	-	109
Public-utility bonds	0	-	-	0
Total	¥ 61	¥ 102	¥ 0	¥ 163
<b>As of September 30, 2018</b>				
Marketable securities (Debt securities):				
Government bonds	¥ 58	¥ -	¥ 0	¥ 58
Investments (Debt securities):				
Commercial papers	7	104	-	111
Public-utility bonds	0	-	-	0
Total	¥ 65	¥ 104	¥ 0	¥ 169

The proceeds from sale and maturity of debt securities classified as available-for-sale securities were ¥21,832 million and ¥3,302 million for the six-month ended and the three-month ended September 30, 2017, respectively. The proceeds from sale and maturity of debt securities classified as available-for-sale securities were ¥7 million and ¥4 million for the six-month ended and the three-month ended September 30, 2018, respectively. The gross realized gains on the sale of debt securities classified as available-for-sale securities were determined on average cost basis and were reflected in income (loss).

As of September 30, 2018, all of the debt securities classified as available-for-sale securities with unrealized losses were in a continuous unrealized loss position for less than 12 months.

TDK measures certain nonmarketable equity securities without a readily determinable fair value based on a practical expedient by estimating the fair value at cost minus impairment, and plus minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. The book value of such investments amounted to ¥728 million as of September 30, 2018. TDK did not record an impairment or other adjustments for the six-month ended September 30, 2018.

Net gains and losses recognized during the period on equity securities and unrealized gains and losses recognized during the period on equity securities for the six-month ended September 30, 2018 are as follows:

	Yen (Millions)
	<u>Six-month ended</u> <u>September 30, 2018</u>
Unrealized gains and losses recognized during the period on equity securities held as of September 30, 2018	¥ (2,941)
Net gains and losses recognized on equity securities sold during the period	100
Net gains and losses recognized during the period on equity securities	<u>¥ (2,841)</u>

Net gains and losses recognized during the period on equity securities and unrealized gains and losses recognized during the period on equity securities for the three-month ended September 30, 2018 are as follows:

	Yen (Millions)
	<u>Three-month ended</u> <u>September 30, 2018</u>
Unrealized gains and losses recognized during the period on equity securities still held as of September 30, 2018	¥ (1,468)
Net gains and losses recognized on equity securities sold during the period	1
Net gains and losses recognized during the period on equity securities	<u>¥ (1,467)</u>

### 3. Inventories

Inventories as of March 31, 2018 and September 30, 2018, are summarized as follows:

	Yen (Millions)	
	March 31, 2018	<u>September 30, 2018</u>
Finished goods	¥ 77,486	¥ 86,731
Work in process	51,159	59,002
Raw materials	78,887	84,729
Total	<u>¥ 207,532</u>	<u>¥ 230,462</u>

### 4. Cost for Retirement and Severance Benefits

Net periodic benefit cost for TDK's employee retirement and severance defined benefit plans for the six-month ended September 30, 2017 and September 30, 2018 consist of the following components:

	Yen (Millions)	
	<u>Six-month ended</u> <u>September 30, 2017</u>	<u>Six-month ended</u> <u>September 30, 2018</u>
Service cost-benefits earned during the period	¥ 4,086	¥ 4,201
Interest cost on projected benefit obligation	1,858	1,743
Expected return on plan assets	(2,063)	(2,336)
Amortization of actuarial loss	2,847	2,638
Amortization of prior service cost (benefit)	(697)	(184)
Net periodic benefit cost	<u>¥ 6,031</u>	<u>¥ 6,062</u>

In net periodic benefit cost for TDK's employee retirement and severance defined benefit plans, ¥4,086 and ¥4,201 million of service cost is included in cost of sales and sales and general administrative expense for the six-month ended September 30, 2017 and

September 30, 2018, respectively. Other elements except service cost are included in other - net of other income (deductions) and those losses were ¥1,945 million and ¥1,861 million for the six-month ended September 30, 2017 and September 30, 2018, respectively.

Net periodic benefit cost for TDK's employee retirement and severance defined benefit plans for the three-month ended September 30, 2017 and September 30, 2018 consist of the following components:

	Yen (Millions)	
	Three-month ended September 30, 2017	Three-month ended September 30, 2018
Service cost-benefits earned during the period	¥ 2,045	¥ 2,072
Interest cost on projected benefit obligation	935	866
Expected return on plan assets	(1,031)	(1,170)
Amortization of actuarial loss	1,420	1,322
Amortization of prior service cost (benefit)	(343)	(92)
Net periodic benefit cost	¥ 3,026	¥ 2,998

In net periodic benefit cost for TDK's employee retirement and severance defined benefit plans, ¥2,045 and ¥2,072 million of service cost is included in cost of sales and sales and general administrative expense for the three-month ended September 30, 2017 and September 30, 2018, respectively. Other elements except service cost are included in other - net of other income (deductions) and those losses were ¥981 million and ¥926 million for the three-month ended September 30, 2017 and September 30, 2018, respectively.

## 5. Contingent Liabilities

TDK provides guarantees to third parties on bank loans of its employees. The guarantees on behalf of the employees are made for their housing loans. For each guarantee issued, in the event the employee defaults on payment, TDK would be required to make payments under its guarantee.

The maximum amount of undiscounted payments TDK would have to make in the event of default as of March 31, 2018 and September 30, 2018, are as follows:

	Yen (Millions)	
	March 31, 2018	September 30, 2018
Guarantees to third parties on bank loans of employees	¥ 769	¥ 684

As of September 30, 2018, the liability recognized for the estimated fair value of TDK's obligation under the guarantee arrangement is not material.

Several claims against TDK are pending. In the opinion of TDK management, based on discussions with legal counsel, any additional liability not currently provided for will not materially affect the consolidated financial position or result of operations of TDK.

## **6. Derivative Financial Instruments and Hedging Activities**

TDK operates internationally and is exposed to the risk of changes in foreign exchange rates and interest rates as well as changes in raw material prices. TDK assesses these risks by continuously monitoring changes in the exchange rates, interest rates and raw material prices and by evaluating hedging opportunities. Derivative financial instruments are utilized to reduce these risks. TDK does not hold or issue derivative financial instruments for trading purposes. TDK is exposed to credit related losses in the event of nonperformance by the counterparties to those derivative financial instruments, but does not expect any counterparties to fail to meet their obligations given their high credit ratings. The credit exposure of those financial instruments is represented by the fair values of contracts. The fair values of the contracts are calculated based on the quotes presented by financial institutions. TDK does not hold any derivative instruments which consisted credit-risk-related contingent features.

### **(1) Hedges of net investment in foreign operations**

TDK uses forward foreign exchange contracts and borrowings denominated in the subsidiary's local currency to hedge the foreign currency exposure of the net investment in overseas subsidiaries. The gains and losses of these hedging instruments are recorded in foreign currency translation adjustments, which is a part of other comprehensive income (loss). There are no gains (losses) reclassified from other comprehensive income (loss) to earnings. Also, there is no ineffective portion and amount excluded from effectiveness testing.

### **(2) Derivatives not designated as hedging instruments**

TDK uses forward foreign exchange contracts, nondeliverable forward contracts (NDF), currency swap contracts and currency option contracts in order to offset foreign exchange gain (loss) mainly arising from foreign-currency denominated assets and liabilities and forecasted transactions. TDK uses interest rate swap in order to control the fluctuation risks of interest rates. Also, TDK uses commodity forward contracts in order to control the fluctuation risk of raw material prices. Although these contracts are not designated as hedges, which is required to apply hedge accountings, TDK considers that these are effective as hedges from an economic viewpoint. The fair values of these undesignated contracts are recognized as income or expenses as earned or incurred.

The effect of derivative financial instruments on the consolidated statements of income and consolidated statements of comprehensive income (loss) for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

(1) Hedges of net investment in foreign operations and other hedging instruments

	Yen (Millions)	
	Gains (losses) recognized in other comprehensive income on derivative (effective portion)	
	Six-month ended September 30, 2017	<b>Six-month ended September 30, 2018</b>
Forward foreign exchange contracts	¥ (941)	¥ <b>(5,010)</b>
Borrowings in local currency	420	<b>(4,398)</b>
Total	¥ (521)	¥ <b>(9,408)</b>

(2) Derivatives not designated as hedging instruments

		Yen (Millions)	
		Six-month ended September 30, 2017	<b>Six-month ended September 30, 2018</b>
Forward foreign exchange contracts	Foreign exchange gain (loss)	¥ 3,650	¥ <b>(3,306)</b>
Nondeliverable forward contracts (NDF)	Foreign exchange gain (loss)	(523)	-
Currency swap contracts	Foreign exchange gain (loss)	(23)	<b>1,281</b>
Interest rate swap contracts	Other income (deductions)-Other-net	(99)	<b>12</b>
Currency option contracts	Foreign exchange gain (loss)	(58)	<b>(164)</b>
Commodity forward contracts	Cost of sales	21	<b>131</b>
Total		¥ 2,968	¥ <b>(2,046)</b>



The effect of derivative financial instruments on the consolidated statements of income and consolidated statements of comprehensive income (loss) for the three-month ended September 30, 2017 and September 30, 2018 are as follows:

(1) Hedges of net investment in foreign operations and other hedging instruments

	Yen (Millions)	
	Gains (losses) recognized in other comprehensive income on derivative (effective portion)	
	Three-month ended September 30, 2017	<b>Three-month ended September 30, 2018</b>
Forward foreign exchange contracts	¥ (443)	¥ (2,382)
Borrowings in local currency	(438)	(1,818)
Total	¥ (881)	¥ (4,200)

(2) Derivatives not designated as hedging instruments

		Yen (Millions)	
		Three-month ended September 30, 2017	<b>Three-month ended September 30, 2018</b>
Forward foreign exchange contracts	Foreign exchange gain (loss)	¥ 1,913	¥ (68)
Nondeliverable forward contracts (NDF)	Foreign exchange gain (loss)	(363)	-
Currency swap contracts	Foreign exchange gain (loss)	114	612
Interest rate swap contracts	Other income (deductions)-Other-net	79	(15)
Currency option contracts	Foreign exchange gain (loss)	(75)	(50)
Commodity forward contracts	Cost of sales	27	93
Total		¥ 1,695	¥ 572

Notional amounts and fair value of derivative financial instruments as of March 31, 2018 and September 30, 2018 are as follows:

Yen (Millions)					
March 31, 2018					
Derivatives designated as hedging instruments and other:					
	Notional amounts	Asset derivatives		Liability derivatives	
		Fair value	Consolidated balance sheets location	Fair value	Consolidated balance sheets location
Forward foreign exchange contracts	¥ 135,530	¥ 173	Other current assets	¥ 1,183	Other current liabilities
Borrowings in local currency	63,744	-	-	-	-
Derivatives not designated as hedging instruments:					
	Notional amounts	Asset derivatives		Liability derivatives	
		Fair value	Consolidated balance sheets location	Fair value	Consolidated balance sheets location
Forward foreign exchange contracts	¥ 82,896	¥ 273	Other current assets	¥ 248	Other current liabilities
Currency swap contracts	20,866	18 678	Other current assets Other assets	90 32	Other current liabilities Other liabilities
Interest rate swap contracts	31,872	293	Other assets	-	-
Commodity forward contracts	157	-	-	3	Other current liabilities

Yen (Millions)					
September 30, 2018					
Derivatives designated as hedging instruments and other:					
	Notional amounts	Asset derivatives		Liability derivatives	
		Fair value	Consolidated balance sheets location	Fair value	Consolidated balance sheets location
Forward foreign exchange contracts	¥ 140,819	¥ -	-	¥ 6,135	Other current liabilities
Borrowings in local currency	68,142	-	-	-	-
Derivatives not designated as hedging instruments:					
	Notional amounts	Asset derivatives		Liability derivatives	
		Fair value	Consolidated balance sheets location	Fair value	Consolidated balance sheets location
Forward foreign exchange contracts	¥ 103,588	¥ 752	Other current assets	¥ 753	Other current liabilities
Currency swap contracts	19,443	53 1,662	Other current assets Other assets	1 -	Other current liabilities -
Interest rate swap contracts	34,071	305	Other current assets	-	-
Commodity forward contracts	567	98 9	Other current assets Other assets	- -	- -

## **7. Fair Value of Financial Instruments**

The following methods and assumptions were used to estimate the fair value of financial instruments in cases for which it is practicable:

### **(a) Cash and cash equivalents, Short-term investments, Trade receivables, Other current assets, Short-term debt, Trade payables, Accrued expenses and Other current liabilities**

Except for derivative financial instruments, the carrying amount approximates fair value because of the short maturity of these instruments.

### **(b) Marketable securities, Investments in securities and Other assets**

The fair values of marketable securities and investments in securities are primarily estimated based on quoted market prices for these instruments. The fair value of TDK's long-term loans receivable included in other assets are estimated based on the amount of future cash flows associated with the instrument discounted using the borrower's current borrowing rate in the market for similar borrowing of comparable maturity, or based on the quoted market prices for the same or similar issues. The long-term loans receivable are classified as Level 2, one of the three levels of fair value hierarchy that is discussed in Note 8 of the Notes to Consolidated Financial Statements.

### **(c) Long-term debt**

The fair value of TDK's long-term debt is estimated based on the amount of future cash flows associated with the instrument discounted using current borrowing rate in the market for similar debt of comparable maturity, or based on the quoted market prices for the same or similar issues. The long-term debt is classified as Level 2, one of the three levels of fair value hierarchy that is discussed in Note 8 of the Notes to Consolidated Financial Statements.

The carrying amounts and estimated fair values of TDK's financial instruments as of March 31, 2018 and September 30, 2018, are summarized as follows:

As of March 31, 2018	Yen (Millions)	
	Carrying amount	Estimated fair value
Assets:		
Marketable securities	¥ 54	¥ 54
Other investments in securities and other assets	25,132	25,132
Liability:		
Long-term debt, including current portion (excluding lease obligation)	(352,736)	(350,950)
As of September 30, 2018	Yen (Millions)	
	Carrying amount	Estimated fair value
Assets:		
Marketable securities	¥ 58	¥ 58
Other investments in securities and other assets	25,032	25,032
Liability:		
Long-term debt, including current portion (excluding lease obligation)	(325,008)	(323,456)

Derivative financial instruments are presented in Note 6 of the Notes to Consolidated Financial Statements.

### Limitations

Fair value estimates are made at a specific point in time, based on relevant market information and information about the financial instruments. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and therefore cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

## 8. Fair Value Measurements

FASB Accounting Standards Codification (“ASC”) 820 “Fair Value Measurements and Disclosures” defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or most advantageous market for the asset or liability. FASB ASC 820 establishes a three level fair value hierarchy for material inputs used in measuring fair value as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that TDK has the ability to access at the measurement date

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Unobservable inputs for the asset or liability

### Assets and liabilities that are measured at fair value on a recurring basis

Assets and liabilities that are measured at fair value on a recurring basis as of March 31, 2018 and September 30, 2018 are as follows:

As of March 31, 2018	Yen (Millions)			Total
	Level 1	Level 2	Level 3	
<b>Assets:</b>				
Marketable securities (debt securities):				
Government bonds	¥ 54	¥ -	¥ -	¥ 54
Derivative contracts:				
Forward foreign exchange contracts	-	446	-	446
Currency swap contracts	-	696	-	696
Interest rate swap contracts	-	293	-	293
Investments (Debt securities):				
Commercial papers	-	109	-	109
Public-utility bonds	0	-	-	0
Investments (Equity securities):				
Manufacturing companies	5,731	-	-	5,731
Other	2,659	-	-	2,659
Investments (Mutual funds)	1,191	-	-	1,191
Rabbi trust investments	5,920	-	-	5,920
Total	¥ 15,555	¥ 1,544	¥ -	¥ 17,099
<b>Liabilities:</b>				
Derivative contracts:				
Forward foreign exchange contracts	¥ -	¥ 1,431	¥ -	¥ 1,431
Currency swap contracts	-	122	-	122
Commodity forward contracts	-	3	-	3
Total	¥ -	¥ 1,556	¥ -	¥ 1,556

As of September 30, 2018	Yen (Millions)			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Marketable securities (Debt securities):				
Government bonds	¥ 58	¥ -	¥ -	¥ 58
Derivative contracts:				
Forward foreign exchange contracts	-	752	-	752
Currency swap contracts	-	1,715	-	1,715
Interest rate swap contracts	-	305	-	305
Commodity forward contracts	-	107	-	107
Investments (Debt securities):				
Commercial papers	-	111	-	111
Public-utility bonds	0	-	-	0
Investments (Equity securities):				
Manufacturing companies	3,607	-	1,268	4,875
Other	2,412	-	-	2,412
Investments (Mutual funds)	1,331	-	-	1,331
Rabbi trust investments	6,730	-	-	6,730
Total	¥ 14,138	¥ 2,990	¥ 1,268	¥ 18,396
<b>Liabilities:</b>				
Derivative contracts:				
Forward foreign exchange contracts	¥ -	¥ 6,888	¥ -	¥ 6,888
Currency swap contracts	-	1	-	1
Total	¥ -	¥ 6,889	¥ -	¥ 6,889

Level 1 marketable securities and investments are valued using unadjusted quoted prices in active markets in which transactions occur with sufficient frequency and volume. Rabbi trusts investments included in other assets in which a part of the employees' salary is deposited and valued using unadjusted quoted prices in active markets.

Level 2 derivative contracts include forward foreign exchange contracts, currency swap contracts, interest rate swap contracts and commodity forward contracts that are valued based on quotes obtained from counterparties and are verified using observable market inputs, such as foreign currency exchange rates and raw material prices. Investments consist of commercial papers and the fair values thereof are based on third-party assessments using observable market data.

Fair values of Level 3 investments are based on discounted cash flow method.

The changes in the carrying amount of assets measured at fair value on a recurring basis that was classified as level 3 for the six-month ended September 30, 2018 are as follows:

	Yen (Millions)
	Six-month ended September 30, 2018
Opening Balance	¥ -
Reclassification*	1,186
Net income (loss) (Realized or unrealized):	
Other Comprehensive Income(loss)	82
Ending Balance	<u>¥ 1,268</u>

The changes in the carrying amount of assets measured at fair value on a recurring basis that was classified as level 3 for the three-month ended September 30, 2018 are as follows:

	Yen (Millions)
	Three-month ended September 30, 2018
Opening Balance	¥ 1,234
Reclassification*	-
Net income (loss) (Realized or unrealized):	
Other Comprehensive Income(loss)	34
Ending Balance	<u>¥ 1,268</u>

\*As a result of the adoption of ASU2016-01, certain investments (nonmarketable equity securities) were measured at fair value on a recurring basis and classified as Level\_3.

#### Assets and liabilities that are measured at fair value on a nonrecurring basis

Assets and liabilities that are measured at fair value on a nonrecurring basis for the six-month ended September 30, 2017 and 2018 are as follows.

	Yen (Millions)			
	Six-month ended September 30,2017			
	Total gains (losses)	Level 1	Level 2	Level 3
Assets:				
Long-lived assets (Property, plant and equipment)	¥ (25)	-	-	¥ -

	Yen (Millions)			
	Six-month ended September 30,2018			
	Total gains (losses)	Level 1	Level 2	Level 3
Assets:				
Long-lived assets (Property, plant and equipment)	¥ (4,711)	-	-	¥ 135
Long-lived assets (Intangible assets)	(9)	-	-	-

For the six-month ended September 30, 2017, according to discounted cash flow expected from the use of each of the assets, the book value of long-lived assets (property, plant and equipment) of ¥25 million was fully written down due to impairment. As a result of the above, impairment loss of ¥25 million caused by other-than-temporary declines in fair values during the six-month ended September 30, 2017 was included in the consolidated statements of income.

For the six-month ended September 30, 2018, the book value of long-lived assets (property, plant and equipment) of ¥4,846 million was written down to its fair value of ¥135 million. Also the book value of long-lived assets (Intangible assets) of ¥9 million was fully

written down due to impairment. The fair value of these long-lived assets was determined based on the discounted future cash flows expected from the use of each of the assets or real estate appraisal amount by external real estate appraiser etc. These fair values are classified as Level 3 because they were determined using unobservable inputs.

As a result of the above, impairment loss of ¥4,720 million caused by other-than-temporary declines in fair values during the six-month ended September 30, 2018 was included in the consolidated statements of income.

## 9. Goodwill and Other Intangible Assets

The components of acquired intangible assets excluding goodwill as of March 31, 2018 and September 30, 2018 are as follows:

As of March 31, 2018	Yen (Millions)		
	Gross Carrying Amount	Accumulated Amortization	Net Amount
<b>Amortizable intangible assets:</b>			
Patent	¥ 24,185	¥ 9,216	¥ 14,969
Customer relationships	24,328	19,112	5,216
Software	36,727	16,065	20,662
Unpatented technologies	41,789	21,919	19,870
Other	11,267	2,971	8,296
<b>Total</b>	<b>¥ 138,296</b>	<b>¥ 69,283</b>	<b>¥ 69,013</b>
<b>Nonamortizable intangible assets:</b>			
Trademark	¥ 3,452		¥ 3,452
In-process research and development	12,834		12,834
Other	232		232
<b>Total</b>	<b>¥ 16,518</b>		<b>¥ 16,518</b>
<b>As of September 30, 2018</b>	Yen (Millions)		
	Gross Carrying Amount	Accumulated Amortization	Net Amount
<b>Amortizable intangible assets:</b>			
Patent	<b>¥ 21,768</b>	<b>¥ 7,653</b>	<b>¥ 14,115</b>
Customer relationships	<b>24,902</b>	<b>19,867</b>	<b>5,035</b>
Software	<b>38,667</b>	<b>16,518</b>	<b>22,149</b>
Unpatented technologies	<b>44,195</b>	<b>24,748</b>	<b>19,447</b>
Other	<b>12,325</b>	<b>3,365</b>	<b>8,960</b>
<b>Total</b>	<b>¥ 141,857</b>	<b>¥ 72,151</b>	<b>¥ 69,706</b>
<b>Nonamortizable intangible assets:</b>			
Trademark	<b>¥ 3,452</b>		<b>¥ 3,452</b>
In-process research and development	<b>14,534</b>		<b>14,534</b>
Other	<b>232</b>		<b>232</b>
<b>Total</b>	<b>¥ 18,218</b>		<b>¥ 18,218</b>

Intangible assets subject to amortization are amortized using the straight-line method over their estimated useful lives to their estimated residual value of zero. Aggregate amortization expense for the six-month ended September 30, 2018 was ¥5,909 million.

As a result of the completion of the allocation of the acquisition cost of Chirp Microsystems Inc. during the six-month ended September 30, 2018, the carrying amount of goodwill related to the Sensor Application Products segment was modified to ¥2,297 million and the modified amounts for in-process research and development of nonamortizable intangible was ¥770 million.

The detail of the acquisitions is presented in Note 14.



## 10. Equity

The changes in the carrying amount of stockholders' equity, noncontrolling interests and total equity for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

	Yen (Millions)		
	Stockholders' equity	Noncontrolling Interests	Total equity
March 31, 2017	¥ 793,614	¥ 8,504	¥ 802,118
Equity transaction of consolidated subsidiaries and other	(6,488)	(1,976)	(8,464)
Comprehensive income:			
Net income	30,689	358	31,047
Other comprehensive income (loss), net of taxes:			
Foreign currency translation adjustments	14,334	46	14,380
Pension liability adjustments	1,956	0	1,956
Net unrealized gains (losses) on securities	(247)	-	(247)
Total other comprehensive income	16,043	46	16,089
Comprehensive income	46,732	404	47,136
Dividends	(7,572)	(313)	(7,885)
September 30, 2017	¥ 826,286	¥ 6,619	¥ 832,905

	Yen (Millions)		
	Stockholders' equity	Noncontrolling Interests	Total equity
<b>March 31, 2018</b>	<b>¥ 824,634</b>	<b>¥ 6,598</b>	<b>¥ 831,232</b>
Cumulative-effect from adoption of ASU 2014-09 (Note 1)	181	-	181
Cumulative-effect from adoption of ASU 2016-01 (Note 1)	-	-	-
Cumulative-effect from adoption of ASU 2016-16 (Note 1)	(6,374)	-	(6,374)
Equity transaction of consolidated subsidiaries and other	(2,654)	(307)	(2,961)
Comprehensive income:			
Net income	41,076	185	41,261
Other comprehensive income (loss), net of taxes:			
Foreign currency translation adjustments	24,463	(126)	24,337
Pension liability adjustments	2,138	(1)	2,137
Net unrealized gains (losses) on securities	(1)	-	(1)
Total other comprehensive income (loss)	26,600	(127)	26,473
Comprehensive income (loss)	67,676	58	67,734
Dividends	(8,837)	(21)	(8,858)
<b>September 30, 2018</b>	<b>¥ 874,626</b>	<b>¥ 6,328</b>	<b>¥ 880,954</b>

Net income attributable to TDK and transfers (to) from noncontrolling interests for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

	Yen (Millions)	
	Six-month ended	
	September 30,	
	2017	2018
Net income attributable to TDK	¥ 30,689	¥ <b>41,076</b>
Decrease in TDK's additional paid-in capital for purchase of Amperex Technology Ltd.'s common shares from third parties	(6,893)	(2,787)
Increase in TDK's additional paid-in capital for purchase of Tronics Microsystems SA's common shares from third parties	0	-
Decrease in TDK's additional paid-in capital for purchase of Guangdong TDK Rising Rare Earth High Technology Material Co.,Ltd.'s common shares from third parties	-	(27)
Increase in TDK's additional paid-in capital for purchase of SolidGear Corporation's common shares from third parties	-	3
Net transfers (to) from noncontrolling interests	(6,893)	(2,811)
Changes arising from net income attributable to TDK and transfers (to) from noncontrolling interests	¥ 23,796	¥ <b>38,265</b>

## 11. Other Comprehensive Income (Loss)

The changes in the carrying amount of accumulated other comprehensive income (loss) for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

	Yen (Millions)			
	Foreign currency translation adjustments	Pension liability adjustments	Net unrealized gains (losses) on securities	Total
March 31, 2017	¥ (40,789)	¥ (71,421)	¥ 3,635	¥ (108,575)
Equity transaction of consolidated subsidiaries and other	73	-	-	73
Other comprehensive income (loss) before reclassifications	14,380	29	(246)	14,163
Amounts reclassified from accumulated other comprehensive income (loss)	-	1,927	(1)	1,926
Other comprehensive income (loss)	14,380	1,956	(247)	16,089
Other comprehensive income (loss) attributable to noncontrolling interests	46	0	-	46
September 30, 2017	¥ (26,382)	¥ (69,465)	¥ 3,388	¥ (92,459)
	Yen (Millions)			
	Foreign currency translation adjustments	Pension liability adjustments	Net unrealized gains (losses) on securities	Total
<b>March 31, 2018</b>	<b>¥ (53,448)</b>	<b>¥ (69,292)</b>	<b>¥ 3,248</b>	<b>¥ (119,492)</b>
Cumulative-effect from adoption of ASU 2016-01 (Note 1)	-	-	(3,083)	(3,083)
Equity transaction of consolidated subsidiaries and other	10	-	-	10
Other comprehensive income (loss) before reclassifications	23,379	-	(1)	23,378
Amounts reclassified from accumulated other comprehensive income (loss)	958	2,137	-	3,095
Other comprehensive income (loss)	24,337	2,137	(1)	26,473
Other comprehensive income (loss) attributable to noncontrolling interests	(126)	(1)	-	(127)
September 30, 2018	¥ (28,975)	¥ (67,154)	¥ 164	¥ (95,965)

The reclassifications out of accumulated other comprehensive income (loss) for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

For the six-month ended September 30,	Yen (Millions)		Affected line items in consolidated statements of income
	2017	2018	
Foreign currency translation:			
	¥ -	¥ 27	Selling and general administrative expense
	-	(985)	Other - net of other income (deductions)
	-	-	Tax (expense) or benefit
	-	(958)	Net of tax
Pension liability adjustments:			
	(2,156)	(2,459)	Other - net of other income (deductions)*2
	229	322	Tax (expense) or benefit
	(1,927)	(2,137)	Net of tax
Net unrealized gains (losses) on securities:			
	1	-	Other - net of other income (deductions)
	-	-	Tax (expense) or benefit
	1	-	Net of tax
Total amount reclassified, net of tax	¥ (1,926)	¥ (3,095)	

\*1 Amounts in parentheses indicate losses in consolidated statements of income.

\*2 This accumulated other comprehensive income (loss) component is included in the computation of net periodic benefit cost for TDK's employee retirement and severance defined benefit plans that is presented in Note 4.

The reclassifications out of accumulated other comprehensive income (loss) for the three-month ended September 30, 2017 and September 30, 2018 are as follows:

For the three-month ended September 30,	Yen (Millions)		Affected line items in consolidated statements of income
	2017	2018	
Foreign currency translation:	¥ -	¥ (985)	Other - net of other income (deductions)
	-	-	Tax (expense) or benefit
	-	(985)	Net of tax
Pension liability adjustments:	(1,080)	(1,233)	Other - net of other income (deductions)*2
	114	86	Tax (expense) or benefit
	(966)	(1,147)	Net of tax
Net unrealized gains (losses) on securities:	0	-	Other - net of other income (deductions)
	-	-	Tax (expense) or benefit
	0	-	Net of tax
Total amount reclassified, net of tax	¥ (966)	¥ (2,132)	

\*1 Amounts in parentheses indicate losses in consolidated statements of income.

\*2 This accumulated other comprehensive income (loss) component is included in the computation of net periodic benefit cost for TDK's employee retirement and severance defined benefit plans that is presented in Note 4.

Tax effects allocated to each component of other comprehensive income (loss) and reclassification adjustments for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

For the six-month ended September 30, 2017	Yen (Millions)		
	Before tax Amount	Tax (expense) or benefit	Net-of-tax Amount
Foreign currency translation adjustments:			
Gross foreign currency translation adjustments	¥ 12,593	¥ 1,787	¥ 14,380
Amount arising during the period from reclassification adjustment realized from liquidation of foreign entities	-	-	-
Net foreign currency translation adjustments	12,593	1,787	14,380
Pension liability adjustments:			
Amount arising during the period	29	(0)	29
Reclassification adjustments for amortization	2,156	(229)	1,927
Net pension liability adjustments	2,185	(229)	1,956
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during the period	(374)	128	(246)
Reclassification adjustment	(1)	-	(1)
Net unrealized gains (losses)	(375)	128	(247)
Other comprehensive income (loss)	¥ 14,403	¥ 1,686	¥ 16,089

For the six-month ended September 30, 2018	Yen (Millions)		
	Before tax Amount	Tax (expense) or benefit	Net-of-tax Amount
Foreign currency translation adjustments:			
Gross foreign currency translation adjustments	¥ 20,967	¥ 2,412	¥ 23,379
Amount arising during the period from reclassification adjustment realized from liquidation of foreign entities	958	-	958
Net foreign currency translation adjustments	21,925	2,412	24,337
Pension liability adjustments:			
Amount arising during the period	-	-	-
Reclassification adjustments for amortization	2,459	(322)	2,137
Net pension liability adjustments	2,459	(322)	2,137
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during the period	(1)	-	(1)
Reclassification adjustment	-	-	-
Net unrealized gains (losses)	(1)	-	(1)
Other comprehensive income (loss)	¥ 24,383	¥ 2,090	¥ 26,473

Tax effects allocated to each component of other comprehensive income (loss) and reclassification adjustments for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

For the three-month ended September 30, 2017	Yen (Millions)		
	Before tax Amount	Tax (expense) or benefit	Net-of-tax Amount
Foreign currency translation adjustments:			
Gross foreign currency translation adjustments	¥ 10,458	¥ 486	¥ 10,944
Amount arising during the period from reclassification adjustment realized from liquidation of foreign entities	-	-	-
Net foreign currency translation adjustments	10,458	486	10,944
Pension liability adjustments:			
Amount arising during the period	-	-	-
Reclassification adjustments for amortization	1,080	(114)	966
Net pension liability adjustments	1,080	(114)	966
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during the period	66	(9)	57
Reclassification adjustment	0	-	0
Net unrealized gains (losses)	66	(9)	57
Other comprehensive income (loss)	¥ 11,604	¥ 363	¥ 11,967

For the three-month ended September 30, 2018	Yen (Millions)		
	Before tax Amount	Tax (expense) or benefit	Net-of-tax Amount
Foreign currency translation adjustments:			
Gross foreign currency translation adjustments	¥ 14,606	¥ 695	¥ 15,301
Amount arising during the period from reclassification adjustment realized from liquidation of foreign entities	985	-	985
Net foreign currency translation adjustments	15,591	695	16,286
Pension liability adjustments:			
Amount arising during the period	-	-	-
Reclassification adjustments for amortization	1,233	(86)	1,147
Net pension liability adjustments	1,233	(86)	1,147
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during the period	2	-	2
Reclassification adjustment	-	-	-
Net unrealized gains (losses)	2	-	2
Other comprehensive income (loss)	¥ 16,826	¥ 609	¥ 17,435



## 12. Net Income Attributable to TDK per Share

A reconciliation of the numerators and denominators of the basic and diluted net income attributable to TDK per share calculations is as follows:

	Yen (Millions)			
	Six-month ended September 30, 2017		Six-month ended September 30, 2018	
	Basic	Diluted	Basic	Diluted
Net income attributable to TDK	¥ 30,689	¥ 30,689	¥ 41,076	¥ 41,076
	Number of shares (Thousands)			
Weighted average common shares outstanding	126,215	126,215	126,271	126,271
Incremental shares arising from the exercise of stock option	-	305	-	326
Weighted average common shares outstanding – Total	126,215	126,520	126,271	126,597
	Yen			
Per common share:				
Net income attributable to TDK	¥ 243.15	¥ 242.56	¥ 325.30	¥ 324.46
	Yen (Millions)			
	Three-month ended September 30, 2017		Three-month ended September 30, 2018	
	Basic	Diluted	Basic	Diluted
Net income attributable to TDK	¥ 19,734	¥ 19,734	¥ 24,879	¥ 24,879
	Number of shares (Thousands)			
Weighted average common shares outstanding	126,216	126,216	126,271	126,271
Incremental shares arising from the exercise of stock option	-	317	-	299
Weighted average common shares outstanding – Total	126,216	126,533	126,271	126,570
	Yen			
Per common share:				
Net income attributable to TDK	¥ 156.35	¥ 155.96	¥ 197.03	¥ 196.56

For the six-month and the three-month ended September 30, 2017, certain stock options issued by TDK Corporation were excluded from the diluted per share calculation of net income attributable to TDK as the effect would have been antidilutive. The stock options issued by TDK Corporation that are vested when a certain performance condition is achieved were also excluded from the diluted per share calculation of net income attributable to TDK for the six-month and the three-month ended September 30, 2018 as it was not probable that the performance condition would be achieved as of September 30, 2018.

### 13. Impairment of Long-Lived Assets

For the six-month and the three-month ended September 30, 2017, impairment losses of ¥25 million and ¥7 million, respectively, were recorded. For the six-month and the three-month ended September 30, 2018, impairment losses of ¥4,720 million were recorded. These are the result of a reduction of the carrying value of the long-lived assets to the fair value because of a reduction in profitability derived from lower demand.

The impairment losses are mainly included in other operating expense(income) in the consolidated statements of income.

For the six-month and three-month ended September 30, 2017, the impairment loss includes ¥5 million and ¥5 million for the Passive Components segment, ¥20 million and ¥2 million for the Magnetic Application Products segment.

For the six-month and three-month ended September 30, 2018, the impairment loss includes ¥9 million for the Passive Components segment and ¥4,711 million for the Magnetic Application Products segment.

### 14. Acquisition

#### (1) InvenSense, Inc. (“InvenSense”)

On May 18, 2017 (“acquisition date”), TDK acquired 96,253 thousand shares (100% of equity interest) of InvenSense at a cost of ¥142,758 million, which was paid in cash, in accordance with an acquisition agreement dated December 21, 2016. As a result, InvenSense and its subsidiaries became consolidated subsidiaries of TDK Corporation.

The acquisition-related costs of ¥1,263 million were recognized as a part of selling, general and administrative expenses.

InvenSense is headquartered in San Jose, California, U.S.A., and its primary businesses are development, fabless-manufacture and sales of inertial sensors, acceleration sensors, angular velocity sensors, magnetic compasses, voice sensors etc. and control software.

Through the acquisition of InvenSense, TDK will be able to strengthen its product line-ups and technologies, which is expected to enable TDK to become a stronger player in broad based sensor solutions for IoT, automotive and ICT by accelerating the sensor product roadmap to offer innovative next generation products and platforms. In addition, sensor fusion, the combination of various sensor technologies and software, creates products with enhanced added value for customers across multiple fields.

The following table summarizes the fair values of the assets acquired and liabilities assumed at the acquisition date. The purchase price allocation had been completed as of March 31, 2018.

	Yen (millions)
	Fair values
Current assets	38,048
Net property, plant and equipment	4,154
Intangible assets	30,170
Investments in securities and Other assets	654
Total assets	73,026
Current liabilities	27,679
Noncurrent liabilities	2,929
Total liabilities	30,608
Net assets acquired	42,418
Goodwill	100,340
Total	142,758

Other intangible assets acquired mainly include technologies of ¥15,775 million subject to amortization and in process research and development of ¥12,915 million not subject to amortization. TDK had estimated the amortization period for technologies to be 8

years. Goodwill recognized of ¥100,340 million was attributable primarily to expected synergies from combining operations of InvenSense and TDK. The goodwill is not deductible for tax purpose.

Although TDK included the results of operations of InvenSense subsequent to the acquisition date in its consolidated financial statements, the results were not material. The effect of the acquisition to net sales and net income attributable to TDK for the six-month ended September 30, 2017 as though the acquisition had occurred at the beginning of the year ended March 31, 2018 was also not material.

## (2) Chirp Microsystems Inc. (“Chirp”)

On February 28, 2018 (“acquisition date”), TDK acquired 29,368 thousand shares (100 percent of equity interest) of Chirp at a cost of ¥3,015 million, which was paid in cash in accordance with a share acquisition agreement. As a result, Chirp became a consolidated subsidiary of TDK Corporation.

Chirp is headquartered in California, U.S.A., and its primary businesses are development, design and supply of high-performance ultrasonic 3D-sensing solutions. Through the acquisition of Chirp, TDK plans to further accelerate TDK’s sensor and actuator business.

The following table summarizes the fair values of the assets acquired and liabilities assumed at the acquisition date. The purchase price allocation had been completed as of the date on which the quarterly report for 2nd quarter of 123rd term was issued.

	Yen (millions)
	Fair values
Current assets	200
Net property, plant and equipment and Intangible assets	774
Other assets	218
Total assets	1,192
Current liabilities	258
Noncurrent liabilities	216
Total liabilities	474
Net assets acquired	718
Goodwill	2,297
Total	3,015

Intangible assets acquired mainly include in-process research and development of ¥ 770 million which is not subject to amortization. Goodwill recognized of ¥2,297 million was attributable primarily to expected synergies from combining operations of Chirp and TDK. The goodwill is not deductible for tax purpose.

Although TDK included the results of operations of Chirp subsequent to the acquisition date in its consolidated financial statements, the results were not material. The effect of the acquisition to net sales and net income attributable to TDK for the six-month ended September 30, 2017 as though the acquisition had occurred at the beginning of the year ended March 31, 2018 was also not material.

## **15. Sale of Business**

On February 3, 2017, TDK transferred its high-frequency devices business to RF360 Holdings Singapore PTE. Ltd. (“RF360”) and its subsidiaries, and subsequently sold 51% of the common shares of RF360 held by EPCOS AG, a wholly owned subsidiary of TDK, to Qualcomm Global Trading PTE. Ltd. (“QGT”), which is a 100% indirect ownership subsidiary of Qualcomm Incorporated (“Qualcomm”) based on the business alliance agreement involving establishment of a joint venture concluded with Qualcomm on January 13, 2016. An option to put and call the remaining common shares (49%) of RF360 after 30 months after the closing date is held by TDK and QGT, respectively. Contingent consideration to be recognized over several years is included in the total consideration amount, of which realized or realizable portion is recognized in other operating expense (income) of consolidated statement of income for the six-month ended September 30, 2018. The remaining common shares (49%) of RF360 Holdings is recognized in consolidated balance sheet as investments in affiliates.

## 16. Revenue

TDK disaggregates revenue by industry segment, product and geographic segment based on contracts with customers. The following table presents disaggregation of revenue. Detailed information of geographic segment is presented in Note 17. TDK adopted ASU 2014-09 “Revenue from Contracts with Customers” by applying the modified retrospective method to recognize a cumulative-effect adjustment to the opening retained earnings and all contracts are in scope. Therefore, the figures for the six-month and the three-month ended September 30, 2017 are not restated.

	Yen (millions)					
	Six-month ended					
	September 30, 2017					
	Japan	Americas	Europe	China	Asia and others	Total
Capacitors	¥ 7,240	¥ 12,444	¥ 20,147	¥ 23,882	¥ 11,745	¥ 75,458
Inductive Devices	10,025	9,169	21,939	27,474	9,480	78,087
Other Passive Components	5,745	2,790	13,528	20,446	6,488	48,997
Passive Components	23,010	24,403	55,614	71,802	27,713	202,542
Sensor Application Products	6,031	3,012	10,304	14,945	2,187	36,479
Magnetic Application Products	10,971	6,784	5,661	61,357	53,381	138,154
Energy Application Products	9,364	14,139	5,774	171,386	16,821	217,484
Other	4,723	4,677	878	14,550	4,084	28,912
Net Sales Total	¥ 54,099	¥ 53,015	¥ 78,231	¥ 334,040	¥ 104,186	¥ 623,571
	Six-month ended					
	September 30, 2018					
	Japan	Americas	Europe	China	Asia and others	Total
Capacitors	¥ 8,042	¥ 14,848	¥ 23,551	¥ 28,951	¥ 12,952	¥ 88,344
Inductive Devices	10,006	9,608	23,523	29,755	10,046	82,938
Other Passive Components	5,619	3,218	15,038	23,056	6,609	53,540
Passive Components	23,667	27,674	62,112	81,762	29,607	224,822
Sensor Application Products	7,217	4,103	11,348	13,510	3,299	39,477
Magnetic Application Products	9,563	6,107	4,671	50,893	74,632	145,866
Energy Application Products	10,284	14,643	6,580	233,594	15,247	280,348
Other	5,485	4,351	1,057	18,804	1,730	31,427
Net Sales Total	¥ 56,216	¥ 56,878	¥ 85,768	¥ 398,563	¥ 124,515	¥ 721,940

Yen (millions)						
Three-month ended September 30, 2017						
	Japan	Americas	Europe	China	Asia and others	Total
Capacitors	¥ 3,674	¥ 6,481	¥ 10,378	¥ 12,745	¥ 5,900	¥ 39,178
Inductive Devices	5,000	4,596	11,210	14,816	4,862	40,484
Other Passive Components	2,862	1,451	7,113	11,657	3,077	26,160
Passive Components	11,536	12,528	28,071	39,218	13,839	105,822
Sensor Application Products	3,229	1,617	5,405	8,669	1,242	20,162
Magnetic Application Products	5,930	3,234	3,172	32,782	26,655	71,773
Energy Application Products	2,345	9,226	2,931	99,990	7,676	122,168
Other	2,526	2,161	438	6,939	2,056	14,120
Net Sales Total	¥ 25,566	¥ 28,766	¥ 40,647	¥ 187,598	¥ 51,468	¥ 334,045
Three-month ended September 30, 2018						
	Japan	Americas	Europe	China	Asia and others	Total
Capacitors	¥ 4,099	¥ 7,309	¥ 11,278	¥ 14,687	¥ 6,510	¥ 43,883
Inductive Devices	4,979	4,741	11,496	15,338	5,072	41,626
Other Passive Components	2,813	1,543	7,331	11,763	3,141	26,591
Passive Components	11,891	13,593	30,105	41,788	14,723	112,100
Sensor Application Products	3,952	2,138	5,562	6,844	2,112	20,608
Magnetic Application Products	4,519	2,522	2,303	22,420	43,626	75,390
Energy Application Products	4,855	7,967	3,391	129,074	9,474	154,761
Other	2,822	2,300	681	9,531	679	16,013
Net Sales Total	¥ 28,039	¥ 28,520	¥ 42,042	¥ 209,657	¥ 70,614	¥ 378,872

TDK sells passive components, sensor application products, magnetic application products and energy application products to global ICT related companies, manufacturers of automobile and automotive components, manufacturers of home electrical appliances and industrial equipment. For those product sales, TDK recognizes revenue when products are transferred to the customers as the customers will gain control over the products and performance obligation is satisfied accordingly.

Transaction price that TDK receives in exchange for products transferred may include variable consideration such as sales discounts, customer privileges, and rebates based on sales volume. Variable consideration is included in the transaction price when uncertainty over the variable consideration is resolved to the extent that a significant reversal in the amount of revenue is not expected. Variable consideration is estimated based on past trend or other elements which are already known as of the transaction date, and is updated on a regular basis.

For products sales based on each contract, TDK recognized the consideration received from customers for which the performance obligation to transfer goods or services has not been satisfied as advance receipt. Amounts of advance received as of March 31, 2018 and September 30, 2018 were ¥1,307 million and ¥1,380 million, respectively, and included in other current liabilities in the balance sheets. Out of the advance received as of March 31,

2018, ¥865 million was recognized as revenue in the statements for the six-month ended September 30, 2018, and ¥0 million was recognized as revenue in the statements for the three-month ended September 30, 2018. The amounts of revenue recognized from performance obligations for the six-month and the three-month ended September 30, 2018 that had been satisfied in previous periods were not material.

There are no unsatisfied or partially unsatisfied performance obligations as of September 30, 2018. Furthermore, there is no balance of contract assets as of September 30, 2018.

## 17. Segment Information

### Business Segment Information

Operating segments are components of TDK for which discrete financial information is available and whose operating results are regularly reviewed by management to make decisions about resources to be allocated to the segment and assess its performance.

Multiple operating segments that have similarities, including type and nature of products, production process, market and so on, are aggregated into the Passive Components segment, the Sensor Application Products segment, the Magnetic Application Products segment and the Energy Application Products segment. Operating segments which are not reportable segments are included in Other.

In addition, TDK newly established Energy Solution Business Company on April 1, 2018, and established the Energy Application Products segment from the three-month ended September 30, 2018 in accordance with the change in the management category of certain businesses. Energy Devices (Rechargeable Batteries) of the Film Application Products segment, Power Supplies of the Magnetic Application Products segment and certain products of Other were reclassified into newly established reporting segment of the Energy Application Products from the three-month ended September 30, 2018.

Furthermore, in accordance with the reorganization for the three-month ended September 30, 2018, certain products of the Passive Components segment were reclassified into Other, certain products of Other were reclassified into the Passive Components segment and certain products of the Sensor Application Products were reclassified into Other.

In accordance with the above, the prior year's figures are also reclassified to conform to the new segmentation.

Principal businesses of each segment are as follows:

Segment	Principal businesses
Passive Components	Ceramic Capacitors, Aluminum Electrolytic Capacitors, Film Capacitors, Inductive Devices (Coils/Ferrite Cores/Transformers), High-Frequency Devices, Piezoelectric Material Products, Circuit Protection Components
Sensor Application Products	Temperature and Pressure Sensors, Magnetic Sensors, MEMS Sensors
Magnetic Application Products	HDD Heads, HDD Suspension Assemblies, Magnets
Energy Application Products	Energy Devices (Rechargeable Batteries), Power Supplies
Other	Mechatronics (Production Equipment), Others

Intersegment transactions in operating segments are based on arm's-length prices.

The business segment information for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

**Net sales**

	Yen (Millions)	
	Six-month ended September 30,	
	2017	2018
Passive Components:		
External customers	¥ 202,542	¥ 224,822
Intersegment	2,034	1,692
	<u>204,576</u>	<u>226,514</u>
Sensor Application Products:		
External customers	36,479	39,477
Intersegment	57	40
	<u>36,536</u>	<u>39,517</u>
Magnetic Application Products:		
External customers	138,154	145,866
Intersegment	94	37
	<u>138,248</u>	<u>145,903</u>
Energy Application Products:		
External customers	217,484	280,348
Intersegment	2	7
	<u>217,486</u>	<u>280,355</u>
Other:		
External customers	28,912	31,427
Intersegment	17,775	14,637
	<u>46,687</u>	<u>46,064</u>
Intersegment eliminations	(19,962)	(16,413)
Total	<u>¥ 623,571</u>	<u>¥ 721,940</u>

**Segment profit (loss)**

	Yen (Millions)	
	Six-month ended September 30,	
	2017	2018
Passive Components	¥ 23,110	¥ 30,401
Sensor Application Products	(10,318)	(9,504)
Magnetic Application Products	8,693	4,407
Energy Application Products	35,054	54,348
Other	1,257	(2,756)
Sub total	<u>57,796</u>	<u>76,896</u>
Corporate and eliminations	(13,582)	(14,716)
Operating income	44,214	62,180
Other income (deductions), net	40	(4,381)
Income before income taxes	<u>¥ 44,254</u>	<u>¥ 57,799</u>



The business segment information for the three-month ended September 30, 2017 and September 30, 2018 are as follows:

**Net sales**

	Yen (Millions)	
	Three-month ended September 30,	
	2017	2018
Passive Components:		
External customers	¥ 105,822	¥ 112,100
Intersegment	1,163	891
	<u>106,985</u>	<u>112,991</u>
Sensor Application Products:		
External customers	20,162	20,608
Intersegment	9	7
	<u>20,171</u>	<u>20,615</u>
Magnetic Application Products:		
External customers	71,773	75,390
Intersegment	25	14
	<u>71,798</u>	<u>75,404</u>
Energy Application Products:		
External customers	122,168	154,761
Intersegment	-	-
	<u>122,168</u>	<u>154,761</u>
Other:		
External customers	14,120	16,013
Intersegment	10,451	7,826
	<u>24,571</u>	<u>23,839</u>
Intersegment eliminations	(11,648)	(8,738)
Total	<u>¥ 334,045</u>	<u>¥ 378,872</u>

**Segment profit (loss)**

	Yen (Millions)	
	Three-month ended September 30,	
	2017	2018
Passive Components	¥ 12,827	¥ 16,379
Sensor Application Products	(5,844)	(4,563)
Magnetic Application Products	5,001	939
Energy Application Products	21,602	33,323
Other	(175)	(1,716)
Sub total	<u>33,411</u>	<u>44,362</u>
Corporate and eliminations	(5,799)	(7,602)
Operating income	<u>27,612</u>	<u>36,760</u>
Other income (deductions), net	(294)	(2,696)
Income before income taxes	<u>¥ 27,318</u>	<u>¥ 34,064</u>

Segment profit (loss) consists of net sales less cost of sales, selling, general and administrative expenses and other operating expense (income) except for those attribute to Corporate.

Corporate mainly includes expenses associated with head office functions that are not allocated to operating segments.

## Geographic Segment Information

The geographic segment information for the six-month ended September 30, 2017 and September 30, 2018 are as follows:

### Net sales

	Yen (Millions)	
	Six-month ended September 30,	
	2017	2018
Japan	¥ 54,099	¥ 56,216
Americas	53,015	56,878
Europe	78,231	85,768
China	334,040	398,563
Asia and others	104,186	124,515
Total	¥ 623,571	¥ 721,940

The geographic segment information for the three-month ended September 30, 2017 and September 30, 2018 are as follows:

### Net sales

	Yen (Millions)	
	Three-month ended September 30,	
	2017	2018
Japan	¥ 25,566	¥ 28,039
Americas	28,766	28,520
Europe	40,647	42,042
China	187,598	209,657
Asia and others	51,468	70,614
Total	¥ 334,045	¥ 378,872

Net sales are based on the location of the customers.

Major countries in each geographic area:

- (1) Americas ..... United States of America
- (2) Europe ..... Germany
- (3) Asia and others ..... Thailand, Philippines, India, Korea