



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

On August 10, 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.]

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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)

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1) Consolidated balance sheets (Unaudited)

ASSETS	Yen (Millions)	
	March 31, 2018	June 30, 2018
Current assets:		
Cash and cash equivalents	¥ 279,624	¥ 251,377
Short-term investments	43,613	30,713
Marketable securities (Note 2 and 7)	54	56
Net trade receivables (Note 1)	304,016	345,888
Inventories (Note 1 and 3)	207,532	227,907
Other current assets (Note 1 and 6)	65,097	72,774
Total current assets	899,936	928,715
Investments in affiliates (Note 2)	143,589	149,075
Other investments in securities (Note 2 and 7)	11,651	10,158
Net property, plant and equipment	545,641	572,937
Goodwill (Note 9)	157,858	164,011
Intangible assets (Note 9)	85,531	86,587
Other assets (Note 1, 6 and 7)	61,003	58,131
Total assets	¥ 1,905,209	¥ 1,969,614

See accompanying notes to consolidated financial statements.

	Yen (Millions)	
LIABILITIES AND EQUITY	March 31, 2018	June 30, 2018
Current liabilities:		
Short-term debt	¥ 124,573	¥ 168,831
Current installments of long-term debt (Note 7)	64,566	55,382
Trade payables	226,791	227,440
Accrued expenses	159,618	165,093
Other current liabilities (Note 6)	27,489	36,863
Total current liabilities	<u>603,037</u>	<u>653,609</u>
Long-term debt, excluding current installments (Note 7)	293,880	297,656
Retirement and severance benefits	125,137	122,993
Other noncurrent liabilities (Note 6)	51,923	53,560
Total noncurrent liabilities	<u>470,940</u>	<u>474,209</u>
Total liabilities	<u>1,073,977</u>	<u>1,127,818</u>
TDK stockholders' equity:		
Common stock		
Authorized 480,000,000 shares;		
issued 129,590,659 shares at March 31, 2018 and June 30, 2018		
outstanding 126,245,079 shares at March 31, 2018 and		
126,259,129 shares at June 30, 2018	32,641	32,641
Additional paid-in capital	8,738	8,678
Legal reserve	45,366	45,781
Retained earnings (Note 1)	874,563	878,398
Accumulated other comprehensive income (loss) (Notes 1, 10 and 11)	(119,492)	(113,490)
Treasury stock at cost;		
3,345,580 shares at March 31, 2018 and 3,331,530 shares		
at June 30, 2018	(17,182)	(17,110)
Total TDK stockholders' equity	<u>824,634</u>	<u>834,898</u>
Noncontrolling interests (Notes 10 and 11)	6,598	6,898
Total equity	<u>831,232</u>	<u>841,796</u>
Total liabilities and equity	<u>¥ 1,905,209</u>	<u>¥ 1,969,614</u>

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

For the Three-month ended June 30, 2017 and 2018

Consolidated statements of income

	Yen (Millions)	
	Three-month ended June 30, 2017	Three-month ended June 30, 2018
Net sales (Note 15)	¥ 289,526	¥ 343,068
Cost of sales (Note 1, 4 and 6)	212,820	248,270
Gross profit	76,706	94,798
Selling, general and administrative expenses (Note 1 and 4)	61,826	70,341
Other operating expense (income) (Note 1)	(1,722)	(963)
Operating income	16,602	25,420
Other income (deductions):		
Interest and dividend income	1,367	1,910
Interest expense	(946)	(1,118)
Foreign exchange gain (loss) (Note 6)	(407)	(953)
Other - net (Note 1, 4 and 6)	320	(1,524)
Total other income (deductions)	334	(1,685)
Income before income taxes	16,936	23,735
Income taxes (Note 1)	5,762	7,437
Net income	11,174	16,298
Less: Net income attributable to noncontrolling interests	219	101
Net income attributable to TDK	¥ 10,955	¥ 16,197

Amounts per share:

	Yen	
	Three-month ended June 30, 2017	Three-month ended June 30, 2018
Net income attributable to TDK (Note 12):		
Basic	¥ 86.80	¥ 128.29
Diluted	86.61	127.94
Cash dividends paid during the period	¥ 60.00	¥ 70.00

Consolidated statements of comprehensive income

	Yen (Millions)	
	Three-month ended June 30, 2017	Three-month ended June 30, 2018
Net income	¥ 11,174	¥ 16,298
Other comprehensive income (loss), net of taxes		
Foreign currencies translation adjustments	3,436	8,051
Pension liability adjustments	990	990
Net unrealized gains (losses) on securities	(304)	(3)
Total other comprehensive income (loss) (Note 11):	4,122	9,038
Comprehensive income (Note 10)	15,296	25,336
Comprehensive income attributable to noncontrolling interests	230	58
Comprehensive income attributable to TDK	¥ 15,066	¥ 25,278

See accompanying notes to consolidated financial statements.

3) Consolidated statements of cash flows (Unaudited)

	Yen (Millions)	
	Three-month ended June 30, 2017	Three-month ended June 30, 2018
Cash flows from operating activities:		
Net income	¥ 11,174	¥ 16,298
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation and amortization	20,551	25,472
Changes in assets and liabilities:		
Decrease (increase) in trade receivables	(29,623)	(33,605)
Decrease (increase) in inventories	(23,105)	(18,639)
Increase (decrease) in trade payables	19,708	(4,730)
Increase (decrease) in accrued expenses	(5,470)	(10,817)
Decrease (increase) in other assets and liabilities, net	(8,587)	(7,002)
Other - net	(4,291)	(3,261)
Net cash used in operating activities	<u>(19,643)</u>	<u>(36,284)</u>
Cash flows from investing activities:		
Capital expenditures	(42,925)	(42,287)
Proceeds from sales of tangible and intangible assets	5,757	364
Proceeds from sale and maturity of short-term investments	29,982	41,201
Payment for purchase of short-term investments	(50,491)	(27,202)
Proceeds from sale and maturity of securities	20,375	222
Payment for purchase of securities	(70)	(66)
Proceeds from sale of business, net of cash transferred	-	6,622
Acquisition of subsidiaries, net of cash acquired	(138,847)	(1,502)
Other - net	(46)	(846)
Net cash used in investing activities	<u>(176,265)</u>	<u>(23,494)</u>
Cash flows from financing activities:		
Proceeds from debt with maturities longer than three months	66,806	1,366
Repayment of debt with maturities longer than three months	(300)	(10,214)
Net increase (decrease) in debt with maturities of three months or less	109,228	43,791
Dividends paid	(7,425)	(8,713)
Other - net	38	(210)
Net cash provided by financing activities	<u>168,347</u>	<u>26,020</u>
Effect of exchange rate changes on cash and cash equivalents	2,303	5,511
Net decrease in cash and cash equivalents	<u>(25,258)</u>	<u>(28,247)</u>
Cash and cash equivalents at beginning of period	330,388	279,624
Cash and cash equivalents at end of period	<u>¥ 305,130</u>	<u>¥ 251,377</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 ¥684 million, ¥246 million, and ¥48 million, respectively, in statements of income for the three-month ended June 30, 2018. Furthermore, net trade receivables and deferred tax assets increased by ¥2,160 million and ¥90 million, respectively in the balance sheets as of June 30, 2018. On the other hand, inventories and other current assets decreased by ¥1,508 million and ¥167 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 15.

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, ¥466 million from cost of sales, ¥498 million from selling, general and administrative expenses were reclassified to other income (deductions) in the consolidated statement of income for the three-month ended June 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 three-month ended June 30, 2017 and 2018 are as follows:

	Yen (Millions)	
	Three-month ended June 30, 2017	Three-month ended June 30, 2018
Gain on sale of business (Note 14)	¥ (1,740)	¥ (963)
Impairment of long-lived assets	18	-
Other operating expense (income) total	¥ (1,722)	¥ (963)

(e) Subsequent Events

TDK has evaluated the subsequent events through August 9, 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 three-month ended June 30, 2018.

2. Marketable Securities and Investments in Securities

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

	Yen (Millions)	
	March 31, 2018	June 30, 2018
Marketable securities		
Debt securities	¥ 54	¥ 56
Total Marketable securities	54	56
Investments in affiliates	143,589	149,075
Other investments in securities:		
Debt securities	109	111
Marketable equity securities	9,581	8,092
Nonmarketable equity securities	1,961	1,955
Total other investments in securities	11,651	10,158
Total	¥ 155,294	¥ 159,289

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

As of March 31, 2018	Yen (Millions)			
	Cost	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Fair Value
Marketable securities:				
Government bonds	¥ 54	¥ -	¥ 0	¥ 54
Investments:				
Commercial papers	7	102	-	109
Public-utility bonds	0	-	-	0
Total	¥ 61	¥ 102	¥ 0	¥ 163
As of June 30, 2018	Yen (Millions)			
	Cost	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Fair Value
Marketable securities (Debt securities):				
Government bonds	¥ 56	¥ 0	¥ -	¥ 56
Investments (Debt securities):				
Commercial papers	9	102	-	111
Public-utility bonds	0	-	-	0
Total	¥ 65	¥ 102	¥ -	¥ 167

The proceeds from sale and maturity of debt securities classified as available-for-sale securities were ¥18,530 million and ¥3 million for the three-month ended June 30, 2017 and 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 June 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 readily determinable fair values based on a practical expedient by estimating the fair value at cost minus impairment, and plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar equity securities of the same issuer. The book value of such investments amounted to ¥721 million as of June 30, 2018. TDK did not record an impairment or other adjustments for the three-month ended June 30, 2018.

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

	Yen (Millions)
	June 30, 2018
Unrealized gains and losses recognized during the period on equity securities held as of June 30, 2018	¥ (1,473)
Net gains and losses recognized on equity securities sold during the period	99
Net gains and losses recognized during the period on equity securities	¥ (1,374)

3. Inventories

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

	Yen (Millions)	
	March 31, 2018	June 30, 2018
Finished goods	¥ 77,486	¥ 82,746
Work in process	51,159	57,604
Raw materials	78,887	87,557
Total	¥ 207,532	¥ 227,907

4. Cost for Retirement and Severance Benefits

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

	Yen (Millions)	
	Three-month ended June 30, 2017	Three-month ended June 30, 2018
Service cost-benefits earned during the period	¥ 2,041	¥ 2,129
Interest cost on projected benefit obligation	923	877
Expected return on plan assets	(1,032)	(1,166)
Amortization of actuarial loss	1,427	1,316
Amortization of prior service cost (benefit)	(354)	(92)
Net periodic benefit cost	¥ 3,005	¥ 3,064

Service cost of ¥2,041 and ¥2,129 million is included in cost of sales and sales and general administrative expense for the three-month ended June 30, 2017 and June 30, 2018, respectively. Other components excluding the service cost of ¥964 million and ¥935 million are included in other - net of other income (deductions) for the three-month ended June 30, 2017 and June 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 June 30, 2018, are as follows:

	Yen (Millions)	
	March 31, 2018	June 30, 2018
Guarantees to third parties on bank loans of employees	¥ 769	¥ 712

As of June 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 three-month ended June 30, 2017 and June 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 June 30, 2017	Three-month ended June 30, 2018
Forward foreign exchange contracts	¥ (498)	¥ (2,628)
Borrowings in local currency	858	(2,580)
Total	¥ 360	¥ (5,208)

(2) Derivatives not designated as hedging instruments

		Yen (Millions)	
		Three-month ended June 30, 2017	Three-month ended June 30, 2018
Forward foreign exchange contracts	Foreign exchange gain (loss)	¥ 1,737	¥ (3,238)
Nondeliverable forward contracts (NDF)	Foreign exchange gain (loss)	(160)	-
Currency swap contracts	Foreign exchange gain (loss)	(137)	669
Interest rate swap contracts	Other income (deductions)-Other-net	(178)	27
Currency option contracts	Foreign exchange gain (loss)	17	(114)
Commodity forward contracts	Cost of sales	(6)	38
Total		¥ 1,273	¥ (2,618)

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

Yen (Millions)					
March 31, 2018					
Derivatives 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	¥ 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)					
June 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	¥ 136,675	¥ 1,540	Other current assets	¥ 4,992	Other current liabilities
Borrowings in local currency	66,324	-	-	-	-
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	¥ 109,394	¥ 126	Other current assets	¥ 2,423	Other current liabilities
Currency swap contracts	20,828	77 1,156	Other current assets Other assets	7 -	Other current liabilities -
Interest rate swap contracts	33,162	320	Other assets	-	-
Commodity forward contracts	394	25	Other current 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 June 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 June 30, 2018	Yen (Millions)	
	Carrying amount	Estimated fair value
Assets:		
Marketable securities	¥ 56	¥56
Other investments in securities and other assets	25,491	25,491
Liability:		
Long-term debt, including current portion (excluding lease obligation)	(347,308)	(345,883)

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 June 30, 2018 are as follows:

As of March 31, 2018	Yen (Millions)			Total
	Level 1	Level 2	Level 3	
Assets:				
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
Liabilities:				
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 June 30, 2018	Yen (Millions)			
	Level 1	Level 2	Level 3	Total
Assets:				
Marketable securities (Debt securities):				
Government bonds	¥ 56	¥ -	¥ -	¥ 56
Derivative contracts:				
Forward foreign exchange contracts	-	1,666	-	1,666
Currency swap contracts	-	1,233	-	1,233
Interest rate swap contracts	-	320	-	320
Commodity forward contracts	-	25	-	25
Investments (Debt securities):				
Commercial papers	-	111	-	111
Public-utility bonds	0	-	-	0
Investments (Equity securities):				
Manufacturing companies	4,417	-	1,234	5,651
Other	2,499	-	-	2,499
Investments (Mutual funds)	1,176	-	-	1,176
Rabbi trust investments	6,450	-	-	6,450
Total	¥ 14,598	¥ 3,355	¥ 1,234	¥ 19,187
Liabilities:				
Derivative contracts:				
Forward foreign exchange contracts	¥ -	¥ 7,415	¥ -	¥ 7,415
Currency swap contracts	-	7	-	7
Total	¥ -	¥ 7,422	¥ -	¥ 7,422

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, Non-deliverable forward contracts (NDF), 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 value of Level 3 investments are determined 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 as of June 30, 2018 are as follows:

	Yen (Millions)
	June 30, 2018
Opening Balance	¥ -
Reclassification*	1,186
Net income (loss) (Realized or unrealized):	
Other Comprehensive Income(loss)	48
Ending Balance	¥ 1,234

*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.

9. Goodwill and Other Intangible Assets

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

As of March 31, 2018	Yen (Millions)		Net Amount
	Gross Carrying Amount	Accumulated Amortization	
Amortizable intangible assets:			
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
Total	¥ 138,296	¥ 69,283	¥ 69,013
Nonamortizable intangible assets:			
Trademark	¥ 3,452		¥ 3,452
In-process research and development	12,834		12,834
Other	232		232
Total	¥ 16,518		¥ 16,518
As of June 30, 2018	Yen (Millions)		Net Amount
	Gross Carrying Amount	Accumulated Amortization	
Amortizable intangible assets:			
Patent	¥ 21,515	¥ 6,931	¥ 14,584
Customer relationships	24,498	19,253	5,245
Software	36,794	15,495	21,299
Unpatented technologies	42,650	23,084	19,566
Other	11,201	3,138	8,063
Total	¥ 136,658	¥ 67,901	¥ 68,757
Nonamortizable intangible assets:			
Trademark	¥ 3,452		¥ 3,452
In-process research and development	14,146		14,146
Other	232		232
Total	¥ 17,830		¥ 17,830

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 three-month ended June 30, 2018 was ¥2,924 million.

In connection with the completion of the purchase price allocation of Chirp Microsystems Inc. during the three-month ended June 30, 2018, the amount of goodwill related to the Sensor Application Products segment was ¥2,297 million and the amounts for in-process research and development of nonamortizable intangible were ¥770 million.

The detail of the acquisitions is presented in Note 13.

10. Equity

The changes in the carrying amount of stockholders' equity, noncontrolling interests and total equity for the three-month ended June 30, 2017 and June 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	89	(0)	89
Comprehensive income:			
Net income	10,955	219	11,174
Other comprehensive income (loss), net of taxes:			
Foreign currency translation adjustments	3,425	11	3,436
Pension liability adjustments	990	0	990
Net unrealized gains (losses) on securities	(304)	-	(304)
Total other comprehensive income	4,111	11	4,122
Comprehensive income	15,066	230	15,296
Dividends	(7,572)	(79)	(7,651)
June 30, 2017	¥ 801,197	¥ 8,655	¥ 809,852

	Yen (Millions)		
	Stockholders' equity	Noncontrolling Interests	Total equity
March 31, 2018	¥ 824,634	¥ 6,598	¥ 831,232
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	16	250	266
Comprehensive income:			
Net income	16,197	101	16,298
Other comprehensive income (loss), net of taxes:			
Foreign currency translation adjustments	8,093	(42)	8,051
Pension liability adjustments	991	(1)	990
Net unrealized gains (losses) on securities	(3)	-	(3)
Total other comprehensive income (loss)	9,081	(43)	9,038
Comprehensive income (loss)	25,278	58	25,336
Dividends	(8,837)	(8)	(8,845)
June 30, 2018	¥ 834,898	¥ 6,898	¥ 841,796

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

	Yen (Millions)	
	Three-month ended June 30,	
	2017	2018
Net income attributable to TDK	¥ 10,955	¥ 16,197
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	-	(24)
Changes arising from net income attributable to TDK and transfers (to) from noncontrolling interests	¥ 10,955	¥ 16,173

11. Other Comprehensive Income (Loss)

The changes in the carrying amount of accumulated other comprehensive income (loss) for the three-month ended June 30, 2017 and June 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	-	-	-	-
Other comprehensive income (loss) before reclassifications	3,436	29	(303)	3,162
Amounts reclassified from accumulated other comprehensive income (loss)	-	961	(1)	960
Other comprehensive income (loss)	3,436	990	(304)	4,122
Other comprehensive income (loss) attributable to noncontrolling interests	11	0	-	11
June 30, 2017	¥ (37,364)	¥ (70,431)	¥ 3,331	¥ (104,464)

	Yen (Millions)			
	Foreign currency translation adjustments	Pension liability adjustments	Net unrealized gains (losses) on securities	Total
March 31, 2018	¥ (53,448)	¥ (69,292)	¥ 3,248	¥ (119,492)
Cumulative-effect from adoption of ASU 2016-01 (Note 1)	-	-	(3,083)	(3,083)
Equity transaction of consolidated subsidiaries and other	4	-	-	4
Other comprehensive income (loss) before reclassifications	8,078	-	(3)	8,075
Amounts reclassified from accumulated other comprehensive income (loss)	(27)	990	-	963
Other comprehensive income (loss)	8,051	990	(3)	9,038
Other comprehensive income (loss) attributable to noncontrolling interests	(42)	(1)	-	(43)
June 30, 2018	¥ (45,351)	¥ (68,301)	¥ 162	¥ (113,490)

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

For the three-month ended June 30,	Amount reclassified from accumulated other comprehensive income (loss) *1		Affected line items in consolidated statements of income
	2017	2018	
Foreign currency translation:			
	¥ -	¥ 27	Selling and general administrative expense
	-	-	Tax (expense) or benefit
	-	27	Net of tax
Pension liability adjustments:			
	¥ (1,076)	¥ (1,226)	Other - net of other income (deductions)*2
	115	236	Tax (expense) or benefit
	(961)	(990)	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	¥ (960)	¥ (963)	

*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 three-month ended June 30, 2017 and June 30, 2018 are as follows:

For the three-month ended June 30, 2017	Yen (Millions)		
	Before tax Amount	Tax (expense) or benefit	Net-of-tax Amount
Foreign currency translation adjustments:			
Gross foreign currency translation adjustments	¥ 2,135	¥ 1,301	¥ 3,436
Amount arising during the period from reclassification adjustment realized from liquidation of foreign entities	-	-	-
Net foreign currency translation adjustments	2,135	1,301	3,436
Pension liability adjustments:			
Amount arising during the period	29	(0)	29
Reclassification adjustments for amortization	1,076	(115)	961
Net pension liability adjustments	1,105	(115)	990
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during the period	(440)	137	(303)
Reclassification adjustment	(1)	-	(1)
Net unrealized gains (losses)	(441)	137	(304)
Other comprehensive income (loss)	¥ 2,799	¥ 1,323	¥ 4,122

For the three-month ended June 30, 2018	Yen (Millions)		
	Before tax Amount	Tax (expense) or benefit	Net-of-tax Amount
Foreign currency translation adjustments:			
Gross foreign currency translation adjustments	¥ 6,361	¥ 1,717	¥ 8,078
Amount arising during the period from reclassification adjustment realized from liquidation of foreign entities	(27)	-	(27)
Net foreign currency translation adjustments	6,334	1,717	8,051
Pension liability adjustments:			
Amount arising during the period	-	-	-
Reclassification adjustments for amortization	1,226	(236)	990
Net pension liability adjustments	1,226	(236)	990
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during the period	(3)	-	(3)
Reclassification adjustment	-	-	-
Net unrealized gains (losses)	(3)	-	(3)
Other comprehensive income (loss)	¥ 7,557	¥ 1,481	¥ 9,038

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)			
	Three-month ended June 30, 2017		Three-month ended June 30, 2018	
	Basic	Diluted	Basic	Diluted
Net income attributable to TDK	¥ 10,955	¥ 10,955	¥ 16,197	¥ 16,197
	Number of shares (Thousands)			
Weighted average common shares outstanding	126,203	126,203	126,248	126,248
Incremental shares arising from the exercise of stock option	-	285	-	352
Weighted average common shares outstanding – Total	126,203	126,488	126,248	126,600
	Yen			
Per common share:				
Net income attributable to TDK	¥ 86.80	¥ 86.61	¥ 128.29	¥ 127.94

For the three-month ended June 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 three-month ended June 30, 2018 as it was not probable that the performance condition would be achieved as of June 30, 2018.

13. 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, 2017.

	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 subject to nonamortization. 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 year ended March 31, 2017 and 2018 as though the acquisition had occurred at the beginning of the year ended March 31, 2017 were not material either.

(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, 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 August 10, 2018, the date on which the consolidated financial statements were issued.

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

Intangible assets acquired mainly include in-process research and development of ¥ 770 million subject to nonamortization. Goodwill of ¥2,297 million was recognized primarily because the acquisition cost exceeded the tentative net assets acquired as of acquisition date through forecast of exceeded profitability through fusion of management resources. 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 year ended March 31, 2017 and 2018 as though the acquisition had occurred at the beginning of the year ended March 31, 2018 were not material either.

14. 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, realized or realizable portion of which is recognized in other operating expense (income) of consolidated statement of income for the three month ended June 30, 2018. The remaining common shares (49%) of RF360 Holdings is recognized in consolidated balance sheet as investments in affiliates.

15. 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 16. 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 three-month ended June 30, 2017 are not restated.

	Yen (millions)					
	Three-month ended					
	June 30, 2017					
	Japan	Americas	Europe	China	Asia and others	Total
Capacitors	¥ 3,536	¥ 5,963	¥ 9,769	¥ 11,137	¥ 5,845	¥ 36,280
Inductive Devices	5,025	4,573	10,729	12,658	4,618	37,603
Other Passive Components	2,883	1,339	6,415	8,789	3,411	22,837
Passive Components	11,474	11,875	26,913	32,584	13,874	96,720
Sensor Application Products	2,802	1,395	4,899	6,276	945	16,317
Magnetic Application Products	5,041	3,550	2,489	28,575	26,726	66,381
Energy Application Products	7,019	4,913	2,843	71,396	9,145	95,316
Other	2,197	2,516	440	7,611	2,028	14,792
Net Sales Total	¥ 28,533	¥ 24,249	¥ 37,584	¥ 146,442	¥ 52,718	¥ 289,526

	Yen (millions)					
	Three-month ended					
	June 30, 2018					
	Japan	Americas	Europe	China	Asia and others	Total
Capacitors	¥ 3,943	¥ 7,539	¥ 12,273	¥ 14,264	¥ 6,442	¥ 44,461
Inductive Devices	5,027	4,867	12,027	14,417	4,974	41,312
Other Passive Components	2,806	1,675	7,707	11,293	3,468	26,949
Passive Components	11,776	14,081	32,007	39,974	14,884	112,722
Sensor Application Products	3,265	1,965	5,786	6,666	1,187	18,869
Magnetic Application Products	5,044	3,585	2,368	28,473	31,006	70,476
Energy Application Products	5,429	6,676	3,189	104,520	5,773	125,587
Other	2,663	2,051	376	9,273	1,051	15,414
Net Sales Total	¥ 28,177	¥ 28,358	¥ 43,726	¥ 188,906	¥ 53,901	¥ 343,068

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 recognizes 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 June 30, 2017 and June 30, 2018 were ¥1,307 million and ¥1,422 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 income statements for the three-month ended June 30, 2018. The amount of revenue recognized from performance obligations for the three-month ended June 30, 2018 that had been satisfied in previous periods was not material.

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

16. 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 June 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 June 30, 2018.

Furthermore, in accordance with the reorganization for the three-month ended June 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 three-month ended June 30, 2017 and June 30, 2018 are as follows:

Net sales

	Yen (Millions)	
	Three-month ended June 30,	
	2017	2018
Passive Components:		
External customers	¥ 96,720	¥ 112,722
Intersegment	871	801
	<u>97,591</u>	<u>113,523</u>
Sensor Application Products:		
External customers	16,317	18,869
Intersegment	48	33
	<u>16,365</u>	<u>18,902</u>
Magnetic Application Products:		
External customers	66,381	70,476
Intersegment	69	23
	<u>66,450</u>	<u>70,499</u>
Energy Application Products:		
External customers	95,316	125,587
Intersegment	2	7
	<u>95,318</u>	<u>125,594</u>
Other:		
External customers	14,792	15,414
Intersegment	7,324	6,811
	<u>22,116</u>	<u>22,225</u>
Intersegment eliminations	(8,314)	(7,675)
Total	<u>¥ 289,526</u>	<u>¥ 343,068</u>

Segment profit (loss)

	Yen (Millions)	
	Three-month ended June 30,	
	2017	2018
Passive Components	¥ 10,283	¥ 14,022
Sensor Application Products	(4,474)	(4,941)
Magnetic Application Products	3,692	3,468
Energy Application Products	13,452	21,025
Other	1,432	(1,040)
Sub total	<u>24,385</u>	<u>32,534</u>
Corporate and eliminations	(7,783)	(7,114)
Operating income	<u>16,602</u>	<u>25,420</u>
Other income (deductions), net	334	(1,685)
Income before income taxes	<u>¥ 16,936</u>	<u>¥ 23,735</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 three-month ended June 30, 2017 and June 30, 2018 are as follows:

Net sales

	Yen (Millions)	
	Three-month ended June 30,	
	2017	2018
Japan	¥ 28,533	¥ 28,177
Americas	24,249	28,358
Europe	37,584	43,726
China	146,442	188,906
Asia and others	52,718	53,901
Total	¥ 289,526	¥ 343,068

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