

Consolidated Financial Statements for the three-month ended and as of June 30, 2020 (in English)

On August 7, 2020, 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

Director-General of the Kanto Local Finance Bureau Filing to:

Date of filing: August 7, 2020

Fiscal period: 1st quarter of 125th term (from April 1, 2020 to June

30, 2020)

Company name (Japanese): TDK Kabushiki-Kaisha

Company name (English): **TDK CORPORATION**

Title and name of representative: Shigenao Ishiguro, Representative Director, President

and CEO

Location of head office: 2-5-1, Nihonbashi, Chuo-ku, Tokyo, Japan

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Tetsuji Yamanishi, Representative Director and Contact person:

Executive Vice President

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Telephone number: +81-3-6778-1060

Contact person: Tetsuji Yamanishi, Representative Director and

Executive Vice President

Place where the document to be filed

Tokyo Stock Exchange, Inc.

(2-1, Nihonbashi-kabutocho, Chuo-ku, Tokyo, Japan) is available for public inspection:

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1) Consolidated balance sheets (Unaudited)

	Yen (Millions)		
ASSETS	March 31, 2020	June 30, 2020	
Current assets:			
Cash and cash equivalents	¥ 332,717	¥ 325,150	
Short-term investments	32,494	34,877	
Marketable securities (Note 2 and 7)	56	55	
Net trade receivables	310,142	318,116	
Inventories (Note 3)	236,453	257,681	
Other current assets (Note 6)	54,620	55,980	
Total current assets	966,482	991,859	
Investments in affiliates (Note 2)	14,888	13,509	
Other investments in securities (Note 2 and 7)	18,341	19,397	
Net property, plant and equipment (Note 9)	611,150	630,081	
Right-of-use assets of operating leases	39,215	38,963	
Goodwill (Note 10)	160,945	159,850	
Intangible assets (Note 10)	79,748	76,965	
Other assets (Note 7)	52,610	54,148	
Total assets	¥ 1,943,379	¥ 1,984,772	

See accompanying notes to consolidated financial statements.

Current installments of long-term debt (Note 7 and 9) 68,028 44,952 Current portion of operating lease obligations 7,252 8,015 Trade payables 201,825 210,360 Accrued expenses 201,591 196,155 Other current liabilities (Note 6) 23,608 26,238 Total current liabilities 718,905 ¥711,711 Long-term debt, excluding current installments (Note 7 and 9) 140,061 190,015 Long-term operating lease obligations 28,824 27,785 Retirement and severance benefits 142,958 140,845 Other noncurrent liabilities 64,067 67,663 Total noncurrent liabilities 375,910 426,316 Total liabilities 375,910 426,316 Total liabilities 375,910 426,316 Total liabilities 335,910 426,316 Total possible requity: 335,910 426,316 Common stock 32,641 32,641 Auditional paid-in capital 1,783 1,788 Legal reserve 45,254 45,995 <th></th> <th>Yen (M</th> <th colspan="2">Yen (Millions)</th>		Yen (M	Yen (Millions)	
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Current installments of long-term debt (Note 7 and 9) 68,028 44,952 Current portion of operating lease obligations 7,252 8,019 Trade payables 201,825 210,360 Accrued expenses 201,591 196,155 Other current liabilities (Note 6) 23,608 26,238 Total current liabilities 718,905 ¥711,711 Long-term debt, excluding current installments (Note 7 and 9) 140,061 190,015 Long-term operating lease obligations 28,824 27,785 Retirement and severance benefits 142,958 140,845 Other noncurrent liabilities 64,067 67,663 Total noncurrent liabilities 375,910 426,316 Total liabilities 375,910 426,316 Total liabilities 375,910 426,316 Total possibilities 375,910 426,316 Total possibilities 375,910 426,316 Total possibilities 375,910 426,316 Total possibilities 32,641 32,641 Accuration possibilities 32,641 32,641	Current liabilities:			
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Trade payables 201,825 210,366 Accrued expenses 201,591 196,156 Other current liabilities (Note 6) 23,608 26,238 Total current liabilities 718,905 ¥711,711 Long-term debt, excluding current installments (Note 7 and 9) 140,061 190,015 Long-term operating lease obligations 28,824 27,785 Retirement and severance benefits 142,958 140,845 Other noncurrent liabilities 64,067 67,663 Total noncurrent liabilities 375,910 426,316 Total liabilities 33,20 32,641 Authorized 480,000,000 shares; 32,641 32,641 issued 129,590,659 shares at March 31, 2020 and June 30, 2020 32,641 32,641 Additional paid-in capital 1,783 1,788 Legal reserve 45,254 45,998 <		7,252	8,019	
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Total liabilities 1,094,815 1,138,027 TDK stockholders' equity: Common stock Authorized 480,000,000 shares; issued 129,590,659 shares at March 31, 2020 and June 30, 2020 outstanding 126,319,133 shares at March 31, 2020 and 126,322,130 shares at June 30, 2020 Additional paid-in capital 1,783 1,780 Legal reserve 45,254 45,998 Retained earnings 971,140 972,232 Accumulated other comprehensive income (loss) (Note 11 and 12) (190,055) (193,646 Treasury stock at cost; 3,271,526 shares at March 31, 2020 and 3,268,529 shares at June 30, 2020 (16,806) (16,791 Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	Total noncurrent liabilities	375,910	426,316	
Common stock Authorized 480,000,000 shares; issued 129,590,659 shares at March 31, 2020 and June 30, 2020 outstanding 126,319,133 shares at March 31, 2020 and 126,322,130 shares at June 30, 2020 Additional paid-in capital 1,783 1,780 Legal reserve 45,254 45,998 Retained earnings 971,140 972,232 Accumulated other comprehensive income (loss) (Note 11 and 12) (190,055) (193,646 Treasury stock at cost; 3,271,526 shares at March 31, 2020 and 3,268,529 shares at June 30, 2020 (16,806) (16,791 Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	Total liabilities	1,094,815	1,138,027	
126,322,130 shares at June 30, 2020 32,641 32,641 Additional paid-in capital 1,783 1,780 Legal reserve 45,254 45,998 Retained earnings 971,140 972,232 Accumulated other comprehensive income (loss) (Note 11 and 12) (190,055) (193,646 Treasury stock at cost; 3,271,526 shares at March 31, 2020 and 3,268,529 shares (16,806) (16,791 Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	Common stock Authorized 480,000,000 shares; issued 129,590,659 shares at March 31, 2020 and June 30, 2020			
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Legal reserve 45,254 45,998 Retained earnings 971,140 972,232 Accumulated other comprehensive income (loss) (Note 11 and 12) (190,055) (193,646 Treasury stock at cost; 3,271,526 shares at March 31, 2020 and 3,268,529 shares (16,806) (16,791 Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	Additional paid-in capital		1,780	
Retained earnings 971,140 972,232 Accumulated other comprehensive income (loss) (Note 11 and 12) (190,055) (193,646) Treasury stock at cost; 3,271,526 shares at March 31, 2020 and 3,268,529 shares at June 30, 2020 (16,806) (16,791) Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745		45,254	,	
Accumulated other comprehensive income (loss) (Note 11 and 12) (190,055) (193,646) Treasury stock at cost; 3,271,526 shares at March 31, 2020 and 3,268,529 shares at June 30, 2020 (16,806) (16,791) Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	•		972,232	
Treasury stock at cost; 3,271,526 shares at March 31, 2020 and 3,268,529 shares at June 30, 2020 (16,806) (16,791 Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	<u> </u>	· ·	(193,646)	
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Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	3,271,526 shares at March 31, 2020 and 3,268,529 shares			
Total TDK stockholders' equity 843,957 842,214 Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	at June 30, 2020	(16,806)	(16,791)	
Noncontrolling interests (Note 11 and 12) 4,607 4,531 Total equity 848,564 846,745	, , , , , , , , , , , , , , , , , , ,		842,214	
Total equity 848,564 846,745	- ·		4,531	
		848,564	846,745	
Total liabilities and equity $$$ $$$ 1,943,379 $$$ $$$ 1,984,772	Total liabilities and equity	¥ 1,943,379	¥ 1,984,772	

2) Consolidated statements of income

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

For the Three-month ended June 30, 2019 and 2020

Consolidated statements of income

	Yen (Millions)	
	Three-month ended June 30, 2019	Three-month ended June 30, 2020
Net sales (Note 15)	¥ 336,815	¥ 309,393
Cost of sales (Note 4 and 6)	240,820	219,823
Gross profit	95,995	89,570
Selling, general and administrative expenses (Note 4)	71,882	70,986
Other operating expense (income) (Note 16)	(867)	144
Operating income	24,980	18,440
Other income (deductions):		
Interest and dividend income	2,520	2,480
Interest expense	(1,117)	(819)
Foreign exchange gain (loss) (Note 6)	(960)	(326)
Other - net (Note 4 and 6)	(720)	936
Total other income (deductions)	(277)	2,271
Income before income taxes	24,703	20,711
Income taxes	9,048	7,456
Net income	15,655	13,255
Less: Net income attributable to noncontrolling interests	67	63
Net income attributable to TDK	¥ 15,588	¥ 13,192
Amounts per share:		
	<u> </u>	en
Net income attributable to TDK per share (Note 13):		
Basic	¥ 123.43	¥ 104.43
Diluted	123.15	104.22
Cash dividends paid during the period	¥ 80.00	¥ 90.00

Consolidated statements of comprehensive income (loss)

	Yen (Millions)		
	Three-month ended June 30, 2019	Three-month ended June 30, 2020	
Net income	¥ 15,655	¥ 13,255	
Other comprehensive income (loss), net of taxes			
Foreign currencies translation adjustments	(38,058)	(5,328)	
Pension liability adjustments	1,007	1,680	
Net unrealized gains (losses) on securities	(14)	40	
Total other comprehensive income (loss) (Note 12):	(37,065)	(3,608)	
Comprehensive income (loss) (Note 11)	(21,410)	9,647	
Comprehensive income (loss) attributable to noncontrolling interests	(136)	46	
Comprehensive income (loss) attributable to TDK	¥ (21,274)	¥ 9,601	

See accompanying notes to consolidated financial statements.

3) Consolidated statements of cash flows (Unaudited)

Cash flows from operating activities: Three-month end June 30, 2019 Investment on the Cash of St. 15,655 ¥ 13,255 Net income ¥ 15,655 ¥ 13,255 Adjustments to reconcile net income to net cash provided by operating activities: \$ 29,572 31,740 Depreciation and amortization 29,572 31,740 Changes in assets and liabilities: (33,513) (9,479) Decrease (increase) in trade receivables (15,033) (21,842) Increase (decrease) in accrued expenses (6,043) (10,125) Increase (decrease) in accrued expenses (6,043) (10,125) Decrease (increase) in other assets and liabilities, net 822 (2,785) Other - net 3,624 65 Other - net 3,624 65 Net cash provided by operating activities (50,895) 46,368 Proceeds from sales of tangible and intangible assets 282 1,004 Proceeds from sale and maturity of short-term investments 23,50 27,661 Payment for purchase of short-term investments 18,62 30,172 Proceeds from sale and maturity of scurities 27		Yen (Millions)		
Net income ¥ 15,655 ¥ 13,255 Adjustments to reconcile net income to net cash provided by operating activities: 29,572 31,740 Depreciation and amortization 29,572 31,740 Changes in assets and liabilities: 31,740 Decrease (increase) in trade receivables (33,513) (9,479) Decrease (increase) in trade payables 12,719 8,380 Increase (decrease) in accrued expenses (6,043) (10,125) Decrease (increase) in accrued expenses (6,043) (10,125) Other - net 3,624 654 Net cash provided by operating activities 3,624 654 Cash flows from investing activities: 50,895 (46,368) Proceeds from sales of tangible and intangible assets 628 1,004 Proceeds from sale and maturity of short-term investments 23,360 27,661 Payment for purchase of short-term investments 23,360 27,661 Payment for purchase of short-term investments (18,622) (30,172) Proceeds from sale and maturity of scorrities 27 3 Payment for purchase of securities				
Adjustments to reconcile net income to net cash provided by operating activities:	Cash flows from operating activities:			
Depreciation and amortization 29,572 31,740	Net income	¥ 15,655	¥ 13,255	
Depreciation and amortization Changes in assets and liabilities: 29,572 31,740 Changes in assets and liabilities: (33,513) (9,479) Decrease (increase) in trade receivables (15,033) (21,842) Increase (decrease) in inventories (15,033) (21,842) Increase (decrease) in trade payables 12,719 8,380 Increase (decrease) in other assets and liabilities, net 822 (2,785) Other - net 3,624 654 Net cash provided by operating activities 7,803 9,798 Cash flows from investing activities: 2 (2,785) Capital expenditures (50,895) (46,368) Proceeds from sales of tangible and intangible assets 628 1,004 Proceeds from sales of tangible and intangible assets 628 1,004 Proceeds from sale and maturity of short-term investments 23,560 27,661 Payment for purchase of short-term investments (18,622) (30,172) Proceeds from sale and maturity of securities 27 3 Payment for purchase of securities (55 (530) Posted from sale	Adjustments to reconcile net income to net cash			
Changes in assets and liabilities: (9,479) Decrease (increase) in trade receivables (33,513) (9,479) Decrease (increase) in inventories (15,033) (21,842) Increase (decrease) in trade payables 12,719 8,380 Increase (decrease) in accrued expenses (6,043) (10,125) Decrease (increase) in other assets and liabilities, net 822 (2,785) Other - net 3,624 654 Net cash provided by operating activities	provided by operating activities:			
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Decrease (increase) in inventories (15,033) (21,842) Increase (decrease) in tactude payables 12,719 8,380 Increase (decrease) in accrued expenses (6,043) (10,125) Decrease (increase) in other assets and liabilities, net 822 (2,785) Other - net 3,624 654 Net cash provided by operating activities 7,803 9,798 Cash flows from investing activities Capital expenditures (50,895) (46,368) Proceeds from sales of tangible and intangible assets 628 1,004 Proceeds from sale and maturity of short-term investments 23,360 27,661 Payment for purchase of short-term investments 18,622 30,172 Proceeds from sale and maturity of securities 27 3 Payment for purchase of securities (5) (530) Proceeds from sale of business, net of cash transferred - 3,717 Proceeds from sale of investments in affiliates - 2,502 Other - net 99 90 Net cash used in investing activities 45 51,187	Changes in assets and liabilities:			
Increase (decrease) in trade payables 12,719 8,380 Increase (decrease) in accrued expenses (6,043) (10,125) Decrease (increase) in other assets and liabilities, net 822 (2,785) Other - net 3,624 654 Net eash provided by operating activities 7,803 9,798 Cash flows from investing activities (50,895) (46,368) Proceeds from sales of tangible and intangible assets 628 1,004 Proceeds from sale and maturity of short-term investments 23,360 27,661 Payment for purchase of short-term investments (18,622) (30,172) Proceeds from sale and maturity of securities 27 3 Payment for purchase of securities (5) (530) Proceeds from sale of business, net of cash transferred - 3,717 Proceeds from sale of investments in affiliates - 2,502 Other - net 99 9 Net cash used in investing activities 45,408 42,903 Cash flows from financing activities 2,502 26,124 Cash flows from financing activities 45 <td>Decrease (increase) in trade receivables</td> <td>(33,513)</td> <td>(9,479)</td>	Decrease (increase) in trade receivables	(33,513)	(9,479)	
Increase (decrease) in accrued expenses (6,043) (10,125) Decrease (increase) in other assets and liabilities, net 822 (2,785) Other - net 3,624 654 Net cash provided by operating activities 7,803 9,798 Cash flows from investing activities: 50,895 (46,368) Proceeds from sales of tangible and intangible assets 628 1,004 Proceeds from sale and maturity of short-term investments 23,360 27,661 Payment for purchase of short-term investments (18,622) (30,172) Proceeds from sale and maturity of securities 27 3 Payment for purchase of securities (5) (530) Proceeds from sale and maturity of securities (5) (530) Proceeds from sale of business, net of cash transferred - 3,717 Proceeds from sale of investments in affiliates - 2,502 Other - net 99 9 Net cash used in investing activities 45 51,187 Repayment of debt with maturities longer than three months (2,021) (23,195) Net increase (decrease) in debt w	Decrease (increase) in inventories	(15,033)	(21,842)	
Increase (decrease) in accrued expenses (6,043) (10,125) Decrease (increase) in other assets and liabilities, net 822 (2,785) Other - net 3,624 654 Net cash provided by operating activities 7,803 9,798 Cash flows from investing activities: \$\$\text{Cash flows from investing activities}\$ \$\$(50,895)\$ (46,368) Proceeds from sales of tangible and intangible assets 628 1,004 Proceeds from sale and maturity of short-term investments 23,360 27,661 Payment for purchase of short-term investments (18,622) (30,172) Proceeds from sale and maturity of securities 27 3 Payment for purchase of securities (5) (530) Proceeds from sale of business, net of cash transferred - 3,717 Proceeds from sale of investments in affiliates - 2,502 Other - net 99 9 Net cash used in investing activities 45,408) (42,093) Cash flows from financing activities 2,021 (23,195) Net increase (decrease) in debt with maturities longer than three months 2,021	Increase (decrease) in trade payables	12,719	8,380	
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Repayment of debt with maturities longer than three months Net increase (decrease) in debt with maturities of three months or less Dividends paid Other - net Net cash provided by financing activities Effect of exchange rate changes on cash and cash equivalents Net decrease in cash and cash equivalents Cash and cash equivalents at beginning of period (23,195) (23,195) (11,206) (11,206) (11,206) (11,206) (11,905) (11,396) (12,396) (12,396) (13,96) (13,96) (13,96) (13,96)	9			
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Effect of exchange rate changes on cash and cash equivalents Net decrease in cash and cash equivalents Cash and cash equivalents at beginning of period (11,905) (1,396) (26,884) (7,567) 289,175 332,717				
Net decrease in cash and cash equivalents (26,884) (7,567) Cash and cash equivalents at beginning of period 289,175 332,717	Net cash provided by financing activities	22,626	26,124	
Net decrease in cash and cash equivalents (26,884) (7,567) Cash and cash equivalents at beginning of period 289,175 332,717	Effect of exchange rate changes on cash and cash equivalents	(11,905)	(1,396)	
Cash and cash equivalents at beginning of period 289,175 332,717		(26,884)		
	Cash and cash equivalents at beginning of period	289,175		
	Cash and cash equivalents at end of period	¥ 262,291	¥ 325,150	

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

Amendments of fair value measurement disclosure requirements

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2018-13 "Amendments of fair value measurement disclosure requirements". This ASU eliminates, amends and adds some of disclosure requirements for fair value measurement. TDK adopted this ASU from April 1, 2020. The adoption of this ASU did not have an impact on TDK's results of operations and financial position because this ASU is related to disclosure.

(d) Subsequent Events

TDK has evaluated the subsequent events through August 6, 2020, the date on which the consolidated financial statements are available to be issued.

(e) 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, 2020.

2. Marketable Securities and Investments in Securities

Marketable securities and investments in securities as of March 31, 2020 and June 30, 2020, are as follows:

,	Yen (Millions)	
_	March 31, 2020	June 30, 2020
Marketable securities		
Debt securities	¥ 56	¥ 55
Total Marketable securities	56	55
Investments in affiliates	14,888	13,509
Other investments in securities:		
Debt securities	42	47
Equity securities with readily determinable fair values	4,745	5,428
Equity securities without readily determinable fair values	13,554	13,922
Total other investments in securities	18,341	19,397
Total	¥ 33,285	¥ 32,961

Debt securities include available-for-sale securities. Information with respect to such securities as of March 31, 2020 and June 30, 2020, is as follows:

	Yen (Millions)			
		Gross	Gross	
As of March 31, 2020	Cost	Unrealized	Unrealized	Fair Value
	Cost	Holding	Holding	Tun vuide
		Gains	Losses	
Marketable securities (Debt securities):				
Government bonds	¥ 56	¥ 0	¥ -	¥ 56
Investments (Debt securities):				
Commercial papers	0	42	-	42
Public-utility bonds	0	-	-	0
Total	¥ 56	¥ 42	¥ -	¥ 98
	Yen (Millions)			
		Gross	Gross	_
As of June 30, 2020	Cost	Unrealized	Unrealized	Foir Volve
	Cost	Holding	Holding	Fair Value
		Gains	Losses	
Marketable securities (Debt securities):				_
Government bonds	¥ 55	¥ 0	¥ -	¥ 55
Investments (Debt securities):				
Commercial papers	0	47	-	47
Public-utility bonds	0			0
Total	¥ 55	¥ 47	¥ -	¥ 102

The proceeds from sale and maturity of debt securities classified as available-for-sale securities was ¥3 million for the three-month ended June 30, 2020. 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, 2020, 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, in principle, at cost minus impairment. If TDK can identify observable price changes in orderly transactions for the identical or a similar investment of the same issuer, TDK measures the equity securities at fair value as of the date that the observable transaction occurred. The book value of such investments amounted to ¥1,746 million as of June 30, 2020. TDK did not record an impairment or other adjustments for the three-month ended June 30, 2020.

Net gains and losses and unrealized gains and losses recognized on equity securities for the three-month ended June 30, 2019 and June 30, 2020 are as follows:

	Yen (Millions)	
	June 30, 2019	June 30, 2020
Unrealized gains and losses recognized during the period on equity securities held as of June 30	¥ (325)	¥ 626
Net gains and losses recognized on equity securities sold during the period	0	-
Net gains and losses recognized during the period on equity securities	¥ (325)	¥ 626

Note: () of amount means net losses.

3. Inventories

Inventories as of March 31, 2020 and June 30, 2020, are summarized as follows: Yen (Millions)

	Ten (willions)		
	March 31, 2020	June 30, 2020	
Finished goods	¥ 87,721	¥ 99,798	
Work in process	56,697	61,319	
Raw materials	92,035	96,564	
Total	¥ 236,453	¥ 257,681	

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, 2019 and June 30, 2020 consist of the following components:

	Yen (Millions)	
	Three-month ended	Three-month ended
	June 30, 2019	June 30, 2020
Service cost-benefits earned during the period	¥ 2,167	¥ 2,203
Interest cost on projected benefit obligation	750	923
Expected return on plan assets	(1,232)	(1,274)
Amortization of actuarial loss	1,437	1,737
Amortization of prior service cost (benefit)	(87)	31
Net periodic benefit cost	¥ 3,035	¥ 3,620

In net periodic benefit cost for TDK's employee retirement and severance defined benefit plans, service cost is included in cost of sales and sales and general administrative expense. Other elements except service cost are included in other - net of other income (deductions).

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, 2020 and June 30, 2020, are as follows:

	Yen (Millions)		
	March 31, 2020 June 30, 202		
Guarantees to third parties on bank loans			
of employees	¥ 469	¥ 427	

As of June 30, 2020, 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. Claims include class action raised in the United States of America and Canada for violation of antitrust law and damage suit raised by several customers; both cases are associated with HDD suspension assemblies. For these claims, it is not possible to make a reasonable estimate of impact at this time. In the opinion of TDK management, 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 amount excluded from effectiveness testing.

(2) Derivatives not designated as hedging instruments

TDK uses forward foreign exchange contracts, 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 and other hedging instruments on the consolidated statements of income and consolidated statements of comprehensive income (loss) for the three-month ended June 30, 2019 and June 30, 2020 are as follows:

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

	Y en (Millions)	
	Gains (losses) recognized in other comprehensi	
	income on derivative and other	
	Three-month ended	Three-month ended
	June 30, 2019	June 30, 2020
Forward foreign exchange contracts	¥ 1,509	-
Borrowings in local currency	1,920	-
Total	¥ 3,429	-

(2) Derivatives not designated as hedging instruments

		Yen (Millions)		
		Three-month ended June 30, 2019	Three-month ended June 30, 2020	
		Julie 30, 2019	June 30, 2020	
Forward foreign exchange contracts	Foreign exchange gain (loss)	¥ 2,535	¥ 1,819	
Currency swap contracts	Foreign exchange gain (loss)	(578)	(932)	
Interest rate swap contracts	Other income (deductions)-Other-net	(83)	-	
Currency option contracts	Foreign exchange gain (loss)	(7)	17	
Commodity forward contracts	Cost of sales	17		
Total		¥ 1,884	¥ 904	

Notional amounts and fair value of derivative financial instruments and other hedging instruments as of March 31, 2020 and June 30, 2020 are as follows:

		Yen (Millio	ons)				
		March 31, 2	020				
Derivatives not designated as	hedging instrume	ents:					
	Asset derivatives Liability derivatives						
	Consolidated Consolida				Consolidated		
	Notional	Notional balance sheets amounts Fair value location			balance sheets		
	amounts				location		
Forward foreign exchange			Other current		Other current		
contracts	¥ 118,414	¥ 124	assets	¥ 1,359	liabilities		
Currency swap contracts			Other current				
	13,051	1,102	assets	-	-		

Yen (Millions)							
		June 30, 20)20				
Derivatives not designated as	hedging instrume	ents:					
Asset derivatives Liability derivatives							
	Consolidated Consolidated						
	Notional		balance sheets		balance sheets		
	amounts	Fair value	location	Fair value	location		
Forward foreign exchange			Other current		Other current		
contracts	¥ 104,654	¥ 703	assets	¥ 315	liabilities		

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, Other investments in securities and Other assets

The fair values of marketable securities and other 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 categorized within 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 categorized within 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, 2020 and June 30, 2020, are summarized as follows:

As of March 31, 2020	Yen (Millions)		
As of March 31, 2020	Carrying amount	Estimated fair value	
Assets:			
Marketable securities	¥ 56	¥ 56	
Other investments in securities and other			
assets	32,771	32,771	
Liability:			
Long-term debt, including current portion			
(excluding finance lease obligation)	(202,207)	(202,389)	
, ,		,	
As of June 20, 2020	Yen (Millions)		
As of June 30, 2020	Carrying amount Estimated fair		
Assets:			
Marketable securities	¥ 55	¥55	
Other investments in securities and other			
assets	34,182	34,182	
Liability:			
Long-term debt, including current portion			

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, 2020 and June 30, 2020 are as follows:

As of March 31, 2020	Yen (Millions)				
AS OF March 31, 2020	Level 1	Level 2	Level 3	Total	
Assets:					
Marketable securities (debt securities):					
Government bonds	¥ 56	¥ -	¥ -	¥ 56	
Derivative contracts:					
Forward foreign exchange contracts	-	124	-	124	
Currency swap contracts	-	1,102	-	1,102	
Investments (Debt securities):					
Commercial papers	-	42	-	42	
Public-utility bonds	0	-	-	0	
Investments (Equity securities):					
Stock	3,743	-	12,282	16,025	
Mutual funds	1,002	-	-	1,002	
Rabbi trust investments	5,799	-	-	5,799	
Total	¥ 10,600	¥ 1,268	¥ 12,282	¥ 24,150	
Liabilities:					
Derivative contracts:					
Forward foreign exchange contracts	¥ -	¥ 1,359	¥ -	¥ 1,359	
Total	¥ -	¥ 1,359	¥ -	¥ 1,359	

Ag of June 20, 2020	Yen (Millions)			
As of June 30, 2020	Level 1	Level 2	Level 3	Total
Assets:				_
Marketable securities (Debt securities):				
Government bonds	¥ 55	¥ -	¥ -	¥ 55
Derivative contracts:				
Forward foreign exchange contracts	-	703	-	703
Investments (Debt securities):				
Commercial papers	-	47	-	47
Public-utility bonds	0	-	-	0
Investments (Equity securities):				
Stock	4,292	-	12,176	16,468
Mutual funds	1,136	-	-	1,136
Rabbi trust investments	6,403	-	-	6,403
Total	¥ 11,886	¥ 750	¥ 12,176	¥ 24,812
Liabilities:				
Derivative contracts:				
Forward foreign exchange contracts	¥ -	¥ 315	¥ -	¥ 315
Total	¥ -	¥ 315	¥ -	¥ 315

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 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 mainly based on comparable multiple valuation method.

With respect to the recurring fair value measurements categorized within Level 3, the significant unobservable input used in the fair value measurement of the equity securities in assets, is mainly PER (price earnings ratio). The weighted average of PER as of March 31, 2020 and June 30, 2020 are both 8.9 times.

The changes in the carrying amount of assets measured at fair value on a recurring basis that was categorized within Level 3 as of June 30, 2019 and June 30, 2020 are as follows:

	Yen (Millions)	Yen (Millions)
	June 30, 2019	June 30, 2020
Opening Balance	¥ 8,716	¥ 12,282
Net income (loss)		
(Realized or unrealized):		
Other Comprehensive Income(loss)	(252)	(106)
Ending Balance	¥ 8,464	¥ 12,176

^{*} Certain investments (equity securities without readily determinable fair values) were measured at fair value on a recurring basis and categorized within Level 3.

As of June 30, 2019 and June 30, 2020, there are no unrealized gains (losses) on securities included in other comprehensive income (loss).

9. Lease

Right-of-use assets of finance leases is included in net property, plant and equipment of consolidated balance sheet and the amount is \(\frac{\pmathbf{x}}{3},790\) million as of March 31, 2020, and \(\frac{\pmathbf{x}}{3},627\) million as of June 30, 2020.

Finance lease obligations is included in current installments of long-term debt and long-term debt, excluding current installments of consolidated balance sheet. Finance lease obligations included in current installments of long-term debt is ¥558 million as of March 31, 2020, and ¥543 million as of June 30, 2020. Finance lease obligations included in long-term debt, excluding current installments is ¥5,324 million as of March 31, 2020, and ¥5,129 million as of June 30, 2020.

10. Goodwill and Other Intangible Assets

The components of acquired intangible assets excluding goodwill as of March 31, 2020 and June 30, 2020 are as follows:

		Yen (Millions)	
As of March 31, 2020	Gross Carrying Amount	Accumulated Amortization	Net Amount
Amortizable intangible assets:			
Patent	¥ 26,259	¥ 10,858	¥ 15,401
Customer relationships	15,991	12,566	3,425
Software	41,836	17,775	24,061
Unpatented technologies	48,772	23,352	25,420
Other	10,890	3,437	7,453
Total	¥ 143,748	¥ 67,988	¥ 75,760
Nonamortizable intangible asset	ts:		
Trademark	¥ 3,452		¥ 3,452
In-process research and			
development	347		347
Other	189		189
Total	¥ 3,988		¥ 3,988
		Yen (Millions)	
As of June 30, 2020	Gross Carrying Amount	Accumulated Amortization	Net Amount
Amortizable intangible assets:			
Patent	¥ 26,142	¥ 11,641	¥ 14,501
Customer relationships	15,985	12,819	3,166
Software	42,365	18,433	23,932
Unpatented technologies Other	48,834 10,828	24,364 3,574	24,470 7,254
Total	¥ 144,154	¥ 70,831	¥ 73,323
Nonamortizable intangible asset		170,001	170,020
Trademark	¥ 3,452		¥ 3,452
In-process research and	-, -		-, -
development	-		-
Other	190		190
Total	¥ 3,642		¥ 3,642

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, 2020 was ¥3,562 million.

There are no significant changes in the carrying amount of goodwill for the three-month ended June 30, 2020.

11. Equity

The changes in the carrying amount of stockholders' equity, noncontrolling interests and total equity for the three-month ended June 30, 2019 and June 30, 2020 are as follows:

	Yen (Millions)			
	Stockholders' equity	Noncontrolling Interests	Total equity	
March 31, 2019	¥ 877,290	¥ 6,466	¥ 883,756	
Equity transaction of consolidated subsidiaries and other	191	(109)	82	
Comprehensive income:				
Net income	15,588	67	15,655	
Other comprehensive income (loss), net of taxes: Foreign currency translation				
adjustments	(37,855)	(203)	(38,058)	
Pension liability adjustments	1,007	O O	1,007	
Net unrealized gains (losses) on				
securities	(14)	-	(14)	
Total other comprehensive income (loss)	(36,862)	(203)	(37,065)	
Comprehensive income (loss)	(21,274)	(136)	(21,410)	
Dividends	(10,103)	(67)	(10,170)	
June 30, 2019	¥ 846,104	¥ 6,154	¥ 852,258	

Yen (Millions)

_	Stockholders' equity	Noncontrolling Interests	Total equity
March 31, 2020	¥ 843,957	¥ 4,607	¥ 848,564
Equity transaction of consolidated subsidiaries and other Comprehensive income:	12	(109)	(97)
Net income	13,192	63	13,255
Other comprehensive income (loss), net of taxes: Foreign currency translation adjustments Pension liability adjustments Net unrealized gains (losses) on securities	(5,311) 1,680 40	(17) 0 -	(5,328) 1,680 40
Total other comprehensive income (loss)	(3,591)	(17)	(3,608)
Comprehensive income	9,601	46	9,647
Dividends	(11,356)	(13)	(11,369)
June 30, 2020	¥ 842,214	¥ 4,531	¥ 846,745

Net income attributable to TDK and transfers (to) from noncontrolling interests for the three-month ended June 30, 2019 and June 30, 2020 are as follows:

	Yen (M	(illions)
	Three-month ended June 30,	
	2019	2020
Net income attributable to TDK Decrease in TDK's additional paid-in capital for purchase of SolidGear Corporation's common shares from third	¥ 15,588	¥ 13,192
parties	(4)	(3)
Net transfers (to) from noncontrolling interests	(4)	(3)
Changes arising from net income attributable to TDK and transfers (to) from noncontrolling interests	¥ 15,584	¥ 13,189

12. Other Comprehensive Income (Loss)

The changes in the carrying amount of accumulated other comprehensive income (loss) for the three-month ended June 30, 2019 and June 30, 2020 are as follows:

	Yen (Millions)				
	Foreign currency translation adjustments	Pension liability adjustments	Net unrealized gains (losses) on securities	Total	
March 31, 2019	¥ (48,905)	¥ (75,640)	¥ 110	¥ (124,435)	
Equity transaction of consolidated subsidiaries and other Other comprehensive income (loss) before reclassifications Amounts reclassified from	(38,058)	(109)	(14)	(38,181)	
accumulated other comprehensive income (loss)	0	1,116	-	1,116	
Other comprehensive income (loss)	(38,058)	1,007	(14)	(37,065)	
Other comprehensive income	(30,030)	1,007	(14)	(37,003)	
(loss) attributable to noncontrolling interests	(203)	0	-	(203)	
June 30, 2019	¥ (86,760)	¥ (74,633)	¥ 96	¥ (161,297)	
	Foreign currency translation	Yen (Mi Pension liability adjustments	Net unrealized gains (losses) on securities	Total	
March 21, 2020	adjustments		¥ 23	V (100.055)	
March 31, 2020 Equity transaction of consolidated subsidiaries and other Other comprehensive income (loss) before reclassifications Amounts reclassified from	¥ (94,369) - (5,349)	¥ (95,709) - (5)	± 23 - 43	¥ (190,055) - (5,311)	
accumulated other comprehensive income (loss)	21	1,685	(3)	1,703	
Other comprehensive income (loss)	(5,328)	1,680	40	(3,608)	
Other comprehensive income				. , ,	
(loss) attributable to				/ 4 = ``	
	(17) ¥ (99,680)	0 ¥ (94,029)	¥ 63	(17) ¥ (193,646)	

The reclassifications out of accumulated other comprehensive income (loss) for the three-month ended June 30, 2019 and June 30, 2020 are as follows:

For the three-month ended June 30,	Amount refrom accurate other complines (lo	mulated prehensive	Affected line items in consolidated statements of income
	2019	2020	
Foreign currency translation:			Other - net of other
	¥ 0	¥ (19)	income (deductions)
		(2)	Tax (expense) or benefit Net of tax
Pension liability adjustments:	0	(21)	Net of tax
Tension had not adjustinents.	(1,352)	(1,768)	Other - net of other income (deductions) *2
	236	83	Tax (expense) or benefit
	(1,116)	(1,685)	Net of tax
Net unrealized gains (losses) on	-	3	Other - net of other income (deductions)
	-	-	Tax (expense) or benefit
	_	3	Net of tax
Total amount reclassified, net of tax	¥ (1,116)	¥ (1,703)	

^{*1} Increased amount indicate increase in profit and amount in parentheses indicate loss 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, 2019 and June 30, 2020 are as follows:

	Y6	en (Millions)	
For the three-month ended June 30, 2019	Before tax	Tax (expense)	Net-of-tax
	Amount	or benefit	Amount
Foreign currency translation adjustments:			_
Gross foreign currency translation adjustments	¥ (38,370)	¥ 312	¥ (38,058)
Amount arising during the period from			
reclassification adjustment realized from			
liquidation of foreign entities	0	-	0
Net foreign currency translation adjustments	(38,370)	312	(38,058)
Pension liability adjustments:			
Amount arising during the period	(116)	7	(109)
Reclassification adjustments for amortization	1,352	(236)	1,116
Net pension liability adjustments	1,236	(229)	1,007
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during			
the period	(14)	-	(14)
Reclassification adjustment		-	
Net unrealized gains (losses)	(14)	-	(14)
Other comprehensive income (loss)	¥ (37,148)	¥ 83	¥ (37,065)

For the three-month ended June 30, 2020 Before tax $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Foreign currency translation adjustments: Gross foreign currency translation adjustments Amount arising during the period from \(\fomation \) \(\fomation \
Gross foreign currency translation adjustments Y (5,042) Y (307) Y (5,349) Amount arising during the period from
liquidation of foreign entities
Net foreign currency translation adjustments (5,023) (305) (5,328)
Pension liability adjustments:
Amount arising during the period (5) - (5)
Reclassification adjustments for amortization 1,768 (83) 1,685
Net pension liability adjustments 1,763 (83) 1,680
Unrealized gains (losses) on securities:
Unrealized holding gains (losses) arising during
the period 43 - 43
Reclassification adjustment (3) - (3)
Net unrealized gains (losses) 40 - 40
Other comprehensive income (loss) $\frac{1}{4}(3,220)$ $\frac{1}{4}(3,88)$ $\frac{1}{4}(3,608)$

13. 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, 2019		Three-mo	nth ended 0, 2020	
	Basic	Basic	Basic	Diluted	
Net income attributable to TDK	¥ 15,588	¥ 15,588	¥ 13,192	¥ 13,192	
	N	Number of sha	res (Thousand	s)	
Weighted average common shares outstanding Incremental shares arising from the	126,290	126,290	126,320	126,320	
exercise of stock option	-	291	-	263	
Weighted average common shares outstanding – Total	126,290	126,581	126,320	126,583	
		Y	en		
Per common share:					
Net income attributable to TDK	¥ 123.43	¥ 123.15	¥ 104.43	¥ 104.22	

The stock options issued by TDK Corporation that are vested when a certain performance condition is achieved were excluded from the diluted per share calculation of net income attributable to TDK for the three-month ended June 30, 2019 and June 30, 2020 as it was not probable that the performance condition would be achieved as of June 30, 2019 and June 30, 2020.

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 TDK Electronics 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. Contingent consideration to be recognized over several years is included in the total consideration amount, and realized or realizable portion are recognized in other operating expense (income) of consolidated statement of income for the year ended March 31, 2019 and March 31, 2020. An option to put and call the remaining common shares of RF360 (49%) after 30 months after the closing date was granted to TDK and QGT, respectively. TDK exercised the option on August 30, 2019 and sold 49% of the common shares on September 16, 2019. The sales price was U.S.\$1.15 billion as stated in the option and the sales did not have a material impact on the consolidated statements of income for the year ended March 31, 2020.

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 17.

	Yen (millions)					
	Three-month ended					
		June 30, 2019				
	Japan	Americas	Europe	China	Asia an d others	Total
Capacitors	¥ 4,439	¥ 6,974	¥ 9,820	¥ 11,808	¥ 6,238	¥ 39,279
Inductive Devices	4,884	3,582	10,241	11,623	3,819	34,149
Other Passive						
Components	2,700	2,139	6,416	10,017	3,569	24,841
Passive Components	12,023	12,695	26,477	33,448	13,626	98,269
Sensor Application Products	3,057	2,172	4,802	5,736	2,375	18,142
Magnetic Application Products	4,492	2,282	1,537	11,804	35,414	55,529
Energy Application Products	4,748	7,672	3,662	111,388	17,043	144,513
Other	2,056	973	665	15,624	1,044	20,362
Net Sales Total	¥26,376	¥ 25,794	¥ 37,143	¥ 178,000	¥ 69,502	¥ 336,815

	Yen (millions)					
	Three-month ended					
		June 30, 2020 A : F				
	Japan	Americas	Europe	China	others	Total
Capacitors	¥ 3,980	¥ 4,194	¥ 6,769	¥ 13,251	¥ 5,140	¥ 33,334
Inductive Devices	3,920	2,294	6,528	11,328	3,307	27,377
Other Passive						
Components	2,169	2,463	4,843	10,702	3,469	23,646
Passive Components	10,069	8,951	18,140	35,281	11,916	84,357
Sensor Application						
Products	2,865	1,182	3,581	5,370	1,705	14,703
Magnetic Application						
Products	4,260	1,407	1,352	10,240	21,019	38,278
Energy Application						
Products	5,503	4,301	4,203	130,184	12,664	156,855
Other	2,789	2,010	237	8,883	1,281	15,200
Net Sales Total	¥ 25,486	¥ 17,851	¥ 27,513	¥ 189,958	¥ 48,585	¥ 309,393

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 March 31, 2020 and June 30, 2020 were ¥970 million and ¥1,000 million, respectively, and included in other current liabilities in the balance sheets. Out of the advance received as of March 31, 2020, ¥448 million was recognized as revenue in the income statements for the three-month ended June 30, 2020. The amount of revenue recognized from performance obligations for the three-month ended June 30, 2020 that had been satisfied in previous periods was not material.

There are no unsatisfied or partially unsatisfied performance obligations as of June 30, 2020. Furthermore, there is no balance of contract assets as of June 30, 2020.

16. Other operating expense (income)

Other operating expense (income) for the three-month ended June 30, 2019 and 2020 are as follows:

	Yen (Millions)		
	Three-month ended June 30, 2019	Three-month ended June 30, 2020	
Impairment of long-lived assets	-	¥ 144	
Gain on sale of business (Note 14)	¥ (867)	-	
Other operating expense (income) total	¥ (867)	¥ 144	

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.

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, 2019 and June 30, 2020 are as follows:

Net sales

Net sales	Yen (Mi	
	Three-month er	
	2019	2020
Passive Components: External customers Intersegment	¥ 98,269 764 99,033	¥ 84,357 917
	99,033	85,274
Sensor Application Products: External customers Intersegment	18,142 15	14,703 90
	18,157	14,793
Magnetic Application Products: External customers Intersegment	55,529 2,782 58,311	38,278 308 38,586
Energy Application Products: External customers Intersegment	144,513 - 144,513	156,855 156,855
Other: External customers Intersegment	20,362 6,638 27,000	15,200 5,729 20,929
Intersegment eliminations Total	(10,199) ¥ 336,815	(7,044) ¥ 309,393
Segment profit (loss)	Yen (Mil	llions)
	Three-month en	
	2019	2020
Passive Components	¥ 10,339	¥ 7,734
Sensor Application Products	(7,021)	(7,265)
Magnetic Application Products	3,298	(3,844)
Energy Application Products	26,469	31,259
Other	315	(1,877)
Other	22 100	(1,0//)

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.

Sub total

Corporate and eliminations

Operating income

Income before income taxes

Other income (deductions), net

33,400

(8,420)

24,980

¥ 24,703

(277)

26,007

(7,567)

18,440

2,271

¥ 20,711

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, 2019 and June 30, 2020 are as follows:

Net sales

	Yen (M	Yen (Millions)		
	Three-month	ended June 30,		
	2019	2020		
Japan	¥ 26,376	¥ 25,486		
Americas	25,794	17,851		
Europe	37,143	27,513		
China	178,000	189,958		
Asia and others	69,502	48,585		
Total	¥ 336,815	¥ 309,393		

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, Vietnam, Korea

18. Significant Subsequent Events

TDK has issued unsecured straight bonds (with special inter-bond pari passu clause) under the following conditions.

	5 th Series Unsecured	6 th Series Unsecured	7 th Series Unsecured		
	Straight Bonds	Straight Bonds	Straight Bonds		
Date of issuance	July 28, 2020				
Total amount of	20 billion von	20 hillion von	40 billion von		
bond issuance	30 billion yen	30 billion yen	40 billion yen		
Issue price	100% of the principle amount				
Coupon rate	0.180%	0.310%	0.430%		
(per annum)	0.180%	0.510%	0.430%		
Term of Redemption	July 28, 2025	July 28, 2027	July 26, 2030		
Purpose of	Donormout of John				
bond issuance	Repayment of debt				