



To Our Stakeholders

Business Overview
And Financial Highlights

Business Overview
And Financial Highlights

Review of Operations
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Corporate Philosophy

We strive to contribute to the development of a dream-inspiring society through our leading-edge technologies and reliable service and support.



Vision

A truly global company generating high added value and profits in the semiconductor and flat panel display industries through innovative technologies and groundbreaking proactive solutions that integrate diverse technologies.

The Corporate Philosophy defines the purpose of Tokyo Electron's existence and its mission in society. It represents Tokyo Electron's basic way of thinking and forms the foundation for its corporate activities.

The Vision was established as an ideal, to which everyone in the Group can aspire, indicating how we should conduct business in order to fulfill the Corporate Philosophy.

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Disclaimer

Matters discussed in this annual report, including forecasts of future business performance of Tokyo Electron, management strategies, beliefs and other statements are based on Tokyo Electron's assumptions in light of information that is currently available. These forward-looking statements involve known or unknown risks, uncertainties and other factors that could cause actual results to differ materially from those referred to in the forward-looking statements.

Factors that have a direct or indirect impact on Tokyo Electron's future performance include, but are not limited to:

- Economic circumstances in Japan and overseas, consumption trends, and large fluctuations in foreign exchange rates
- Changes in semiconductor/FPD markets
- Changes in the demand for products and services manufactured or offered by Tokyo Electron's customers, such as semiconductor manufacturers, FPD manufacturers and electronics makers
- Tokyo Electron's capabilities to continue to develop and provide products and services that respond to rapid technology innovation and changing customer needs in a timely manner

For details, please refer to Business-Related and Other Risks on page 18.

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To Our Stakeholders

■ To Our Stakeholders

To Our Stakeholders

Leading the Way Forward with Innovation

To begin, we would like to express our thanks for the continued support of our investors and all of Tokyo Electron's stakeholders.

In 2017, driven by rapidly growing demand for hyperscale data centers, the wafer fab equipment market grew almost 40% year on year, surpassing US\$50 billion for the first time. In this environment, Tokyo Electron posted strong fiscal 2018 results. Net sales and net income attributable to owners of the parent both reached record highs, marking steady progress toward the targets of the medium-term management plan.

With the full-fledged arrival of the internet of things (IoT), the semiconductor and display markets are growing at an unprecedented pace. In response to expanding business opportunities, Tokyo Electron is taking an aggressive stance, targeting a world-class ROE and operating margin of 30% or higher. To reach this target, we believe that the most critical element will remain the same. As expressed in our corporate vision, we must consistently provide customers with solutions that integrate new, innovative technologies with our diverse existing process technologies. By achieving the goals of the medium-term management plan and continuing to work to sustainably improve our corporate value, we will strive to live up to the expectations of our stakeholders. We look forward to your continued support.



Business Overview and Financial Highlights

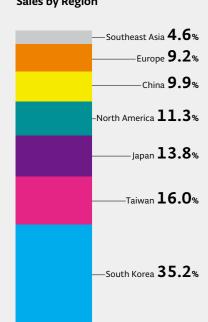
■ Business Overview and Financial Highlights

Business Overview and Financial Highlights

Semiconductor Production Equipment

- Coater/Developer Etch System
- Cleaning System
- **Deposition System**
- Wafer Prober

Sales by Region



Semiconductor devices are broadly used in mobile devices, such as smartphones and tablets, as well as the data center servers that are indispensable for the processing of big data. With the arrival of the IoT, semiconductor applications will expand in all fields, from consumer electronics and automobiles to medicine and healthcare. Tokyo Electron provides a wide range of semiconductor production equipment used to manufacture such semiconductors along with superior technical support and service. The main categories of our product lineup are coater/developers, etch systems, deposition systems and cleaning systems used in wafer processing as well as wafer probers used in the wafer testing process. In addition, we also offer such products as electrochemical deposition systems and wafer bonders/debonders used in advanced packaging processes.







Plasma Etch System

Tactras™





Single Wafer Deposition System





Wafer Prober Single Wafer Cleaning System

FPD Production

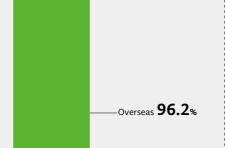
FPD Etch/Ash System Equipment

Japan **3.8**%

Inkjet Printing System for Manufacturing OLED Panels

FPD Coater/Developer

Sales by Region



Flat panel displays (FPDs) are an essential part of everyday life, employed in such products as TVs, smartphones and tablets. Going forward, FPDs are expected to see new growth in demand for such applications as virtual reality (VR) and augmented reality (AR) head-mounted displays. Tokyo Electron supplies coater/ developers and etch/ash systems for manufacturing FPDs along with solid technical support and service. We also offer an inkjet printing system for manufacturing OLED panels using largesized substrates to take advantage of the expanding OLED display market.





Cash Dividends per Share

17

FPD Coater/Developer Exceliner™.

FPD Plasma Etch/Ash System Inkjet Printing System for Manufacturing OLED Panels Elius™ 2500

LITHIUS Pro™ Z

Net Sales and Gross Profit Margin

Coater/Developer

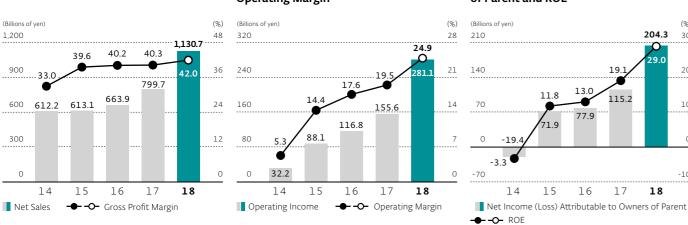
CLEAN TRACK™

Operating Income and **Operating Margin**

ALD System

NT333™

Net Income (Loss) Attributable to Owners of Parent and ROE



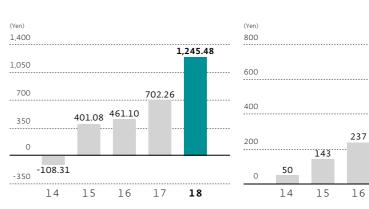
The amounts in this report in billions, millions and thousands of yen; thousands of U.S. dollars; and thousands of shares as of and for the years ended March 31, 2016 and prior are rounded to the nearest unit. Such amounts as of and for the years ended March 31, 2017 and onward, including year-on-year differences, are truncated at the nearest unit. Accordingly, totals for the years ended March 31, 2017 and onward do not necessarily agree with the sum of the corresponding individual amounts.

Free Cash Flow

(Billions of ven) 160 139.7 120 118.0 64.2 60 4 -33.4 14 15 16 17 **18**

Free Cash Flow = Cash flows from operating activities + Cash flows from investing activities (excluding changes in short-term investments with original maturities of less than one year)

Net Income (Loss) per Share



■ Interview with the CEO

Interview with the CEO



Working toward a World-Class ROE and Operating Margin

Question

Tokyo Electron achieved record-high profit for a second consecutive year. Could you tell us more about your progress under the medium-term management plan?

I am very pleased that we have reached recordhigh profit for a second consecutive year. I believe this is a result of the initiatives we've been advancing under the medium-term management plan.

Tokyo Electron aims to grow in fields where technological innovation and market growth are expected, and where we can leverage our strengths. Based

on this policy, we have already built an unassailable position in coater/developers. Furthermore, in 2015, we designated etch, deposition and cleaning as key fields. By stepping up product competitiveness, responsiveness to customers and operational efficiency, we have been striving to achieve a "Best in Class" position in the industry.



Interview with the CEO

■ Interview with the CEO

Interview with the CEO

Looking at the past three years, the wafer fab equipment (WFE)¹ market has seen unprecedented growth, expanding from around US\$30 billion to more than US\$50 billion. In this environment, we have built a framework for nimble, efficient development, reorganizing our development and production groups and business units, establishing the Process Integration Center, and integrating the strengths and best known method (BKM) of each product. In addition, by advancing joint development with customers, we have worked to provide high-value-added products more rapidly than ever before.

Net sales, profit margins and market share in all our key fields have increased significantly as

a result of these efforts. Moreover, sales in the field solutions business (encompassing sales of parts and used equipment, modifications and maintenance services) grew to 22% of total net sales. This was bolstered by our number of units installed—among the highest in the industry—and outstanding support capabilities. Going forward, backed by market expansion as well as our industry-leading technological prowess and highly competitive products, we will achieve even greater growth.

1 Wafer fab equipment (WFE): The semiconductor production process is divided into front-end production, in which circuits are formed on wafers and inspected, and back-end production, in which wafers are cut into chips, assembled and inspected again. WFE refers to the production equipment used in front-end production and in wafer-level packaging production.

Question Question

What factors went into the new financial model you announced in May 2018?

With the arrival of the IoT and AI era, the semiconductor and flat panel display (FPD) industries are entering a new period of growth; in a few years, Tokyo Electron expects the WFE market to surpass US\$60 billion. We see this as an excellent growth opportunity and are aiming for world-class ROE and an operating margin of 30% or higher in the medium to long term.

The roadmap to these targets is the new financial model for fiscal 2021. The new model raises the assumed size of the WFE market to US\$62 billion and sets targets of ¥1,700 billion in net sales and a 28% operating margin. At the same time, we will build a management structure with downward cost flexibility that can secure ¥1,500 billion in net sales and an operating margin of

26.5% even if the WFE market contracts to US\$55 billion due to shifts in the semiconductor supply balance or other temporary changes.

Although we revamped the financial model, the medium-term management plan basic strategy of becoming "Best in Class" is unchanged. To connect expanding business opportunities to the greatest possible growth, we have raised our targets for capital expenditure and R&D spending and are increasing our development and production capacity. In the etch system business, we will introduce an automated warehousing system and an additional production line at our factory and begin operations at a new development building,

thereby accelerating the development of next-generation technologies. In the deposition equipment business, we are building new production buildings, increasing capacity to be ready for future demand growth. At the same time, we are working to effectively control fixed costs and the ratio of SG&A expenses to consolidated net sales. In these ways, we will achieve the targets of the new financial model as well as our medium- to long-term ROE and operating margin targets.



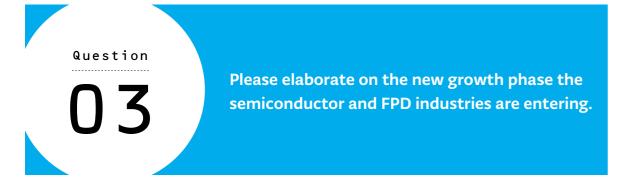
New Financial Model (Fiscal 2021)

WFE market size	US\$ 55 billion	US\$ 62 billion
Net sales	¥1,500 billion	¥1,700 billion
Operating margin	26.5%	28%
ROE	30-	-35%

Interview with the CEO

■ Interview with the CEO

Interview with the CEO



The world is now at the start of a fourth industrial revolution (Industry 4.0), centered on IoT and big data. As systems for analyzing and utilizing the vast amounts of data generated by network-connected "things" are created, numerous new services are expected to emerge that will change industrial structures and society itself.

The core of these new services will be data processing and analysis, namely, cloud computing and Al. Furthermore, autonomous driving, smart fabs and other services with low tolerance for data transmission delay will require edge computing, in which data is processed somewhere physically closer to the user than in conventional

First industrial revolution 1760s-Mechanization improves productivity James Watt invents a new type of steam engine 100 years Second industrial revolution 1860s-Heavy industry and petrochemical industries develop, and major innovations occur in mass production and transport Mass transport using steam Farly automobiles 100 years Third industrial revolution 1970s-The use of semiconductors spreads. and computers enable automation 50 years Fourth industrial revolution 2010s-The arrival of the IoT and AI era, in which all kinds of things are connected via the internet

cloud computing. Technological innovation in semiconductors is an absolute necessity for the development of these services. In FPDs, in addition to TVs and mobile devices, new applications like augmented reality (AR), virtual reality (VR) and flexible displays are emerging. Accordingly, improving display resolution and energy efficiency is of growing importance.

As the technological requirements of semiconductors and FPDs grow more sophisticated and their applications broaden, our customers' needs are taking on new dimensions. We must now advance product development looking not only

to the challenges posed by next-generation technologies, but the next several generations, and work not just to enhance the performance of individual machines, but provide solutions that optimize entire production processes. Expectations are now rising for production equipment manufacturers to innovate on all fronts—from shortening lead times between R&D and mass production to creating new services using Al and big data.



For details on the innovation driving the evolution of semiconductors, please refer to pages 9 and 10.

Question

04

As customer needs change, how will Tokyo Electron leverage its strengths?

One of Tokyo Electron's greatest strengths is that it deals in not just hardware, software, process technology or services, but all four. Leveraging this strength, we will help customers improve their entire production processes and thereby enhance their production line operations.

First, using our diverse product lineup and process technologies, we will advance joint development with customers from an early stage to quickly provide solutions that take the entire production process into account. Last year, we established the new Process Integration Center as part of these efforts, and its initiatives are already generating positive feedback.

Second, by reinforcing support at customer factories and seamlessly linking them with our R&D divisions and business units, we will help our customers shorten lead times between semiconductor device development and mass production.

Third, building on the insight and data gleaned from our installed base of 66,000 units—among the largest in the industry—we will offer new services that present high added value for customers by, for example, increasing equipment uptime and production yields.

As customers' needs grow on multiple fronts, very few production equipment manufacturers worldwide can meet their growing expectations.

Interview with the CEO

■ Interview with the CEO

Interview with the CEO

Tokyo Electron is one of the few that can. If we leverage our innovative technological and support

capabilities, I am confident the opportunities for Tokyo Electron to grow and excel will only expand.

Question 5

Please tell us about Tokyo Electron's sustainability initiatives.

Employees are the source of sustainable corporate value creation and growth. Since I was appointed CEO, I have sought to ensure that Tokyo Electron enriches the lives of its employees and their families. To ensure that every employee is highly motivated and to secure outstanding people, we have introduced a new global human resources system and continue working to make job responsibilities clearer and evaluations fairer. Furthermore, we have adopted an incentive plan linked to medium-term performance as part of efforts to enable employees and management to work as one toward increasing corporate value. I have also visited factories and overseas Group companies to speak with our people there, actively seeking to deepen engagement with front-line employees. I am confident that these initiatives to bring out the very best performance in each employee will contribute to sustainable growth.

In addition, as the social responsibilities incumbent on companies increase, we hope to draw inspiration from the United Nations' Sustainable Development Goals (SDGs) and other standards to step up our ESG initiatives. Seeking to enhance governance efficacy, we have brought in a new outside director and are discussing long-term strategy from diverse viewpoints. Turning to the environment, in addition to reducing the environmental footprint of our own products, we are advancing initiatives to help reduce the power consumption of the semiconductor devices manufactured using our products.

Through such measures, we aim to ensure that Tokyo Electron is highly sustainable and fulfills its corporate social responsibilities.



For details on Tokyo Electron's ESG-related initiatives, please refer to pages 11–14 and our Sustainability Report 2018.



Question

06

What is your approach to using cash on hand?

Our greatest priority for cash on hand is investment in growth aimed at the ongoing creation of innovative technologies. We will focus on areas where we can effectively utilize Tokyo Electron's technologies and strengths and expect future market growth. Furthermore, we will put increased effort into R&D related to promising core technologies to maximize their potential.

Turning to shareholder returns, we have adopted a performance-linked dividend scheme and

set a target dividend payout ratio of 50%. For fiscal 2018, we paid an annual per-share dividend of ¥624, marking a record high for a fourth consecutive year. We will flexibly consider stock repurchases, taking a comprehensive view of such factors as investment needed for growth, cash on hand and the macroeconomic environment.

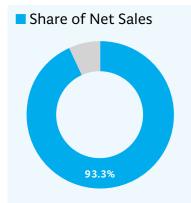
Going forward, we will continue to strive to sustainably increase corporate value and maximize shareholder value through profit growth.

Review of Operations and Business Outlook

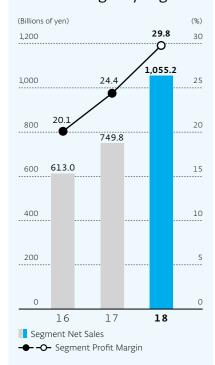
■ Review of Operations and Business Outlook

Review of Operations and Business Outlook

Semiconductor Production Equipment (SPE)



Net Sales and Profit Margin by Segment



Segment profit corresponds to income before income

taxes on the consolidated statements of income

2017 Business Environment

Investment in data center servers was brisk, backed by growing transmission volumes due in part to the spread of streaming video and other services. Supply of DRAM was especially tight, and in 3D NAND,¹ the use of SSD² in servers also grew. These factors led to major increases in capital investment aimed at expanding production. As a result, 2017 global capital expenditure for wafer fab equipment (WFE)³ grew 37% year on year to surpass US\$50 billion for the first time.

- 1 3D NAND: A new type of non-volatile memory in which memory cells are stacked vertically
- 2 SSD (Solid state drive): A high-volume data storage device that uses non-volatile memory
- 3 Wafer fab equipment (WFE): The semiconductor production process is divided into front-end production, in which circuits are formed on wafers and inspected, and back-end production, in which wafers are cut into chips, assembled and inspected again. WFE refers to the production equipment used in front-end production and in wafer-level packaging production.

Fiscal 2018 Business Overview

- > Segment net sales grew 40.7% year on year to ¥1,055.2 billion.
- By application, sales of equipment for DRAM and non-volatile memory more than doubled year on year.
- By product, investment in 3D NAND and multiple patterning, reflecting ongoing miniaturization, increased. Tokyo Electron's market share rose, leading to sales growth in the key fields of etch, deposition and cleaning. Sales of etch systems rose to 40% of the segment's total new equipment sales.
- Sales in the field solutions business (encompassing sales of parts and used equipment, modifications and maintenance services) rose 20.5% year on year to ¥251.0 billion due to significant growth in parts sales, mainly in South Korea, reflecting higher equipment utilization rates at customer facilities.
- The segment profit margin improved significantly, from 24.4% in the previous fiscal year to 29.8%, due in part to the increase in sales as well as a rise in the competitiveness of products in key fields.

Business Outlook

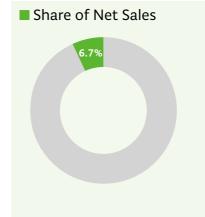
With the full-scale arrival of IoT, the use of data centers with high-speed processing and services that leverage big data is rapidly expanding. This expansion relies on semiconductors and is driving a boom in semiconductor demand. Reflecting this demand, the WFE market is expected to grow to over US\$60 billion in the near future. Tokyo Electron has positioned etch, deposition and cleaning systems as key medium-term growth fields, which are expected to see especially strong market expansion. By achieving technological differentiation in these fields, the Company aims to increase its profitability and market share.

As the number of layers in 3D NAND increases and the miniaturization of DRAM and logic chips continues, device structure is growing more complex and a wider range of materials is being used. To fabricate such devices, deposition technologies that form uniform films from a broad range of materials and etch and cleaning technologies that selectively and precisely remove such films are becoming more important than ever. Tokyo Electron is working to expand its market share in its three key fields by leveraging such strengths as its deep hole etch technologies for high aspect ratio features, surface modification and drying technologies that prevent pattern collapse caused by cleaning chemicals, and ALD/quasi-ALE⁴ technologies that enable atomic level film formation and removal.

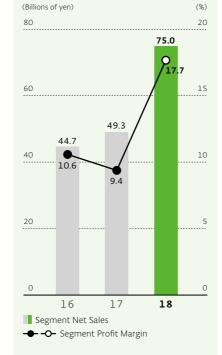
The advance of new technological generations will lead to even more formidable and complex technological challenges going forward. Tokyo Electron will leverage its lineup of equipment for a diverse range of processes to quickly develop and offer integration technologies that optimize multiple processes to one another. By taking part in joint development with customers from an early stage according to their respective technological roadmaps, the Company will advance business growth from a long-term perspective.

4 ALD (atomic layer deposition)/quasi-ALE (atomic layer etch): Atomic level film deposition and etch techniques

FPD Production Equipment



■ Net Sales and Profit Margin by Segment



Segment profit corresponds to income before income taxes on the consolidated statements of income.

2017 Business Environment

Investment in small- and medium-sized OLED panels for smartphones and other mobile devices was brisk. At the same time, investment in generation 10.5 large panels for TVs began. As a result, the equipment market for thin-film transistor (TFT) array processes, in which Tokyo Electron operates, grew about 30% from the previous year, reaching approximately US\$10 billion.

1 Thin-film transistor (TFT) array processes: The processes of manufacturing the substrates with the electric circuit functions that drive displays

Fiscal 2018 Business Overview

- > Segment net sales rose 52.0% year on year to ¥75.0 billion.
- The segment profit margin rose significantly, from 9.4% in the previous fiscal year to 17.7%.
- Customers continued to transition to highly profitable PICP^{TM2} etch systems for small- and medium-sized panels.
- Tokyo Electron used its track record in generation 10 panels to secure a large share of the market for generation 10.5 large-sized panel equipment.

2 PICP™: A plasma source that produces extremely uniform high-density plasma on panel substrates

Business Outlook

In the display market, technological innovation is expected in both products for mobile devices and for TVs. Accordingly, the market for TFT array process equipment, in which Tokyo Electron operates, is expected to remain firm through 2020. Within this overall market, Tokyo Electron aims to improve profitability and market share by leveraging its technological superiority.

In small- and medium-size panels for mobile devices, increases in display size are expected to drive continued expansion in panel area-basis demand. Despite undergoing recent market adjustments, demand for OLED is forecast to grow over the medium term, as it offers excellent performance (e.g. high resolution and low power consumption) and enables flexible displays. OLED production, however, requires more difficult etching and lengthier processes. In addition, new etch processes are emerging for flexible display production. In addition to PICPTM etch systems, which offer excellent processing uniformity, Tokyo Electron is working toward business growth by introducing BetelexTM, a new platform with higher productivity, and equipment for new processes.

Looking at large-sized panels for TVs, investment in generation 10.5 panels for 65-inch TVs has begun. Building on its track record of providing equipment for the mass production of generation 10 panels, Tokyo Electron is already securing business in this area and aims to flex its competitive strengths to win other customers' planned investment going forward. In addition, as Tokyo Electron's PICP™ etch systems currently boast overwhelming competitiveness for small- and medium-sized panels, we are beginning to roll out these systems for large-sized panels in preparation for investment in high-resolution 4K and 8K displays.

Furthermore, Tokyo Electron is well positioned to take advantage of the coming widespread adoption of OLED TVs. The Company's inkjet printing system offers drastically improved material efficiency compared with conventional evaporation systems. To build a robust position as the inkjet equipment market takes shape, Tokyo Electron is readying its business framework in this area with the delivery of systems to customers' development lines.

Innovation Drives the Evolution of Semiconductors

■ Innovation Drives the Evolution of Semiconductors

Innovation Drives the Evolution of Semiconductors

Semiconductor Production —A History of Innovation

In 1965, Dr. Gordon Moore, one of Intel's founders, made a prescient observation that eventually became Moore's Law. Six years later, Intel released the world's first commercial microprocessor, the Intel 4004. Over the following half century, through repeated technological innovation, semiconductor performance has continued to improve, with steadily higher circuit density realizing improved performance, such as increased capacity, speed and power efficiency.

Figure 1 illustrates the evolution of logic devices since 2000. In early planar poly-gates, strained silicon technology was introduced to improve channel mobility. Later, high-k¹/ metal gate technologies were introduced to reduce current leakage that arose due to miniaturization. To enhance pattern fidelity, circuit design transitioned from 2D layouts to combinations of simpler 1D layouts (Figure 2). As miniaturization continued beyond 45 nm, multiple patterning technologies were developed to compensate for the limits of lithography resolution, and FinFET structures were adopted to reduce short-channel effects. Going forward, with the advent of 5-nm technology and beyond, logic devices are expected to evolve into nanowire structures. In memory devices, the use of capacitors and transistors with 3D structures in DRAM have driven continued miniaturization, and the switch from planar NAND flash memory to 3D NAND has sidestepped the

limits of miniaturization (Figure 3).

Through the combination of new designs and materials and the creation of new production methods, semiconductors have continued to evolve. Today, production technology is approaching the physical limits of miniaturization, at the atomic level. The world's first commercial microprocessor, manufactured with 10-micron technology, contained approximately 2,300 transistors per chip. In contrast, the latest mass-produced chips—products of 14-nm technology—boast well over a billion transistors per chip. The gate length on these chips is approximately 20 nm, and the width of the fins (the channels) is just 8 nm. Going forward, each successive technology node will entail miniaturization by a few nanometers, or the size of ten or so atoms. Manufacturing such devices will require atomic-level control.

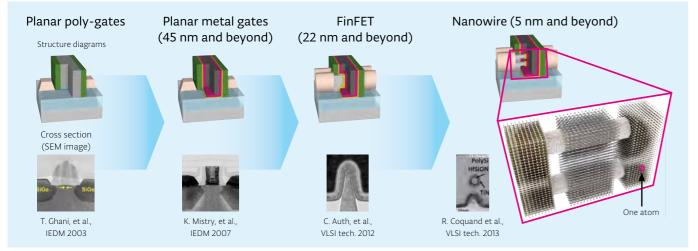
1 High-k: High dielectric constant film

Technological Barriers to Miniaturization

Miniaturization in semiconductor production is now facing new hurdles. The first of these is photolithography resolu-Today, however, the shortest wavelength available for use in mass production is 193 nm, more than 20 times the width

tion, a challenge that has emerged in recent years. Until now, miniaturization has advanced by using shorter wavelength light sources in exposure equipment to increase resolution.

Figure 1. The Evolution of Logic Device Transistor Structures



Devices evolved through changes in transistor materials and structure. Manufacturing requires atomic-level production technology.

the aforementioned fins. The use of immersion lithography technology, in which exposure is conducted in a liquid medium with a high refractive index, helps to improve resolution, but even this is insufficient to achieve the desired results.

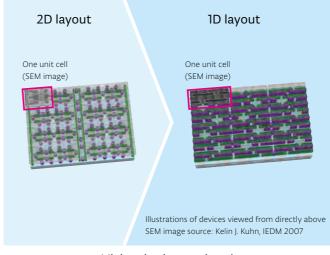
On top of this, aligning photomasks and wafers during patterning is also a challenge. In the latest logic and DRAM devices, transistors and other logic circuit elements are not only small, but arranged in complex configurations. If exposure alignment is off by a distance of just ten or so atoms, the densely arranged circuit elements will be interconnected inaccurately, leading to declines in processing precision.

Furthermore, at high-volume manufacturing sites, noise that always has a certain probability of occurring is becoming a more pronounced issue. The errors caused by such noise might not be problematic when lithography and etch processes are conducted just once. However, when lithography and etch processes are conducted multiple times on the same layer, these errors accumulate, leading to reduced yield. As miniaturization advances, these three challenges are expected to become even more serious. Solving them will be crucial to advancing to the 5-nm technology node and beyond.

Breakthroughs in **Production Technology**

To solve these challenges, a number of breakthrough production technologies are beginning to emerge.

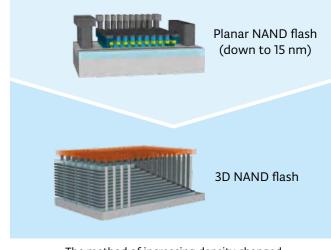
Figure 2. The Evolution of Logic Device Circuit Design



Miniaturization continued by changing to simpler, 1D layouts. A well-known example, which is already widely used in mass production, is multiple patterning technology. This approach uses process technologies—such as deposition, lithography, etch and cleaning—to supplement the resolution of exposure equipment. Patterns with several times the density achievable by the lithography resolution can now be formed by employing the litho-etch method, in which lithography and etch processes are performed repeatedly, or selfaligned patterning, in which repeated deposition and etch processes are performed after lithography. These technologies are expected to see continued application in coming technology nodes. In addition, technology known as selfaligned block (SAB), which increases tolerance for placement variance in lithography, is currently being developed. By taking advantage of differences in etch selectivity by material, this technology is expected to enable the processing only of the desired materials without the need for improved performance from exposure equipment.

To realize these patterning technologies, the further refinement of production technologies for each unit process is indispensable. These include atomic layer etch (ALE) and atomic layer deposition (ALD), which control etching and deposition at the atomic level (Figure 4), as well as drying technologies to prevent pattern collapse caused by cleaning chemicals. In addition, the unit processes that give the best performance individually do not always achieve the highest yields when combined. This means that integration technology, aimed at optimizing unit processes to one

Figure 3. The Evolution of NAND Flash Memory



The method of increasing density changed from planar miniaturization to vertical stacking.

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> Innovation Drives the Evolution of Semiconductors

■ Innovation Drives the Evolution of Semiconductors

Innovation Drives the Evolution of Semiconductors

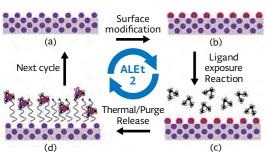
another, will only grow more important. Tokyo Electron provides equipment for a wide range of processes. Leveraging this strength, we are beginning to aggressively develop and offer integration technology solutions.

In addition to pattering technologies, EUV, a new type of light source for lithographic exposure, is approaching commercialization. In particular, the use of EUV in litho-etch processes (as explained above) is expected to reduce the

Figure 4: Atomic Layer Etch (ALE) and Atomic Layer Deposition (ALD)

ALE

A gas is adsorbed to the wafer surface, then the excess gas is purged and the adsorbed gas is reacted with another substance to etch the exposed atomic layer of the wafer. This process is repeated as many times as necessary.



Colin T. Carver, et al., ECS J. Solid State Sci. Technol. 2015 volume 4. issue 6. N5005-N5009: doi: 10.1149/2.0021506iss

ALD A gas is adsorbed to the wafer surface, then the excess gas is purged and the adsorbed gas is reacted with another substance to deposit an atomic layer on the wafer. This process is repeated as many times as necessary. Repeat cycle N times Purge Säynätjoki 8 May 2012, SPIE Newsroom DOI: 10 1117/2 1201204 004218

Column 01

Types of Multiple Patterning Technology

Multiple patterning technologies are broadly divided into litho-etch methods, in which lithography and etch processes are performed repeatedly on the same layer, and self-aligned patterning methods, in which repeated deposition and etch processes are performed after lithography. Litho-etch methods enable patterning density equivalent to that achievable based on the resolution of the lithography equipment multiplied by the number of litho-etch repetitions. This approach is well suited for reducing the pitch (the distance between features) of masks, such as those for forming

contacts to connect transistors and wiring, vias to bridge the spaces between wiring, cuts to break lines formed by self-aligned multiple patterning, and blocks to fill spaces. Self-aligned multiple patterning, meanwhile, is useful for reducing the pitch of periodic linespace patterns. These techniques achieve patterning equivalent to twice the lithography resolution when performed once, and four times the lithography resolution when performed twice, which is why these approaches are referred to as double patterning (SADP) and quadruple patterning (SAQP), respectively.

Litho-etch multiple patterning: Limited use of etch and deposition



Lithography 1











Self-aligned multiple patterning (SAMP): Performing etch/deposition numerous times





















Sidewall deposition 1 Sidewall etch back 1 Hard mask etch Mandrel B etch Sidewall deposition 2 Sidewall etch back 2

number of masks needed per layer, reducing placement error and thereby increasing yields (Figure 5). Tokyo Electron is working with exposure equipment suppliers, consortia and other partners to develop coater/ developers for EUV lithography. We report our progress every year at SPIE Advanced Lithography, the world's largest lithography conference, as we strive toward the adoption of EUV in mass production in the semiconductor industry. The combination of patterning technologies and

EUV is now pushing miniaturization toward the 5-nm

Beyond Miniaturization

technology node and beyond.

Having reached the atomic level, semiconductor miniaturization is gradually approaching its physical limits. Nevertheless, semiconductor performance will continue to improve. Going forward, technological innovation will continue to advance in forms other than miniaturization.

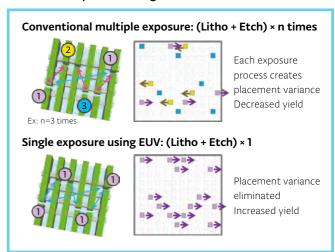
In memory devices, ferroelectric memory (FeRAM) has been seen as a promising new type of memory since research on scalable ferroelectric materials was published in 2011.2 In logic devices, research has begun into neuromorphic computers that employ new architectures known as non-von Neumann as well as quantum computers, which utilize quantum-mechanical phenomena. Neuromorphic computers require less energy to send electric signals than conventional devices. Because of this property, they are expected to reduce the power consumption of devices and be particularly suited to wearables and small IoT-related electronics. Quantum computers

excel in performing complex calculations on large volumes of information and are expected to be adopted in data center servers and similar electronics.

These new devices can only be commercialized through the application of existing semiconductor production technologies. Tokyo Electron is focusing not just on ways to continue miniaturization, but also on the technologies that will be required for continued evolution over the long term. In addition to our independent R&D initiatives, we are beginning to build an ecosystem for collaboration with consortia, academia and other equipment and material suppliers around the world. By creating new production technologies, Tokyo Electron will contribute to the continued evolution of semiconductors.

2 TS Böscke, et al., "Ferroelectricity in hafnium oxide thin films," Applied Physics Letters 99, 102903

Figure 5. The Advantages of EUV Lithography in Litho-Etch **Multiple Patterning Processes**



Column 02

Neuromorphic Computers

Neuromorphic computers are made by building chips that contain circuits that mimic human brain cells—neurons. When trained, these artificial neurons create synapses as they connect to one another, eventually forming a neural network. Compared with conventional semiconductor devices, such chips are expected to be more energy efficient. Moreover, if one neuron fails, its operation can instead be performed by another of the many neurons on the chip, making these chips highly reliable.



Conceptual illustration of a neural network

■ Message from the Chairman of the Board

Message from the Chairman of the Board

Pursuing Effective Governance to Increase Shareholder Value

Since the publication of Japan's Corporate Governance Code and the Ito Review, interest has been steadily rising in such topics as board composition and management effectiveness. Corporate governance is the foundation for realizing Tokyo Electron's goal of increasing corporate value over the short, medium and long terms. Since Tokyo Electron's initial listing on the Tokyo Stock Exchange in 1980, informed by Japanese and global standards, we have constantly pursued excellence in corporate governance.

Tokyo Electron uses the Audit & Supervisory Board System. This enables both quick decision making leveraging the insight of our executive directors and effective oversight provided by our non-executive directors, outside directors and the Audit & Supervisory Board. In this way, we achieve a healthy balance of aggressive management and careful supervision in corporate governance.

New initiatives in fiscal 2018, the year ended March 31, 2018, included setting up a meeting to discuss Tokyo Electron's medium- to long-term growth strategies to complement the regular meetings of the Board of Directors. At this meeting, internal and external directors and Audit & Supervisory Board members engaged in vigorous discussion. Furthermore, we welcomed a new outside director in June 2018, bringing the total number of outside directors and Audit & Supervisory Board members to six and further increasing the diversity of the Board of Directors. The new outside director, Mr. Michio Sasaki, brings insight and management experience at Keyence, a corporation well known for being highly profitable, and I am sure he will contribute greatly at Tokyo Electron. Through such efforts to deepen and bring additional perspectives to the discussions held at Board of Directors meetings, we hope to continue to enhance the Board's effectiveness. In addition, to solidify the Company's foundation for growth, we have strengthened our efforts to develop future leaders. Our Human Resource Department and the Nomination Committee jointly formulate succession plans for the CEO and ranking executive officers, while the Board of Directors oversees the implementation and examination of such plans.

To grow sustainably in the semiconductor and electronics industries, it is essential to rapidly develop innovative technologies and high-value-added products and to offer these to customers alongside high-quality service. The production equipment market is approaching a new growth phase, reflecting the increased use of IoT technologies and big data. As the chairman of the Board of Directors, I will continue working to build an effective corporate governance system and ensure the Board operates effectively in order to further enhance shareholder value.

Tetsuo Tsuneishi



Corporate Governance

■ Corporate Governance

Corporate Governance

Basic Stance

In an environment where over 80% of our sales come from overseas, Tokyo Electron regards maintaining governance as essential to becoming a truly global company that achieves sustainable growth.

To that end, Tokyo Electron strives to build frameworks to maximize the use of its worldwide resources. In addition to strengthening its management platform and technology base, the Company maintains a governance structure that will enable it to attain world-class profitability.

Tokyo Electron uses the Audit & Supervisory Board System, which consists of a Board of Directors and an Audit & Supervisory Board. Effective governance is achieved based on the supervision of management by the Audit & Supervisory Board.

Board of Directors

Roles and Responsibilities of the Board of Directors

The Board of Directors works to achieve sustainable growth and increase corporate value over the medium to long term based on its fiduciary responsibility to shareholders. The roles and responsibilities of the Board of Directors are as follows:

- (1) Establishing management strategy and vision
- (2) Making major operational decisions based on strategic direction
- (3) Engaging in constructive, open-minded debate

The Board of Directors seeks the active participation of those present in discussions in order to obtain a wide range of opinions, and supervises management and operational execution based on active debate.

The Board of Directors respects minority or opposing viewpoints, including opinions voiced by outside directors; revises the conditions for implementation or the content of proposals as necessary; and engages in extensive debate with the goal of reaching decisions based on consensus. However, emphasis is placed on making necessary decisions quickly to avoid missing opportunities.

Board Size and Independent Outside Directors

Tokyo Electron considers it essential to maintain a Board of Directors with the appropriate size to ensure high quality, active debate and the diversity expected of both executive directors and independent directors. The current Board of Directors consists of 12 directors, and Tokyo Electron believes this to be the appropriate size, at present, to achieve a good balance in terms of knowledge, experience and skills.

Tokyo Electron regards the active expression of opinions, not only by independent directors, but also by Audit & Supervisory Board members, as the cornerstone that supports the sound decision making of the Board of Directors. Currently, six out of the 17 participants in the Board of Directors meetings, including the Audit & Supervisory Board members, are outside members, consisting of three independent directors and three outside Audit & Supervisory Board members.

Does Tokyo Electron have these major components of corporate governance?

(As of July 1, 2018)

Compensation Committee	Yes	Composed of directors, including outside directors and excluding representative directors, or Audit & Supervisory Board members
Nomination Committee	Yes	Composed of directors, excluding the CEO, or Audit & Supervisory Board members
Outside directors	Yes	Three of the 12 directors are outside directors
Outside Audit & Supervisory Board members	Yes	Three of the five Audit & Supervisory Board members are outside Audit & Supervisory Board members
Executive officer system	Yes	
Disclosure of individual remuneration of representative directors	Yes	Disclosed since 1999
Annual performance-linked compensation system	Yes	
Medium-term performance-linked compensation scheme	Yes	Adopted in 2018
Stock options system	Yes	Does not apply to outside directors and Audit & Supervisory Board members
Retirement allowance system for executives	No	
Anti-takeover measures	No	

Tokyo Electron believes that the current Board of Directors meetings achieve an appropriate sense of productive tension and constructive debate due to the combined presence of executive directors, essential for making operational decisions, and outside members, who provide objectivity.

Nominations for Director and CEO

Tokyo Electron has established a Nomination Committee to ensure fairness and efficacy in management. The Nomination Committee proposes director candidates to the Board of Directors prior to their election at the General Meeting of Shareholders and also nominates CEO candidates for appointment by the Board of Directors. The Nomination Committee is composed of four directors and Audit & Supervisory Board members, including at least one outside Audit & Supervisory Board member; the CEO is not a member of the committee. The authority to propose the election or dismissal of the CEO or directors is entrusted to the Nomination Committee.

Director and CEO Compensation

Tokyo Electron's compensation policy prioritizes the following considerations.

- (1) Globally competitive composition and levels of compensation
- (2) Correspondence with short-term performance, sustainable growth and medium- and long-term increases in corporate value
- (3) Assuring management transparency and fairness as well as the appropriateness of compensation

In line with this policy, Tokyo Electron has adopted a director and executive officer compensation system that is closely linked to performance and shareholder value. The compensation of directors currently comprises a fixed basic wage and an annual performance-linked bonus. However, to realize further growth by better linking director compensation to medium-term corporate performance, Tokyo Electron has introduced a new, medium-term performance-linked compensation scheme from the year ending March 31, 2019.

To ensure management transparency and fairness as well as the appropriateness of compensation, Tokyo Electron maintains a Compensation Committee, which comprises three or more directors and includes at least one outside director. The Compensation Committee conducts an analysis of industry compensation levels and systems in and outside

Japan. Based on this analysis, the committee proposes a policy and system for the compensation of the Board of Directors and executive officers as well as individual compensation amounts for the representative directors.

Corporate Governance

In order to better link factors that increase corporate value and shareholder value to compensation, Tokyo Electron has designated the net income attributable to owners of the parent and return on equity (ROE) for the current period as the main calculation benchmarks in the annual performance-linked compensation system for the CEO and other directors. These are adjusted, as necessary, for extraordinary income/losses and other special factors.

In principle, annual performance-linked compensation consists of monetary compensation and share-based compensation (stock options); the ratio of these two components is roughly 1:1 for directors, and single year performance is appropriately reflected in the performance-linked compensation of the CEO and other directors. Share-based compensation is awarded in the form of stock options with the exercise price set at one yen per share, and a three-year vesting period from the date of allotment before the options may be exercised.

The medium-term performance-linked compensation comprises share-based compensation (performance shares) and is aimed at using shareholdings to align the perspectives of directors with those of shareholders and incentivize directors to increase corporate value. Medium-term performance-linked compensation is based on reference amounts calculated based on each director's position and duties. Compensation payouts vary from 0% to 150% of said reference amounts according to the attainment level of performance targets over the relevant three-year term. The operating margin, ROE and other performance indicators are used to appropriately link medium-term enhancement of corporate value with director compensation amounts.

Evaluation of the Effectiveness of the Board of Directors

Each year, based on a question-based evaluation survey filled out by the Board of Directors and Audit & Supervisory Board members, the Board of the Directors analyzes and evaluates its own effectiveness through discussions, mainly involving the outside directors and outside Audit & Supervisory Board members, as well as separate discussions involving the entire Board of Directors. The board then discloses a summary of the results.

■ Corporate Governance

Corporate Governance

At meetings of the Board of Directors, directors and Audit & Supervisory Board members actively engage in discussion based on their diverse viewpoints and experiences. Important items are examined in terms of risk, openly debated and considered carefully. In fiscal 2018, to complement Board of Directors meetings, Tokyo Electron held an off-site meeting focused on operational strategy and vision. Turning to the Board's internal committees, the Nomination Committee reported on initiatives based on succession plans, and the Compensation Committee made proposals to better link compensation with medium-term performance. Tokyo Electron thus believes that its Board of Directors is appropriately carrying out its role as defined in the Corporate Governance Guidelines, namely (1) Establishing management strategy and vision and (2) Making major operational decisions based on strategic direction. Accordingly, Tokyo Electron believes that the Board of Directors, including the Nomination Committee and Compensation Committee, is functioning effectively.

Going forward, to deepen its discussions of Tokyo Electron's medium- and long-term vision and growth strategy, in addition to items for resolution and reports, the Board of Directors will continue working to enrich the items brought up for discussion at its meetings. Furthermore, by providing ample opportunities for discussion and debate in which outside directors and outside Audit & Supervisory Board

members are the main participants, Tokyo Electron will strive to ensure appropriate, meaningful decision making based on highly diverse views. In addition, the Board of Directors will continue to consider its composition, including the ratio of outside members and diversity, such as that of gender and nationality.

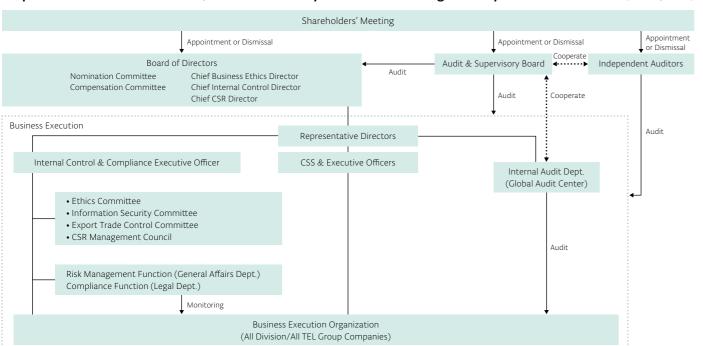
Audit & Supervisory Board

The Audit & Supervisory Board currently consists of five members and includes three outside Audit & Supervisory Board members. Two members are full-time. The full-time Audit & Supervisory Board members collect information through onsite surveys, and the board maintains appropriate coordination with the Internal Audit Department and the independent auditors as part of a structure that enables Audit & Supervisory Board members to obtain all information necessary for audits.

Moreover, the composition of Audit & Supervisory Board members provides a good balance of knowledge required for operational audits and accounting audits, including financial and accounting knowledge, legal knowledge, and audit experience at other companies. Tokyo Electron thus believes its Audit & Supervisory Board members are able to perform their auditing functions effectively.

Corporate Governance Framework, Internal Control System and Risk Management System





Internal Control System and Risk Management

Basic Stance

In order to enhance the Tokyo Electron Group's corporate value and remain accountable for our actions to our stakeholders, we are making efforts to strengthen effective internal control. This involves implementing practical measures that are in line with the Fundamental Policies concerning Internal Controls within the Tokyo Electron Group, set out by Tokyo Electron's Board of Directors. We also annually evaluate our internal control over financial reporting based on the Financial Instruments and Exchange Act of Japan.

Risk Management System

To more effectively strengthen the internal control and risk management systems of the entire Group, Tokyo Electron has established a dedicated risk management unit within the General Affairs Department of the corporate headquarters. This unit analyzes the risks faced by the Group and identifies material risks. It then monitors the management of such risks while supporting and implementing risk management activities. The unit also regularly reports the status of risk management activities to the Audit & Supervisory Board members and the Board of Directors.

In fiscal 2018, the Group reassessed the material risks in its operating environment. For each risk determined to be material, the status of risk management at the responsible divisions was reconfirmed. Going forward, the Group will continue these initiatives to enhance the efficacy of its risk management framework.

Auditing by the Internal Audit Department

The Global Audit Center of the corporate headquarters is the Group's internal audit department. This Center is responsible for auditing business activities, compliance and systems at domestic and overseas Group companies and business units (BUs) in accordance with each fiscal year's auditing plan. In addition, the Group's internal control over financial reporting based on the Financial Instruments and Exchange Act of Japan was evaluated as effective by the independent auditors in fiscal 2018.

At operating divisions where issues have been identified through audits and assessments, the Global Audit Center monitors progress and provides necessary guidance for improvement.

Business Continuity Plans (BCPs)

Corporate Governance

The Tokyo Electron Group began building business continuity plans in 2003. After the Great East Japan Earthquake, the Group completely reworked these plans to be more effective and include provisions for restoring operations after crises, focusing on major business sites. As examples of specific initiatives, the Group has put considerable effort into such preparations for disasters as stockpiling emergency supplies (including food and drinking water), reinforcing essential infrastructure, rebuilding the safety confirmation system, creating manuals, and implementing drills and employee training. Furthermore, to meet its responsibilities as an equipment manufacturer, the Group pursues ongoing efforts to improve its BCPs, including taking steps to facilitate early recovery and alternate production.

When the Kumamoto Earthquake struck in April 2016, the Group was able to respond with speed and precision based on the BCP it had prepared. In addition, since fiscal 2018, the Group has been advancing seismic reinforcement construction at its major business sites.

Information Security Management

To ensure the appropriate management of information assets, the Group has an information management framework centered on its Information Security Committee, which is composed of representatives from departments across the Group.

Rules concerning the handling and protection of such sensitive information as trade secrets and personal information are formulated based on the Information Security Committee's policy and applied throughout the Group. An e-learning system is used to educate and promote awareness of these rules among Group employees and executives.

Additionally, the Group has a reporting system for both actual and potential cases (jointly referred to as "incidents") of information leakage. Reported incidents are quickly settled and then analyzed. Based on such analyses, recurrence prevention measures are implemented throughout the Group.

In order to mitigate emerging cyber security threats, the Group examines and undertakes rational countermeasures as necessary. The Group also has in place systems to detect targeted threats that utilize social engineering as well as a supervisory framework to prevent damage.

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■ Corporate Governance

Corporate Governance

Business Ethics and Compliance

Basic Stance

Stakeholder trust is the cornerstone of business activities. In order to maintain trust, it is necessary to continuously act in rigorous conformity to business ethics and compliance. In line with the Fundamental Policies concerning Internal Controls within the Tokyo Electron Group, all Group executives and employees are required to maintain high standards of ethics and to act with a clear awareness of compliance.

Business Ethics

In 1998, Tokyo Electron formulated the Code of Ethics of the Tokyo Electron Group as a set of uniform standards to govern all of its global business activities. In the same year, the Company appointed a Chief Business Ethics Director and established the Ethics Committee, which is responsible for promoting business ethics awareness throughout the Tokyo Electron Group. The Ethics Committee comprises the Chief Business Ethics Director, the Ethics Committee Chairman, and presidents of major Group companies in and outside Japan. The members meet semiannually, report on ethicsrelated issues facing each company, and discuss measures to further improve ethical behavior and compliance.

The Code of Ethics is reviewed in response to changes in the expectations of society. In January 2015, an anti-corruption statement was added to its introduction based on Principle 10 of the United Nations Global Compact, which concerns working against corruption including extortion and bribery. In August 2016, the Group revised the Code of Ethics in light of social changes and the Code of Conduct of the RBA®1.

The Tokyo Electron Group's Code of Ethics and related explanations and Q&A sections are published in Japanese, English, Korean and Chinese and disclosed on the intranet to enable all Group executives and employees, including those overseas, to view them at any time. The Code of Ethics is also publicly accessible from the corporate website.

1 RBA is a registered trademark of the Responsible Business Alliance.



The Code of Ethics of the Tokyo Electron Group

Compliance System

Tokyo Electron has appointed an Internal Control & Compliance Executive Officer from among its executive officers to raise awareness of compliance across the Group and further improve Group-wide compliance. Each Group company has also drawn up its own compliance regulations, setting out basic compliance-related requirements in line with the Code of Ethics. The compliance regulations are intended to ensure that all individuals who take part in the business activities of the Tokyo Electron Group clearly understand the pertinent laws and regulations, international standards and internal company rules, and consistently apply these rules in all of their activities.

Compliance Education

Through the Group's e-learning system, we provide webbased training programs covering the basics of compliance, export-related compliance, protection of personal information, the Act for Subcontracting and other topics. All executives and employees are required to complete these programs. In addition, other web-based programs tailored to specific positions and job roles are also available, including those on insider trading and the Social Security and Tax Number System.

We also have an online quiz-based business ethics and compliance education course, launched in fiscal 2014, for all Group executives and employees. Updated yearly, the guiz is intended to maintain compliance awareness throughout the Group and disseminate the latest information.

Furthermore, in fiscal 2018, we implemented a test to check employee understanding of compliance, including anti-corruption and anti-bribery issues, in response to increased enforcement of anti-corruption law around the world. To deepen understanding of these topics, we held inperson training for department vice presidents and similar level managers that focused on preventing corruption and bribes to foreign government officials as well as in-person training for Corporate Directors and executive officers that focused on the management of overseas subsidiaries

Internal Reporting System

The Tokyo Electron Group has an internal reporting system that employees can use to report any activity suspected of being in breach of laws, regulations or business ethics. An ethics hotline and a compliance hotline have been established to receive reports from all Group companies, and each overseas location also has its own reporting system. In fiscal 2018, to further facilitate reporting, the Group set up an external reporting hotline as well as hotlines for reporting

from business partners. In all instances, the system ensures that whistleblowers remain anonymous and are protected from any disadvantage or repercussions.

There were no reports or cases of non-compliance with laws, regulations, or principles of ethics in fiscal 2018 that could have had a material impact on the Group's business or local communities.

Promoting Dialog with Investors

Basic Stance

Tokyo Electron endeavors to provide opportunities for constructive dialog with growing numbers of investors around the world to contribute to the Company's sustainable growth and increase corporate value over the medium and long term. Furthermore, to the extent that this is reasonable and possible, the Company places emphasis on having the Chairman of the Board and CEO communicate with investors through direct dialog.

IR Activities

Striving to maintain dialog with investors, Tokyo Electron maintains a dedicated Investor Relations Department under the direct control of the CEO. The Chairman of the Board and CEO serve as spokespersons for the Company at such events as earnings release conferences and medium-term management plan briefings for securities analysts and institutional investors, IR conferences in and outside Japan, and individual meetings.

The spokespersons for the IR Department hold individual meetings with investors and periodically relay the opinions of investors at these events to the Chairman of the Board and CEO so that feedback can be of use in management.

Shareholders' Meeting

Corporate Governance

Tokyo Electron schedules its shareholders' meeting to avoid days on which many such meetings are concentrated as part of its measures to vitalize these meetings and to promote smooth and efficient voting. The Company also mails a Notice of Annual General Meeting of Shareholders to shareholders more than three weeks in advance of the meeting and discloses notices on its website before they are mailed, striving to provide shareholders with information as early as possible. Shareholders are free to cast their votes via the internet, and Tokyo Electron participates in the web based voting platform for institutional investors operated by ICJ, Inc.

To supplement the above shareholder meeting-related initiatives, Tokyo Electron's website carries the resolutions, voting results and presentation materials of shareholders' meetings.



For more details on our corporate governance, please refer to the Tokyo Electron Corporate Governance Guidelines vww.tel.com/about/cg

Third-Party Recognition

Tokyo Electron has been selected for inclusion in world-leading environmental, social and governance (ESG) investment indices.

In fiscal 2018, Tokyo Electron was once again selected for inclusion in the DJSI¹ Asia Pacific 2017, the FTSE4Good² Global Index and MSCI World ESG Leaders Index. The Company was also selected for the FTSE Blossom Japan Index and MSCI Japan ESG Select Leaders Index, two ESG indices selected by Japan's Government Pension Investment Fund (GPIF).

- 1 DJSI (Dow Jones Sustainability Indices): ESG investment indices developed by U.S.-based S&P Dow Jones Indices LLC and Switzerland-based RobecoSAM AG. The Asia Pacific index covers
- 2 FTSE4Good: An index related to environmental performance and corporate social responsibility developed by the U.K.-based FTSE Group

MEMBER OF Dow Jones Sustainability Indices In Collaboration with RobecoSAM @



2018 Constituent MSCI MSCI ESG Leaders Indexes



Directors, Audit & Supervisory Board Members and Executive Officers (As of July 1, 2018)

Directors •



Tetsuo Tsuneishi Representative Director



Sadao Sasaki Corporate Director



Charles Ditmars Lake II* Corporate Director Chairman and Representative Director, Aflac Life Insurance President, Aflac International Incorporated



Toshiki Kawai Representative Director President & CEO

Tatsuya Nagakubo

Corporate Director

Business Ethics, CSR

Internal Control.

Michio Sasaki* Corporate Director Director, iROHA Co., Ltd.



Hirofumi Kitayama Corporate Director

Kiyoshi Sunohara

Corporate Director



Masami Akimoto Corporate Director



Tetsuro Hori Corporate Director



Tetsuro Higashi Corporate Director Corporate Advisor



Hiroshi Inoue* Corporate Director Executive Advisor Tokyo Broadcasting System Television Inc.

* Outside Director

Audit & Supervisory Board Members



Yoshiteru Harada Audit & Supervisory Board Member



Yoshikazu Nunokawa Audit & Supervisory Board Member



Takatoshi Yamamoto* Audit & Supervisory Board Memher



Ryuji Sakai* Audit & Supervisory Board Member Attorney at law, Nagashima Ohno & Tsunematsu



Kyosuke Wagai* Audit & Supervisory Board Member Certified Public Accountant, Wagai CPA Office

*Outside Audit & Supervisory Board Member

Executive Officers

Tetsuo Tsuneishi

Chairman of the Board

Toshiki Kawai

President & CEO, GM, Corporate Innovation Division

Hirofumi Kitayama

EVP & GM, EHS, Quality, Procurement, Production Technology, Leader, Business Innovation Project

Masami Akimoto

EVP & GM

Tetsuro Hori

EVP & GM, Special Mission, Subleader, Business Innovation Project

Sadao Sasaki

EVP & GM, Development & Production 1st Division President, Tokyo Electron Technology

Tatsuya Nagakubo

SVP & GM, Human Resources, General Affairs, CSR Division, Legal, Chairman of Ethics Committee

Kiyoshi Sunohara

SVP & GM, Field Solutions Business Division, Subleader, Business Innovation Project

Hideyuki Tsutsumi

SVP & GM, Corporate Innovation Division, Corporate Marketing

Takeshi Okubo

SVP & GM, Global Sales Division

Barry Mayer

SVP & GM, Global Strategy

David Brough

SVP & GM, Global Strategy President, Tokyo Electron Europe Ltd.

Seisu Ikeda

SVP & GM, Account Sales Division

Kenji Washino

SVP & GM, Backend Process **Business Division**

Yoshinobu Mitano SVP & GM, SPE Business Division

Yoshifumi Tahara SVP & GM, Development & Production 4th Division

Masaki Yoshizawa

VP & GM, Strategy

Hiroshi Kawamoto

VP & GM, Finance Division

Takeo Sasaki

VP & GM, Export & Logistics Control Division

Yutaka Nanasawa

VP & GM, IT Division President, TEL Solar Services AG

VP & GM, CTSPS BU

Keiichi Akiyama

Isamu Wakui

VP & GM, ES BU

Hiroshi Ishida

VP & GM. TFF BU

Tsuguhiko Matsuura

VP & GM. FPD Business Division

Masayuki Kojima

VP & GM, Development & Production 2nd Division President, Tokyo Electron Miyagi Ltd.

Shinichi Hayashi

VP & GM, Development & Production 3rd Division, Deputy GM, Corporate Innovation Division President, Tokyo Electron Kyushu Ltd.

Toshihiko Nishigaki

VP & GM, Deputy GM, Corporate Innovation Division, Corporate Marketing, Information Technology President, TEL FSI, Inc.

Shingo Tada

VP & GM, Deputy GM, Account Sales Division

Masahiro Morita

VP & GM, Account Sales, Global Sales

> EVP: Executive Vice President SVP: Senior Vice President VP: Vice President GM: General Manager

Financial Review

Financial Review

Sales and Income

Operating Environment

The overall world economy in fiscal 2018 held firm, with the United States and Europe seeing ongoing steady economic recovery, while the economies of China and Asia were solid.

In the electronics industry, investment in data center servers was brisk, reflecting growth in high-volume data transmission driven by streaming video and other cloud-based services. Demand for semiconductors, especially memory, increased substantially. As a result, the wafer fab equipment market, in which Tokyo Electron operates, grew 37% year on year, surpassing US\$50 billion for the first time ever. At the same time, the display industry saw capital investment aimed at OLED panels for mobile devices and the start of capital investment in large generation 10.5 panels. Accordingly, the market for flat panel display (FPD) production equipment was brisk, growing 40% year on year to approach US\$20 billion.

Sales

Net sales in fiscal 2018 rose 41.4% year on year to ¥1,130.7 billion. This reflected the favorable market environment, expanding demand for cutting-edge semiconductor production equipment (SPE) and increased demand for parts and used equipment sales, modifications and maintenance services. By segment, net sales in the SPE segment grew 40.7% year on year to ¥1,055.2 billion. Net sales in the FPD production equipment segment grew 52.0% year on year to ¥75.0 billion. For details on performance by segment, please refer to Review of Operations and Business Outlook on page 8. Furthermore, net sales in the field solutions

business (encompassing sales of parts and used equipment, modifications and maintenance services) rose 20.5% year on year to ¥251.0 billion, accounting for 22.2% of consolidated net sales.

Gross Profit, SG&A Expenses and Operating Income

Gross profit in fiscal 2018 was up 47.4% year on year to ¥475.0 billion, reflecting the growth in net sales. The gross profit margin rose 1.7 percentage points to 42.0%, mainly due to increased sales of high-value-added products.

SG&A expenses rose 16.4% year on year to ¥193.8 billion, but the ratio of SG&A expenses to consolidated net sales dropped 3.7 percentage points from the previous fiscal year to 17.1% in the fiscal year under review. The Group also steadily advanced cost control measures, as targeted under the medium-term management plan. Consequently, operating income increased 80.6% year on year to ¥281.1 billion, and the operating margin rose 5.4 percentage points to 24.9%, greatly exceeding the previous record high.

R&D Expenses

R&D expenses were up 15.9% year on year to ¥97.1 billion. The main cause of this rise was the reinforcement of R&D in the fields of etch, deposition and cleaning systems, in which the Company is working to expand its market share under the medium-term management plan. Tokyo Electron focused on R&D aimed at enhancing the competitiveness of future products. This included developing innovative technologies to not only enhance the performance of individual products, but optimize entire processes, as well as making products more intelligent.

Tokyo Electron regards advanced technological prowess as the source of its growth. Accordingly, the Company actively invests in growth to produce next-generation products, mainly focusing on fields in which market growth is forecast. In the fiscal year under review, Tokyo Electron increased its market share in key fields related to DRAM and 3D NAND flash memory manufactured using cutting-edge technology, making progress toward the goals of the medium-term management plan.

In FPD production equipment, Tokyo Electron released new products for generation 10.5 panels, which are expected to see rapid market growth going forward.

Other Income (Expenses) and Net Income Attributable to Owners of Parent

During fiscal 2018, net other expenses came to ¥5.9 billion, reflecting ¥3.1 billion in extraordinary loss due to the transition to a defined contribution pension plan and ¥0.9 billion in loss on impairment of goodwill. As a result, income before income taxes came to ¥275.2 billion, up 84.6% year on year. Net income attributable to owners of the parent totaled ¥204.3 billion in fiscal 2018, up 77.4% from fiscal 2017. Net income per share rose 77.4% year on year to ¥1,245.48.

Comprehensive Income

In fiscal 2018, Tokyo Electron recognized comprehensive income of \pm 206.1 billion, up from \pm 119.9 billion in fiscal 2017. This was mainly due to the \pm 204.3 billion in net income, \pm 6.3 billion in unrealized gains on

investment securities related to strategically held shares, and ¥4.4 billion in loss on remeasurements of defined benefit plans due to a decrease in the discount rate used to calculate retirement benefits as a result of falling interest rates.

Dividend Policy and Dividends

It is the policy of Tokyo Electron to pay dividends on the basis of business performance. The Company aims for a payout ratio of 50% of net income attributable to owners of the parent. Furthermore, with an eye to ensuring stable dividends, a lower limit of ¥150 per share has been set on annual dividends.¹ Reflecting the Company's strong sales and profit growth, Tokyo Electron paid annual dividends for fiscal 2018 of ¥624 per share (for a payout ratio of 50.1%), its highest ever. Going forward, the Company will seek to build world-class profitability and reciprocate the support of share-holders by delivering profit growth.

1 This lower limit may be revised in the event that the Company does not generate net income for two consecutive fiscal years.

Financial Position and Cash Flows

Assets, Liabilities and Net Assets

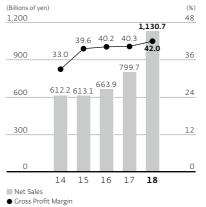
Assets

Current assets increased ¥221.1 billion from the end of the previous fiscal year to ¥997.1 billion, reflecting a ¥58.5 billion increase in cash on hand¹ due to the generation of ¥139.7 billion in free cash flow,² a ¥107.8 billion increase in inventories due to increased production to meet robust demand from semiconductor and

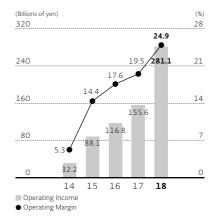
(Billions of yen)

Sales and Income	2014	2015	2016	2017	2018
Net sales	¥612,170	¥613,125	¥663,949	¥799,719	¥1,130,728
Gross profit	201,892	242,774	267,210	322,291	475,032
Gross profit margin	33.0%	39.6%	40.2%	40.3%	42.0%
Selling, general and administrative expenses	169,687	154,661	150,421	166,594	193,860
Operating income	32,205	88,113	116,789	155,697	281,172
Operating margin	5.3%	14.4%	17.6%	19.5%	24.9%
Income (loss) before income taxes	(11,756)	86,828	106,467	149,116	275,242
Net income (loss) attributable to owners of parent	(19,409)	71,888	77,892	115,208	204,371

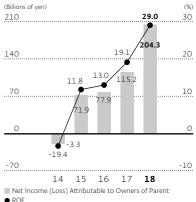
■ Net Sales and Gross Profit Margin



Operating Income and Operating Margin



■ Net Income (Loss) Attributable to Owners of Parent and ROE



ROE
 ROE = Net income (loss) attributable to owners of parent /
 Average total equity x 200.

Financial Review

Financial Review

FPD manufacturers, and a ¥25.7 billion increase in trade notes and accounts receivable. The turnover period for trade notes and accounts receivable in fiscal 2018 was 52 days, compared with 61 days in fiscal 2017, and the inventory turnover period in fiscal 2018 was 111 days, compared with 108 days in fiscal 2017.

Net property, plant and equipment increased ¥25.5 billion year on year to ¥125.9 billion. This was largely due to ¥45.6 billion in new fixed asset acquisitions, including part of the construction costs for a new logistics building being constructed at the Miyagi Plant to increase productivity as well as R&D equipment acquired to bolster the development of next-generation technologies.

Investments and other assets increased ¥4.5 billion year on year to ¥85.6 billion.

As a result, total assets as of March 31, 2018 stood at ¥1,208.7 billion, up ¥251.2 billion year on year.

- 1 Cash on hand: Cash and cash equivalents + Short-term investments with original maturities of less than one year
- 2 Free cash flow: Cash flows from operating activities + Cash flows from investing activities (excluding changes in short-term investments with original maturities of less than one year)

Liabilities and Net Assets

Current liabilities increased ¥120.6 billion from the end of fiscal 2017 to ¥368.4 billion at the end of fiscal 2018. This was mainly due to a ¥32.2 billion increase in customer advances, a ¥29.3 billion increase in trade notes and accounts payable, a ¥12.6 billion increase in accrued employees' bonuses and a ¥34.9 billion increase in income taxes payable.

Non-current liabilities increased ¥5.0 billion year on vear to ¥68.7 billion.

Net assets came to ¥771.5 billion at the end of fiscal 2018, up ¥125.5 billion from the end of fiscal 2017. This was mainly due to a ¥122.0 billion increase in retained earnings, reflecting the recording of ¥204.3 billion in net income attributable to owners of the parent and ¥82.2 billion paid in cash dividends (¥36.7 billion for the fiscal 2017 year-end dividend and ¥45.4 billion for the fiscal 2018 interim dividend).

As a result, the equity ratio fell 3.7 percentage points year on year to 63.5% at the end of March 2018. ROE climbed to 29.0% from 19.1% in fiscal 2017.

Capital Expenditures¹ and Depreciation and Amortization²

Capital expenditures totaled ¥45.6 billion in fiscal 2018, a 120.3% year-on-year increase. Major expenditures included the acquisition of R&D machinery and equipment in order to strengthen key areas in the SPE business.

Depreciation and amortization increased 15.4% to ¥20.6 billion.

- 1 Capital expenditures represent only the gross increase in property, plant and equipment.
- 2 Depreciation and amortization does not include amortization of goodwill or losses on impairment.

Cash Flows

Cash Flows

The balance of cash and cash equivalents at the end of March 2018 stood at ¥257.8 billion, an increase of ¥93.5 billion from the end of fiscal 2017. Cash on hand, which consists of cash and cash equivalents as well as short-term investments with original maturities of less than one year not included in cash and cash equivalents, increased ¥58.5 billion year on year to ¥373.8 billion at the end of March 2018. Cash flows during the fiscal year under review were as follows.

Net cash provided by operating activities came to ¥186.5 billion, up ¥49.6 billion from fiscal 2017. Major contributors were ¥275.2 billion in income before income taxes, a ¥31.6 billion increase in customer advances, a ¥28.5 billion increase in trade notes and accounts payable, and ¥20.6 billion in depreciation and amortization. Major outflows included a ¥109.8 billion increase in inventories, ¥49.7 billion in income taxes paid, and a ¥25.9 billion increase in trade notes and accounts receivable.

Net cash used in investing activities was ¥11.8 billion, compared with ¥28.8 billion used in the previous fiscal year. This was mainly due to ¥41.7 billion used as payment for purchases of property, plant and equipment and an inflow of ¥35.0 billion due to a net decrease in short-term investments.

Net cash used in financing activities came to ¥82.5 billion, compared with ¥39.3 billion in fiscal 2017. This was mainly attributable to ¥82.2 billion in dividends paid.

Millions of yer

2016

¥ 69,398

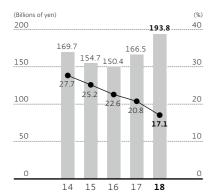
(150,014)

(138,601)

95,638

	Millions of yen								
Financial Position	2014	2015	2016	2017	2018				
Total current assets	¥621,492	¥670,883	¥617,416	¥775,938	¥ 997,102				
Net property, plant and equipment	112,344	106,896	96,317	100,441	125,952				
Total investments and other assets	94,756	98,375	79,635	81,067	85,650				
Total assets	828,592	876,154	793,368	957,447	1,208,705				
Total current liabilities	170,510	172,812	166,061	247,770	368,452				
Total liabilities	237,978	234,991	229,129	311,447	437,195				
Total net assets (Total shareholders' equity)	590,614	641,163	564,239	645,999	771,509				

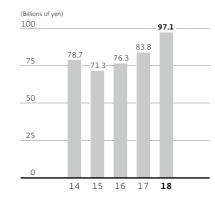
■ Selling, General and Administrative Expenses and Ratio to Net Sales



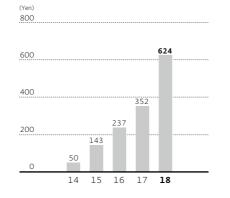
■ Selling, General and Administrative Expenses

• Ratio to Net Sales

■ R&D Expenses



■ Cash Dividends per Share



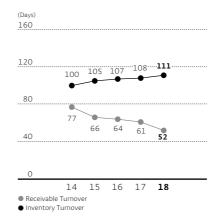
Receivable Turnover and Inventory Turnover

Cash flows from operating activities

Cash flows from investing activities

Cash flows from financing activities

Cash and cash equivalents at end of year



Capital Expenditures and Depreciation and Amortization

2014

¥ 44.449

(19,599)

104,797

(187)

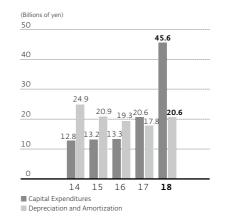
2015

¥ 71,806

155,738

(18,214)

317,632



Cash on Hand

2017

¥136,948

(28,893)

(39,380)

164,366

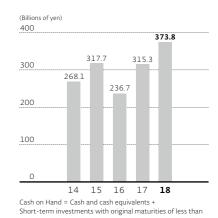
2018

¥186,582

(11,833)

(82,549)

257,877



Financial Section Investor Information

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Financial Review

Business-Related and Other Risks

The following risks may have a material impact on Tokyo Electron's business performance, stock price, or financial position.

(1) Impact from Changes in the Semiconductor Market

Tokyo Electron has achieved a high profit margin by concentrating resources in high-tech fields, including semiconductor production equipment, where technological innovation is rapid but Tokyo Electron can effectively use its strengths. Although technological change is responsible for the semiconductor market's rapid growth, Tokyo Electron has actively undertaken structural reforms to be able to generate profits under any circumstances, including when the market contracts temporarily due to imbalance of supply and demand. However, order cancellations, excess capacity and personnel and increased inventories resulting from an unexpectedly large market contraction, losses from bad debts resulting from the worsening of a customer's financial position, and supply shortages resulting from the worsening of a supplier's management situation, could adversely affect Tokyo Electron's business performance considerably.

(2) Impact from Concentration of Transactions on Particular Customers

Tokyo Electron has been successful at increasing transactions with the leading semiconductor manufacturers worldwide, including those in Japan, through the provision of products featuring outstanding, cutting-edge technology and of services offering a high level of customer satisfaction. However, Tokyo Electron's sales may from time to time be temporarily concentrated on particular customers due to the timing of large capital investments of major semiconductor manufacturers. The resulting escalation in sales competition could adversely affect Tokyo Electron's business performance.

(3) Impact from Research and Development

Through ongoing and proactive R&D investment and activities in cutting-edge technologies—miniaturization, vacuum, plasma, thermal processing, coating/developing, cleaning, wafer-transfer and clean technologies—Tokyo Electron has created advanced technologies. At the same time, by quickly bringing to market new products incorporating these technologies, Tokyo Electron has successfully captured a high market share in each of the product fields it has entered and generated a high profit margin. However, delays in the launch of new products and other factors could adversely affect Tokyo Electron's business performance.

(4) Safety-Related Impact

Tokyo Electron's basic philosophy is to always bear in mind safety and health in the execution of business activities, including development, manufacturing, sales, services and management. In accordance with this philosophy, Tokyo Electron works actively and continuously to improve the safety of its products and to eliminate any harmful impact on health. However, harm to customers, order cancellations or other circumstances resulting from safety or other problems related to Tokyo Electron's products could adversely affect Tokyo Electron's business performance.

(5) Impact from Quality Issues

Tokyo Electron actively develops outstanding, cutting-edge technologies for incorporation in new products that are brought quickly to market. At the same time, Tokyo Electron works to establish a quality assurance system, efforts that include obtaining ISO 9001 certification, as well as to establish a world-class service system. These actions have resulted in a large number of customers adopting Tokyo Electron's products. However, because Tokyo Electron's products are based on cutting-edge technologies, and due to other factors, many of the technologies developed are in unfamiliar fields. The occurrence of unforeseen defects or other issues could adversely affect Tokyo Electron's business performance.

(6) Impact of Intellectual Property Rights

In order to distinguish its products and make them more competitive, Tokyo Electron has promoted its R&D strategy for the early development of cuttingedge technologies together with its business and intellectual property strategies. This approach has enabled Tokyo Electron to obtain sole possession of many proprietary technologies that have been instrumental to the Company's ability to capture a high market share and generate high profit margins in each of its product fields. Tokyo Electron's products incorporate and optimize many of these proprietary cutting-edge technologies. There may be cases in which, by avoiding the use of third-party technologies and intellectual property rights, Tokyo Electron's business performance could be adversely affected.

(7) Impact of Fluctuating Foreign Exchange Rates

Success in the development of overseas operations has increased the share of sales generated overseas. As a rule, Tokyo Electron conducts export transactions on a yen basis to avert exposure to foreign currency risks. However, some exports are denominated in foreign currencies. In these cases, Tokyo Electron hedges foreign currency risk by using a forward foreign exchange contract when an order is received or by other means. However, foreign exchange rate risks can arise from fluctuations in prices due to sudden foreign exchange movements, which could have an indirect adverse effect on Tokyo Electron's business performance.

(8) Influence of Corporate Acquisitions

As part of its business strategy, Tokyo Electron conducts corporate acquisitions in order to expand into new business areas, secure new technologies and business platforms, and strengthen the competitiveness of existing businesses. The Company conducts due diligence and carefully deliberates each specific acquisition. However, in the event that the results following an acquisition do not meet expectations, Tokyo Electron's business performance could be adversely affected.

(9) Impact from Major Lawsuits or Legal Actions

Tokyo Electron is not currently involved in any lawsuits or other legal actions that are likely to significantly influence its business results. However, in the event that the Company's business or other activities become the subject of a major lawsuit or other legal action, depending on the outcome of such action, Tokyo Electron's business results could be adversely affected.

(10) Impact of Laws and Regulations

Tokyo Electron operates globally and is therefore subject to and strives to ensure compliance with the laws and regulations of the countries and regions where it does business, including import and export regulations, environmental regulations and transfer pricing rules. However, should the Company be unable to respond adequately to unforeseen tightening or other changes to such laws or regulations, such changes could adversely affect Tokyo Electron's business performance.

(11) Other Risks

Tokyo Electron is actively engaged in reforming its corporate structure so that it can generate profits even when markets contract. These reforms have entailed creating new high-growth and high-return businesses and pursuing higher earnings from existing businesses. At the same time, Tokyo Electron has promoted activities to preserve the environment and worked to restructure its compliance, risk management and information security management systems. However, as long as it conducts business activities, as with peer companies or companies in different industries, Tokyo Electron is subject to the effect of many other factors. These include the world and regional economic environments, natural disasters, war, terrorism, infectious diseases and other unavoidable occurrences, financial or stock markets, government or other regulations, supply chains, market conditions for products and real estate, the ability to recruit personnel in Japan and overseas, competition over standardization, and loss of key personnel. Any of these factors could adversely affect Tokyo Electron's business performance.

Financial Section
Investor Information

■ Consolidated Eleven-Year Summary

Consolidated Eleven-Year Summary

Tokyo Electron Limited and Subsidiaries As of and for the years ended March 31

	Thousands of U.S. dollars						Millions of yen					
	2018	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Net sales ¹	\$10,643,151	-	¥799,719	¥663,949	¥613,125	¥612,170	¥ 497,300	¥ 633,091	¥ 668,722	¥418,637	¥ 508,082	¥ 906,092
Semiconductor production equipment	9,932,551	1,055,234	749,893	613,033	576,242	478,842	392,027	477,873	511,332	262,392	325,383	726,440
FPD production equipment	706,597	75,068	49,387	44,687	32,710	28,317	20,077	69,889	66,721	71,361	88,107	68,016
PV production equipment	_	_	—	_	3,618	3,806	83	_	_	_		_
Electronic components and computer networks	_	_	—	_	_	100,726	84,665	84,868	90,216	84,473	94,207	111,181
Other	4,001	425	438	6,229	555	479	448	461	453	411	385	455
Operating income (loss)	2,646,577	281,172	155,697	116,789	88,113	32,205	12,549	60,443	97,870	(2,181)	14,711	168,498
Income (loss) before income taxes	2,590,762	275,242	149,116	106,467	86,828	(11,756)	17,767	60,602	99,579	(7,768)	9,637	169,220
Net income (loss) attributable to owners of parent	1,923,674	204,371	115,208	77,892	71,888	(19,409)	6,076	36,726	71,924	(9,033)	7,543	106,271
Comprehensive income (loss) ²	1,940,439	206,152	119,998	60,984	80,295	(10,889)	15,826	36,954	69,598	(4,751)	_	_
Domestic sales	1,400,233	148,760	101,122	121,808	95,046	161,631	118,504	171,364	182,165	162,609	208,871	323,946
Overseas sales	9,242,917	981,967	698,597	542,141	518,079	450,539	378,796	461,727	486,557	256,028	299,211	582,146
Depreciation and amortization ³	194,088	20,619	17,872	19,257	20,878	24,888	26,631	24,198	17,707	20,002	23,068	21,413
Capital expenditures ⁴	429,251	45,603	20,697	13,341	13,184	12,799	21,774	39,541	39,140	14,919	18,108	22,703
R&D expenses	914,000	97,103	83,800	76,287	71,350	78,664	73,249	81,506	70,568	54,074	60,988	66,073
Total assets	11,377,121	1,208,705	957,447	793,368	876,154	828,592	775,528	783,611	809,205	696,352	668,998	792,818
Total net assets	7,261,950	771,509	645,999	564,239	641,163	590,614	605,127	598,603	584,802	523,370	529,265	545,245
Number of employees		11,946	11,241	10,629	10,844	12,304	12,201	10,684	10,343	10,068	10,391	10,429
	U.S. dollars						Yen	-	-			
Net income (loss) per share of common stock:												
Basic	\$ 11.72	¥ 1,245.48	¥ 702.26	¥ 461.10	¥ 401.08	¥(108.31)	¥ 33.91	¥ 205.04	¥ 401.73	¥ (50.47)	¥ 42.15	¥ 594.01
Diluted⁵	11.68	1,241.22	700.35	460.00	400.15	_	33.85	204.72	401.10	_	42.07	592.71
Net assets per share of common stock	44.00	4,674.49	3,919.50	3,428.37	3,567.23	3,225.92	3,309.58	3,275.14	3,198.66	2,859.37	2,896.55	2,989.70
Cash dividends per share of common stock	5.87	624.00	352.00	237.00	143.00	50.00	51.00	80.00	114.00	12.00	24.00	125.00
Number of shares outstanding (thousands)		165,210	165,210	165,211	180,611	180,611	180,611	180,611	180,611	180,611	180,611	180,611
Number of shareholders		35,186	21,937	24,664	20,829	30,563	41,287	42,414	44,896	39,285	42,509	43,324
ROE		29.0	19.1	13.0	11.8	(3.3)	1.0	6.3	13.3	(1.8)	1.4	21.4
Operating margin		24.9	19.5	17.6	14.4	5.3	2.5	9.5	14.6	(0.5)	2.9	18.6
Equity ratio		63.5	67.2	70.9	73.0	69.8	76.5	74.9	70.8	73.5	77.5	67.5
Total asset turnover (times)		1.04	0.91	0.80	0.72	0.76	0.64	0.79	0.89	0.61	0.70	1.16
	U.S. dollars						Thousands of yen	ž.	•	<i>:</i>		,
Net sales per employee	\$ 890,938	¥ 94,653	¥ 71,143	¥ 62,466	¥ 56,540	¥ 49,754	¥ 40,759	¥ 59,256	¥ 64,655	¥ 41,581	¥ 48,896	¥ 86,882

¹ From fiscal 2015, Electronic components and computer networks were excluded because Tokyo Electron Device Limited, a former consolidated in Other.
2 From fiscal 2011, the Company applied "Accounting Standards for Presentation of Comprehensive Income" (Statement No. 25) released by the Accounting Standards Board of Japan (ASBJ). Accordingly, comprehensive income (loss) has been disclosed from fiscal 2010.

³ Depreciation and amortization does not include amortization and loss on impairment of goodwill.

⁴ Capital expenditures only represent the gross increase in property, plant and equipment.

⁵ From fiscal 2011, the Company calculated net income per share of common stock (diluted) in accordance with "Accounting Standard for Earnings Per Share" (Guidance No. 4) released by the ASBJ. Dilution is not assumed for the years ended March 31, 2014 and 2010.

⁶ The amounts in this summary in millions and thousands of yen; thousands of yen; thousands of shares as of and for the years ended March 31, 2017 and onward are truncated at the nearest unit. Accordingly, totals for the years ended March 31, 2017 and onward do not necessarily agree with the sum of the corresponding individual amounts.

Financial Section
Investor Information

Consolidated Balance Sheets

Consolidated Balance Sheets

Tokyo Electron Limited and Subsidiaries As of March 31, 2018 and 2017

> Thousands of U.S. dollars Millions of yen ASSETS 2018 2017 2018 Current assets: ¥164,366 \$ 2,427,314 Cash and cash equivalents ¥ 257,877 Short-term investments 116,000 151,000 1,091,867 133,858 1,501,982 Trade notes and accounts receivable 159,570 Allowance for doubtful accounts (59)(63)(563)Inventories 344,071 236,256 3,238,620 475,385 Deferred income taxes 50,505 36,892 Other current assets 69,137 53,628 650,768 997,102 775,938 9,385,375 Total current assets Property, plant and equipment: Land 28,030 24,855 263,843 Buildings 159,474 145,901 1,501,081 Machinery and equipment 138,932 132,043 1,307,725 11,060 6,026 104,108 Construction in progress 337,498 308,826 3,176,759 Total property, plant and equipment Less: Accumulated depreciation 211,546 208,385 1,991,209 Net property, plant and equipment 125,952 100,441 1,185,550 Investments and other assets: 33,128 24,119 311,827 Investment securities 19,128 167,979 Deferred income taxes 17,846 4,818 Net asset for defined benefits Intangible assets 15,882 15,401 149,492 Other assets 20,215 19,416 190,282 Allowance for doubtful accounts (1,422)(1.816)(13,386)Total investments and other assets 85,650 81,067 806,196 ¥1.208.705 ¥957.447 \$11.377.121 Total assets

Thousands of U.S. dollars Millions of yen LIABILITIES AND NET ASSETS 2018 2017 2018 Current liabilities: ¥ 108,607 ¥ 79,217 \$ 1,022,284 Trade notes and accounts payable Income taxes payable 66,046 31,069 621,671 Accrued employees' bonuses 34,467 21,853 324,429 Customer advances 100,208 67,976 943,231 Other current liabilities 59,122 47,653 556,501 247,770 Total current liabilities 368,452 3,468,118 Non-current liabilities: 59,684 56,200 Net liability for defined benefits 561,784 9,058 Other liabilities 7,476 85,267 Total non-current liabilities 68,742 63,677 647,052 Total liabilities 437,195 311,447 4,115,171 Net assets: Shareholders' equity 54,961 54,961 517,330 Common stock Authorized: 300,000,000 shares Issued: 165,210,911 and 165,210,911 shares as of March 31, 2018 and 2017, respectively 78,011 Capital surplus 78,023 734,290 Retained earnings 625,390 503,325 5,886,581 Treasury stock, at cost (7,518)(7,766)(70,771)1,097,342 and 1,135,104 shares as of March 31, 2018 and 2017, respectively Accumulated other comprehensive income Net unrealized gains on investment securities 17,134 10,788 161,278 59 Net deferred gains on hedging instruments 278 2,623 5,507 51,843 Foreign currency translation adjustments 5,789 (2,086)Accumulated remeasurements of defined benefit plans (6,618)(62,293)Share subscription rights 4,363 2,620 41,068 Non-controlling interests 284 Total net assets 771,509 645,999 7,261,950 Total liabilities and net assets ¥1,208,705 ¥957,447 \$11,377,121

See accompanying Notes to Consolidated Financial Statements.

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Financial Section Investor Information

Thousands of

■ Consolidated Statements of Income ■ Consolidated Statements of Comprehensive Income

Consolidated Statements of Income

Tokyo Electron Limited and Subsidiaries Years ended March 31, 2018 and 2017

	Million	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Net sales	¥1,130,728	¥ 799,719	\$10,643,151
Cost of sales	655,695	477,427	6,171,832
Gross profit	475,032	322,291	4,471,318
Selling, general and administrative expenses	193,860	166,594	1,824,741
Operating income	281,172	155,697	2,646,577
Other income (expenses):			
Interest and dividend income	859	1,032	8,088
Share of profit of associates accounted for using the equity method	571	342	5,382
Insurance dividend income	334	300	3,150
Foreign exchange loss, net	(2,897)	(791)	(27,274)
Gain on sales of property, plant and equipment	77	55	731
Gain on sales of investment securities	_	6	_
Loss on impairment of property, plant and equipment, goodwill and other assets	(925)	(362)	(8,714)
Loss on disaster	_	(7,521)	_
Loss on revision of retirement benefit plan	(3,154)	<u> </u>	(29,690)
Other, net	(795)	357	(7,487)
Income before income taxes	275,242	149,116	2,590,762
Income taxes:		-	
Current	83,434	40,633	785,340
Deferred	(12,591)	(6,765)	(118,522)
Net income	204,399	115,248	1,923,944
Net income attributable to non-controlling interests	28	39	269
Net income attributable to owners of parent	¥ 204,371	¥ 115,208	\$ 1,923,674

	Ye	en	U.S.	dollars
Per share of common stock:				
Net income — basic	¥ 1,245.48	¥ 702.26	\$	11.72
Net income — diluted	1,241.22	700.35		11.68
Net assets	4,674.49	3,919.50		44.00
Cash dividends	624.00	352.00		5.87

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income

Tokyo Electron Limited and Subsidiaries Years ended March 31, 2018 and 2017

	Millions	s of yen	U.S. dollars
	2018	2017	2018
Net income	¥204,399	¥115,248	\$1,923,944
Other comprehensive income (loss):			
Net unrealized gains on investment securities	6,337	2,875	59,657
Net deferred gains on hedging instruments	198	10	1,869
Foreign currency translation adjustments	(242)	(933)	(2,286)
Remeasurements of defined benefit plans	(4,494)	2,682	(42,308)
Share of other comprehensive income of associates accounted for using the equity method	(46)	114	(436)
Total other comprehensive income (loss)	1,752	4,750	16,494
Comprehensive income	206,152	119,998	1,940,439
Total comprehensive income attributable to:			
Owners of parent	206,122	119,942	1,940,162
Non-controlling interests	29	56	276

See accompanying Notes to Consolidated Financial Statements.

Financial Section Investor Information

■ Consolidated Statements of Changes in Net Assets ■ Consolidated Statements of Cash Flows

Consolidated Statements of Changes in Net Assets

Tokyo Electron Limited and Subsidiaries Years ended March 31, 2018 and 2017

						Millions of ye	en .				
		Sharehol	ders' equity		Accu	mulated other	comprehensive	e income			
	Common stock	Capital surplus	Retained earnings	Treasury stock	Net unrealized gains on investment securities	Net deferred gains on hedging instruments	Foreign currency translation adjustments	Accumulated remeasurements of defined benefit plans	Share subscription rights	Non- controlling interests	Total net assets
Balance as of March 31, 2016	¥54,961	¥78,023	¥427,618	¥(8,051)	¥ 7,903	¥ 50	¥6,743	¥(4,878)	¥1,641	¥229	¥564,239
Cash dividends	_	_	(39,371)	_	_	_	_	_	_	_	(39,371)
Net income attributable to owners of parent	_	_	115,208	_	_	_	_	_	_	_	115,208
Repurchase of treasury stocks	_	_	_	(6)	_	_	_	_	_	_	(6)
Disposal of treasury stocks	_	_	(130)	290	_	_	_	_	_	_	159
Other, net	_	_	_	_	2,886	9	(953)	2,791	979	56	5,769
Balance as of March 31, 2017	¥54,961	¥78,023	¥503,325	¥(7,766)	¥10,788	¥ 59	¥5,789	¥(2,086)	¥2,620	¥284	¥645,999
Cash dividends	_	_	(82,203)	_	_	_	_	_	_	_	(82,203)
Net income attributable to owners of parent	_	_	204,371	_	_	_	_	_	_	_	204,371
Repurchase of treasury stocks	_	_	_	(16)	_	_	_	_	_	_	(16)
Disposal of treasury stocks	_	_	(102)	264	_	_	_	_	_	_	161
Change in equity of parent arising from transactions with non-controlling shareholders	_	(12)	_	_	_	_	_	_	_	_	(12)
Other, net	_	_	_	_	6,345	219	(281)	(4,531)	1,742	(284)	
Balance as of March 31, 2018	¥54,961	¥78,011	¥625,390	¥(7,518)	¥17,134	¥278	¥5,507	¥(6,618)	¥4,363	¥ —	¥771,509

					Th	ousands of U.S.	dollars				
		Sharehol	ders' equity		Accı	mulated other	comprehensive	income			
	Common stock	Capital surplus	Retained earnings	Treasury stock	Net unrealized gains on investment securities	Net deferred gains on hedging instruments	Foreign currency translation adjustments	Accumulated remeasurements of defined benefit plans	Share subscription rights	Non- controlling interests	Total net assets
Balance as of March 31, 2017	\$517,330	\$734,404	\$4,737,629	\$(73,104)	\$101,552	\$ 557	\$54,493	\$(19,639)	\$24,664	\$2,682	\$6,080,571
Cash dividends	_	_	(773,754)	_	_	_	_	_	_	_	(773,754)
Net income attributable to owners of parent Repurchase of treasury	_	_	1,923,674	_	_	-	_	_	_	_	1,923,674
stocks	_	_	_	(154)	_	_	_	_	_	_	(154)
Disposal of treasury stocks	_	_	(969)	2,486	_	_	<u> </u>	_	_	_	1,517
Change in equity of parent arising from transactions with non-controlling											
shareholders	_	(114)	_	_	_	_	_	_	_	_	(114)
Other, net	_	_	_	_	59,725	2,065	(2,649)	(42,654)	16,403	(2,682)	30,209
Balance as of March 31, 2018	\$517,330	\$734,290	\$5,886,581	\$(70,771)	\$161,278	\$2,623	\$51,843	\$(62,293)	\$41,068	\$ —	\$7,261,950

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statements of Cash Flows

Tokyo Electron Limited and Subsidiaries Years ended March 31, 2018 and 2017

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Cash flows from operating activities:			
Income before income taxes	¥275,242	¥149,116	\$2,590,762
Depreciation and amortization	20,619	17,872	194,088
Loss on impairment of property, plant and equipment, goodwill and other assets	925	362	8,714
Amortization of goodwill	600	631	5,652
Increase in accrued employees' bonuses	12,710	10,112	119,642
Increase in accrued directors' bonuses	2,573	623	24,227
Increase (decrease) in accrued warranty expenses	2,769	(220)	26,069
Interest and dividend income	(859)	(1,032)	(8,088)
Increase in trade notes and accounts receivable	(25,971)	(17,411)	(244,458)
Increase in inventories	(109,846)	(44,102)	(1,033,948)
Increase in trade notes and accounts payable	28,535	24,053	268,594
Increase in prepaid consumption tax	(13,896)	(12,350)	(130,807)
Increase in accrued consumption tax	1,297	359	12,208
Increase in customer advances	31,684	34,444	298,239
Other, net	8,851	5,843	83,318
Subtotal	235,238	168,304	2,214,216
Receipts from interest and dividends	1,115	1,266	10,495
Income taxes paid	(49,771)	(32,622)	(468,480)
Net cash provided by operating activities	186,582	136,948	1,756,231
Cash flows from investing activities:			
Payment for purchases of short-term investments	(131,000)	(202,200)	(1,233,057)
Proceeds from maturities of short-term investments	166,000	192,232	1,562,500
Payment for purchases of property, plant and equipment	(41,750)	(17,557)	(392,982)
Payment for acquisition of intangible assets	(4,431)	(1,116)	(41,715)
Other, net	(651)	(252)	(6,128)
Net cash used in investing activities	(11,833)	(28,893)	(111,383)
Cash flows from financing activities:			
Payment for purchases of treasury stock	(16)	(6)	(154)
Dividends paid	(82,203)	(39,371)	(773,754)
Other, net	(329)	(2)	(3,103)
Net cash used in financing activities	(82,549)	(39,380)	(777,012)
Effect of exchange rate changes on cash and cash equivalents	1,312	53	12,350
Net increase in cash and cash equivalents	93,511	68,728	880,187
Cash and cash equivalents at beginning of year	164,366	95,638	1,547,127
Cash and cash equivalents at end of year	¥257,877	¥164,366	\$2,427,314

See accompanying Notes to Consolidated Financial Statements.

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■ Notes to Consolidated Financial Statements

Notes to Consolidated Financial Statements

Tokyo Electron Limited and Subsidiaries Years ended March 31, 2018 and 2017

1. Basis of Presentation of Consolidated Financial Statements

The accompanying consolidated financial statements of Tokyo Electron Limited (hereinafter "the Company") and its subsidiaries (hereinafter collectively referred to as "Tokyo Electron") have been prepared in accordance with the provisions set forth in the Financial Instruments and Exchange Act of Japan and its related accounting regulations, and in conformity with accounting principles generally accepted in Japan, which are different in certain respects as to application and disclosure requirements of International Financial Reporting Standards.

The Company uses financial statements prepared by foreign subsidiaries in accordance with International Financial Reporting Standards or U.S. generally accepted accounting principles for the preparation of the consolidated financial statements, together with adjustment for certain items which are required to be adjusted in the consolidation process.

The accompanying consolidated financial statements have been restructured and translated into English from the statutory Japanese language consolidated financial statements. Some supplementary information included in the statutory Japanese language consolidated financial statements is not presented in the accompanying consolidated financial statements.

The amounts in the consolidated financial statements and associated notes shown in millions and thousands of yen; thousands of U.S. dollars; and thousands of shares as of and for the years ended March 31, 2018 and 2017 are truncated at the nearest unit. Accordingly, totals do not necessarily agree with the sum of the corresponding individual amounts.

U.S. dollar amounts included herein are solely for the convenience of readers and are presented at the rate of ¥106.24 to \$1.00, the approximate rate as of March 31, 2018. The translation should not be construed as a representation that the Japanese yen amounts shown could be converted into U.S. dollars at that or any other rate.

2. Summary of Significant Accounting Policies

(a) Principles of consolidation

The consolidated financial statements include the accounts of the Company and its 33 and 35 subsidiaries as of March 31, 2018 and 2017, respectively. All significant inter-company accounts, transactions and unrealized profits or losses have been eliminated through consolidation procedures.

There are 9 and 8 affiliates accounted for using the equity method as of March 31, 2018 and 2017, respectively.

The fiscal year-end of all entities is March 31, except for 3 consolidated foreign subsidiaries. Financial statements provisionally closed for the period ending March 31 are used for those subsidiaries.

(b) Foreign currency translation

All assets and liabilities denominated in foreign currencies are translated into Japanese yen at the year-end rates, except for those hedged by forward exchange contracts, which are translated at the contracted rates. Resulting exchange gains and losses are included in earnings for the year.

Revenue and expense items are translated at the rates that approximate those prevailing at the time of the transactions.

The balance sheet accounts of foreign subsidiaries are translated into Japanese yen at the rates of exchange in effect at the balance sheet date, except for shareholders' equity accounts, which are translated at the historical rates. Revenue and expense accounts of foreign subsidiaries are translated at average rates of exchange in effect during the year. Resulting translation adjustments are presented in net assets as a component of accumulated other comprehensive income in the consolidated balance sheets.

(c) Cash and cash equivalents

Cash and cash equivalents consist of cash, short term deposits and low-risk financial instruments with original maturities of three months or less.

(d) Short-term investments

Short-term investments consist of short term deposits and low-risk financial instruments with original maturities of more than three months.

(e) Investment securities

Tokyo Electron examines the intent of holding each security and classifies those securities as trading securities, held-to maturity debt securities or other securities. Tokyo Electron has no trading securities as of March 31, 2018 and 2017. Held-to-maturity debt securities are stated mainly at amortized cost. Other securities with market prices are valued at fair value at the balance sheet date. The differences between the book value and fair value of other securities, net of applicable income taxes, are presented in net assets as a component of accumulated other comprehensive income. Other securities without market prices are valued at cost using the weighted-average method.

The cost of sold securities is calculated using the weighted average method.

(f) Inventories

Inventories are stated at the lower of cost, determined by principally the specific identification method, or net realizable value, which is defined as selling price less estimated additional manufacturing costs and estimated direct selling expenses.

(g) Property, plant and equipment

Property, plant and equipment are stated at cost. Depreciation of buildings, machinery and equipment of the Company and its domestic subsidiaries is computed using the declining-balance method, except for buildings acquired since April 1, 1998 and facilities attached to buildings and structures acquired since April 1, 2016 which are depreciated using the straight-line method, based on the estimated useful lives of assets. Foreign subsidiaries mainly apply the straight-line method over the estimated useful lives of assets.

Estimated useful lives of property, plant and equipment are as follows:

Buildings 2 to 60 years Machinery and equipment 2 to 17 years

(h) Intangible assets (excluding goodwill)

Intangible assets are amortized by the straight-line method over their estimated useful lives.

(i) Goodwill

Goodwill is evaluated on an individual basis and amortized by the straight-line method over a period not exceeding 20 years.

(j) Impairment of fixed assets

Tokyo Electron evaluates the carrying value of fixed assets held for use in the business and idle assets.

If the carrying value of a fixed asset is impaired, a loss is recognized based on the amount by which the carrying value exceeds its recoverable amount, being the higher of the net selling price or the value in use of the assets. Net selling price is determined using the fair value less disposal costs and value in use is based on the total amount of discounted cash flows estimated to be generated from the continuing use of the individual assets or the asset group and the disposal of the assets.

(k) Allowance for doubtful accounts

The allowance for doubtful accounts is provided at an amount determined based on the historical experience of bad debts with respect to ordinary receivables, and an estimate of uncollectible amounts determined by reference to

specific doubtful receivables from customers which are experiencing financial difficulties.

(I) Employee benefits

The Company and its domestic subsidiaries provide defined benefit plans for their employees. Expected benefits are attributed to accounting periods by the benefit formula basis. Prior service costs are charged to earnings on a straight-line basis, beginning from the fiscal year in which they are incurred, over a fixed number of years (4 years) within the average remaining years of service of employees when the changes occur. Actuarial differences are charged to earnings on a straight-line basis, beginning from the following fiscal year after they are incurred, over a fixed number of years (4 years) within the average remaining years of service of employees when the differences occur.

The provision for accrued pension and severance costs for directors and audit & supervisory board members of the Company and its domestic subsidiaries is calculated in accordance with internal regulations.

The Company and certain domestic subsidiaries decided to discontinue the payment of severance pay for directors and audit & supervisory board members after April 1, 2005, and at the general shareholders' meeting in June 2005, it was resolved that the severance pay for directors and audit & supervisory board members until March 31, 2005 would be paid at the termination of their service and the decision regarding the payment amount for each director and audit & supervisory board member was delegated to the board of directors and audit & supervisory board members. The accruals for severance costs for directors and audit & supervisory board members are included in Net liability for defined benefits in the consolidated balance sheets.

(m) Accrued warranty expenses

Tokyo Electron's products are generally subject to warranty, and Tokyo Electron accrues estimated warranty costs when product revenue is recognized. Estimated after-sale repair expenses over warranty periods are accrued based on the historical ratio of actual repair expenses to corresponding sales.

(n) Derivatives and hedge accounting

The Company and certain subsidiaries make use of derivatives in order to manage certain risks arising from adverse fluctuations in foreign currency exchange rates. The amount of derivatives is limited to the extent of foreign currency assets, liabilities and actual orders, and Tokyo Electron does not trade in derivatives for speculative purposes.

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■ Notes to Consolidated Financial Statements

Notes to Consolidated Financial Statements

Derivatives are carried at fair value in the consolidated balance sheet with changes in unrealized gain or loss charged or credited to earnings, except for those which meet the criteria for hedge accounting. Unrealized gains or losses on hedging instruments, net of taxes, are reported in net assets as a component of accumulated other comprehensive income (loss). Receivables and payables hedged by qualified forward foreign exchange contracts are translated at the corresponding foreign exchange contract rates.

(o) Income taxes

Tokyo Electron records deferred tax assets and liabilities on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and net operating loss carryforwards. Deferred tax assets and liabilities are measured using the enacted tax rates and laws which are expected to be in effect when net operating loss carryforwards and temporary differences are expected to be realized.

(p) Revenue recognition

Revenue from Semiconductor and FPD (Flat Panel Display) production equipment is principally recognized at the time of the customer confirmation of set-up and testing of products. Revenue from equipment not requiring substantial installation is recognized at the time of shipment. Service revenue maintenance is recognized ratably over the term of the maintenance contract.

(q) Research and development expenses

Research and development expenses are charged to earnings as incurred and amounted to ¥97,103 million (\$914,000 thousand) and ¥83,800 million for the years ended March 31, 2018 and 2017, respectively.

(r) Reclassifications

Certain reclassifications have been made to the prior year's consolidated financial statements to conform with the presentation used for the year ended March 31, 2018.

3. Change in Accounting Policies and Adoption of New Accounting Standards

Year ended March 31, 2017

In accordance with the revision to the Japanese Corporation Tax Act, the Company and its domestic subsidiaries adopted the "Practical Solution on a change in depreciation method due to Tax Reform 2016" (ASBJ Practical Issues Task Force No. 32, June 17, 2016) and changed the depreciation method for facilities attached to buildings and structures

acquired since April 1, 2016 from the declining-balance method to the straight-line method, starting from the fiscal year ended March 31, 2017.

The effect of this change on the consolidated financial statements is immaterial.

4. Additional Information

The Company and its domestic subsidiaries adopted "Revised Implementation Guidance on Recoverability of Deferred Tax Assets" (ASBJ Guidance No. 26, March 28, 2016) from the year ended March 31, 2017.

5. Accounting Standards Issued but Not yet Adopted

"Implementation Guidance on Tax Effect Accounting" (ASBJ Guidance No. 28, February 16, 2018)

"Implementation Guidance on Recoverability of Deferred Tax Assets" (ASBJ Guidance No. 26 (revised 2018), February 16, 2018)

(1) Overview

The above guidance was revised with regard to the treatment of taxable temporary differences for investments in subsidiaries within the context of non-consolidated financial statements, and to clarify the approach to determining recoverability of deferred tax assets in a company which is categorized as 'Type 1' according to the guidance.

(2) Effective date

Effective from the beginning of the fiscal year ending March 31, 2019.

(3) Effects of the application of the guidance

The Company and its consolidated domestic subsidiaries are currently in the process of determining the effects of this new guidance on the consolidated financial statements.

"Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 30, 2018 (hereinafter, "Statement No.29"))
"Implementation Guidance on Accounting Standard for Revenue Recognition" (ASBJ Guidance No. 30, March 30, 2018 (hereinafter, "Guidance No.30"))

(1) Overview

The International Accounting Standards Board (IASB) and the U.S. Financial Accounting Standards Board (FASB) collaborated on a project to develop a single, comprehensive revenue recognition model and jointly issued new revenue recognition standards "Revenue from Contracts with

Customers" (IFRS 15 published by IASB, Topic 606 published by FASB) in May 2014. IFRS 15 is effective for annual reporting periods beginning on or after 1 January 2018 and Topic 606 is effective for annual reporting periods beginning after December 15, 2017.

Considering the above circumstances, the Accounting Standard Board of Japan (ASBJ) also developed a new revenue recognition and issued Statement No.29 together with Guidance No.30.

ASBJ's basic policy in developing the new revenue recognition standards is to first incorporate the core principle of IFRS 15 in the light of improving the international comparability of financial statements and then add additional alternative treatments to the extent that international comparability would not be significantly impaired where any business practices operated in Japan need to be considered.

(2) Effective date

Effective from the beginning of the fiscal year ending March 31, 2022.

(3) Effects of the application of the standards

The Company and its consolidated subsidiaries are currently in the process of determining the effects of these new standards on the consolidated financial statements.

6. Securities

Other securities as of March 31, 2018 and 2017 are as follows:

	Millions of yen						
2018:	Cost	Carrying value					
Non-current							
Securities with carrying value exceeding acquisition cost							
Equity securities	¥7,620	¥32,293					
Securities with carrying value not exceeding acquisition cost							
Equity securities	819	819					
Other	15	15					
Total	¥8,455	¥33,128					

	Millions of yen	
2017:	Cost	Carrying value
Non-current		
Securities with carrying value exceeding acquisition cost		
Equity securities	¥7,183	¥22,704
Securities with carrying value not exceeding acquisition cost		
Equity securities	_	_
Total	¥7,183	¥22,704

	Thousands of U.S. dollars		
2018:	Cost	Carrying value	
Non-current			
Securities with carrying value exceeding acquisition cost			
Equity securities	\$71,730	\$303,971	
Securities with carrying value not exceeding acquisition cost			
Equity securities	7,714	7,714	
Other	141	141	
Total	\$79,587	\$311,827	

Held-to-maturity securities classified as current assets are ¥286,500 million (\$2,696,724 thousand) and ¥244,500 million as of March 31, 2018 and 2017, respectively.

Reconciliation of held-to-maturity securities as of March 31, 2018 and 2017 to the amounts of short-term investments in the consolidated balance sheets are as follows:

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Held-to-maturity (current)	¥286,500	¥244,500	\$2,696,724
Deposits and low-risk financial instruments with original maturities of three months or less	(170,500)	(93,500)	(1,604,856)
Deposits with original maturities of more than three months	_	_	_
Short-term investments	¥116,000	¥151,000	\$1,091,867

Net loss on devaluation of investment securities was ¥536 million (\$5,049 thousand) and ¥105 million for the years ended March 31, 2018 and 2017, respectively.

For the years ended March 31, 2018 and 2017, the amounts of gain and loss on sale of available-for-sale securities were immaterial.

7. Inventories

Inventories as of March 31, 2018 and 2017 are as follows:

	Million	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Finished products	¥220,497	¥152,629	\$2,075,465
Work in process, raw materials and supplies	123,573	83,626	1,163,154
Total	¥344,071	¥236,256	\$3,238,620

The amounts of change in inventory provision included in cost of sales in the consolidated statements of income for the years ended March 31, 2018 and 2017 were an increase of ¥173 million (\$1,635 thousand) and a decrease of ¥3,060 million, respectively.

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8. Pledged Assets

Tokyo Electron did not hold any assets pledged as collateral as of March 31, 2018 and 2017.

9. Short-Term Borrowings

There are no short-term borrowings classified as current liabilities as of March 31, 2018 and 2017.

As of March 31, 2018 and 2017, Tokyo Electron had unused lines of credit amounting to \$126,953 million (\$1,194,971 thousand) and \$126,944 million, respectively.

10. Employee Benefits

The Company and its domestic subsidiaries provide a cash balance plan and a non-contributory retirement and severance benefit plan as defined benefit plans for their employees. Further, certain consolidated overseas subsidiaries provide defined benefit plans for their employees.

Effective April 1, 2018, Tokyo Electron and its domestic subsidiaries converted a part of their defined benefit plans to a defined contribution plan. The loss on revision of retirement benefit plan of ¥3,154 million (\$29,690 thousand) resulting from this change was recognized and presented in other income (expenses) for the year ended March 31, 2018 in accordance with the "Accounting Procedures for Conversion between Different Retirement Benefit Schemes" (Corporate Accounting Standards Implementation Guidelines No. 1) and the "Practical Treatment of Accounting Procedures for Conversion between Different Retirement Benefit Schemes" (Practical Issues Task Force No. 2).

Defined benefit plans

(1) Movement of defined benefit obligations

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Balance at April 1, 2017 and 2016	¥118,660	¥116,228	\$1,116,912
Service cost	6,052	6,080	56,967
Interest cost	963	772	9,066
Actuarial gain (loss)	4,632	(3,075)	43,601
Benefits paid	(3,029)	(2,708)	(28,517)
Prior service cost	1,690	_	15,915
Decrease by conversion of a part of defined benefit plans to a defined contribution plan	(15,946)	_	(150,100)
Increase by transfer	_	1,327	_
Foreign currency exchange rate changes	(30)	101	(288)
Other	_	(65)	_
Balance at March 31, 2018 and 2017	¥112,992	¥118,660	\$1,063,557

(2) Movement of plan assets

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Balance at April 1, 2017 and 2016	¥67,653	¥62,549	\$636,798
Expected return on plan assets	1,400	1,266	13,186
Actuarial gain	526	540	4,960
Employer contributions	3,577	2,940	33,678
Benefits paid	(915)	(1,011)	(8,616)
Decrease by conversion of a part of defined benefit plans to a defined contribution plan	(18,523)	_	(174,359)
Increase by transfer	_	1,289	_
Foreign currency exchange rate changes	(24)	84	(227)
Other	(12)	(6)	(119)
Balance at March 31, 2018 and 2017	¥53,683	¥67,653	\$505,301

(3) Reconciliation from defined benefit obligations and plan assets to liability (asset) for defined benefits

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Funded defined benefit obligations	¥54,677	¥63,761	\$514,657
Plan assets	(53,683)	(67,653)	(505,301)
Funded status	993	(3,892)	9,355
Unfunded defined benefit obligations	58,315	54,899	548,899
Net liability for defined benefits at March 31, 2018 and 2017	¥59,309	¥51,007	\$558,255
Net liability for defined benefits	59,309	55,825	558,255
Net asset for defined benefits	_	(4,818)	_
Net liability for defined benefits at March 31, 2018 and 2017	¥59,309	¥51,007	\$558,255

Note: The provision for accrued pension and severance costs for directors and audit & supervisory board members of ¥374 million (\$3,529 thousand) and ¥374 million as of March 31, 2018 and 2017 is not included.

(4) Defined benefit costs

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Service cost	¥6,052	¥6,080	\$56,967
Interest cost	963	772	9,066
Expected return on plan assets	(1,400)	(1,266)	(13,186)
Net actuarial gain (loss) amortization	(1,237)	291	(11,649)
Other	388	290	3,654
Total defined benefit costs for the years ended March 31, 2018 and 2017	¥4,765	¥6,168	\$44,852
Loss on transfer to defined contribution plan (Note)	3,154	_	29,690

Note: Loss on revision of retirement benefit plan was recognized in other income (expenses) for the year ended March 31, 2018.

(5) Remeasurements of defined benefit plans

Millions	s of yen	Thousands of U.S. dollars
2018	2017	2018
¥(1,354)	¥ —	\$(12,747)
(5,093)	3,869	(47,947)
¥(6,448)	¥3,869	\$(60,695)
	2018 ¥(1,354) (5,093)	¥(1,354) ¥ — (5,093) 3,869

Note: Prior service cost and actuarial loss for the year ended March 31, 2018 include the reclassification adjustments of ¥336 million (\$3,167 thousand) and ¥240 million (\$2,263 thousand), respectively associated with the conversion of a part of defined benefit plans to a defined contribution plan.

(6) Accumulated remeasurements of defined benefit plans

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Prior service cost that is yet to be recognized (before tax)	¥(1,354)	¥ —	\$(12,747)
Net actuarial loss that is yet to be recognized (before tax)	(7,806)	(2,712)	(73,482)
Total	¥(9,161)	¥(2,712)	\$(86,229)

(7) Plan assets

1. Plan assets comprise:

	2018	2017
Bonds	38%	39%
Life insurance company general account	25	26
Equity securities	20	20
Alternative investments (Note)	9	9
Cash and cash equivalents	1	3
Other	7	3
Total	100%	100%

Note: Alternative investments consist of hedge funds and insurance-linked

2. Long-term expected rate of return

Current and target asset allocations, and historical and expected returns on the various categories of plan assets have been considered in determining the long-term expected rate of return.

(8) Actuarial assumptions

The principal actuarial assumptions as of and for the years ended March 31, 2018 and 2017 are as follows:

	2018	2017
Discount rate	0.46%	0.71%
Long-term expected rate of return	2.00%	2.00%

The expected rates of salary increase for the years ended March 31, 2018 and 2017 are also considered as one of the actuarial assumptions, and are set based on the salary increase index by age group as of January 1, 2018 and January 1, 2014, respectively.

11. Income Taxes

Significant components of the deferred tax assets and liabilities as of March 31, 2018 and 2017 are as follows:

	Millions	of yen	U.S. dollars
	2018	2017	2018
Deferred tax assets			
Elimination of unrealized profit in inventories	¥27,718	¥19,276	\$260,900
Net liability for defined benefits	18,129	18,102	170,648
Net operating loss carryforwards	10,969	15,402	103,254
Accrued employees' bonuses	8,185	4,977	77,051
Devaluation of inventories	4,148	3,995	39,049
Accrued warranty expenses	2,675	2,168	25,186
Accrued enterprise taxes	2,186	1,515	20,583
Other	14,535	12,600	136,815
Total gross deferred tax assets	88,550	78,038	833,490
Less valuation allowance	(8,043)	(9,808)	(75,711)
Total deferred tax assets	80,506	68,229	757,778
Deferred tax liabilities			
Net unrealized gains on investment securities	(7,554)	(4,757)	(71,105)
Undistributed earnings of subsidiaries	(6,143)	(5,197)	(57,828)
Other	(4,384)	(7,327)	(41,267)
Total deferred tax liabilities	(18,082)	(17,282)	(170,201)
Net deferred tax assets	¥62,424	¥50,947	\$587,577

Net deferred tax assets are included in the consolidated balance sheets as of March 31, 2018 and 2017 as follows:

	Millions of yen		Thousands of U.S. dollars
	2018 2017		2018
Current assets	¥50,505	¥36,892	\$475,385
Investments and other assets	17,846	19,128	167,979
Other current liabilities	_	_	_
Other non-current liabilities	(5,926)	(5,073)	(55,788)

The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the period in which temporary differences become deductible and net operating loss carry forwards are available to be utilized. For assessment of the realizability of deferred tax assets, management considers the scheduled reversal of deferred tax liabilities, future estimated taxable income, tax planning strategies and level of net operating loss carryforwards, if any, in accordance with accounting principles generally accepted in Japan.

Based on the level of historical taxable income and future estimated taxable income over the periods which the temporary differences are deductible and net operating loss carry forwards are available to be utilized, management believes

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Tokyo Electron will realize the benefits of deferred tax assets, net of valuation allowance, as of March 31, 2018 and 2017.

The Company and its wholly-owned domestic subsidiaries apply a consolidated tax filing system for corporate tax purposes.

Significant components of the difference between the statutory and effective tax rates for the years ended March 31, 2018 and 2017 are as follows:

	2018	2017
Statutory tax rate in Japan	30.86%	30.86%
Adjustments:		
Tax credits	(6.23)	(8.41)
Effect of enacted changes in tax rates on net deferred tax assets	1.55	_
Difference in statutory tax rates		
of subsidiaries	(1.33)	(0.11)
Others, net	0.89	0.37
Effective tax rate	25.74%	22.71%

Year ended March 31, 2018

The U.S. federal income tax rate applied to the consolidated subsidiaries in the U.S. is reduced from 35% to 21% associated with the U.S. tax reform legislation signed into law on December 22, 2017.

Net deferred tax assets were reduced by $\pm 3,029$ million ($\pm 28,519$ thousand) and income taxes were increased by $\pm 3,211$ million ($\pm 30,233$ thousand) as of and for the year ended March 31, 2018 resulting from this tax rate reduction.

Year ended March 31, 2017

The Company received notification from the National Tax Agency, Japan (NTA) dated February 14, 2017, that agreement had been reached through the Mutual Agreement Procedure (MAP) between the NTA and U.S. income tax authorities concerning the transfer pricing adjustments assessed during prior historical periods relating to the transactions between the Company and its U.S. subsidiary. As a result, ¥405 million of tax benefit is included in current income tax expense as the difference between the current tax refunds and the estimated amount recorded in the prior year.

12. Other Income (Expenses)

Loss on impairment of property, plant and equipment, goodwill and other assets

For the year ended March 31, 2018, the following loss on impairment was recognized:

Goodwill of TEL NEXX, Inc.

			Loss on im	npairment
Location	Purpose of use	Asset Type	Millions of yen	Thousands of U.S. dollars
Billerica, Massachusetts, U.S.A.	Business assets	Goodwill	¥925	\$8,714

Tokyo Electron performed an impairment test and recognized loss on impairment of goodwill of TEL NEXX, Inc., a subsidiary manufacturing semiconductor production equipment, due to TEL NEXX, Inc.'s reconsideration of its business plan. Tokyo Electron recognized the difference between the book value and the recoverable amount of goodwill as loss on impairment. The recoverable amount was measured as value in use, and was calculated by discounting future cash flows at a discount rate of 14.0%.

Loss on disaster

Loss on disaster of \pm 7,521 million for the year ended March 31, 2017 represents the actual and estimated expenses relating to the recovery of buildings, production and development facilities as well as the disposal of inventories caused by the impact of the Kumamoto earthquake in 2016.

Loss on revision of retirement benefit plan

Effective April 1, 2018, Tokyo Electron and its domestic subsidiaries converted a part of their defined benefit plans to a defined contribution plan. The loss on revision of retirement benefit plan of ¥3,154 million (\$29,690 thousand) resulting from this change was recognized and presented in other income (expenses) for the year ended March 31, 2018 in accordance with the "Accounting Procedures for Conversion between Different Retirement Benefit Schemes" (Corporate Accounting Standards Implementation Guidelines No. 1) and the "Practical Treatment of Accounting Procedures for Conversion between Different Retirement Benefit Schemes" (Practical Issues Task Force No. 2).

13. Net Assets

Net assets comprises four subsections, which are share-holders' equity, accumulated other comprehensive income, share subscription rights and non-controlling interests.

Under Japanese laws and regulations, the entire amount paid for new shares is required to be designated as common stock. However, a company may, by a resolution of the board of directors, designate an amount not exceeding one half of the price of the new shares as additional paid-in capital which is included in capital surplus.

In cases where dividend distribution of surplus is made, the lesser of an amount equal to 10% of the dividend or the excess, if any, of 25% of common stock over the total of additional paid-in capital and legal reserve must be set aside as additional paid-in capital or legal reserve. Legal reserve is included in retained earnings in the accompanying consolidated balance sheets.

Both appropriations of legal reserve and additional paid-in capital used to eliminate or reduce a deficit generally require a resolution of the shareholders' meeting.

Additional paid-in capital and legal reserve may not be distributed as dividends. All additional paid-in capital and legal reserve may be transferred to other capital surplus and retained earnings, respectively, which are potentially available for dividends.

The Company is subject to restriction of dividends based on the Japanese Corporate Act, which restricts the amount of dividends to retained earnings on a consolidated basis.

The Company's articles allow for the distribution of earnings to shareholders on dates other than the mid-term and year-end, by a resolution of the board of directors in accordance with Japanese laws and regulations.

At the board of directors' meeting held on May 11, 2018, the distribution of cash dividends amounting to ¥56,947 million (\$536,026 thousand) was resolved. Such appropriations have not been accrued in the consolidated financial statements as of March 31, 2018 since they are recognized in the period in which they are resolved at the board of directors' meeting.

14. Other Comprehensive Income

Other comprehensive income for the years ended March 31, 2018 and 2017 is as follows:

			Thousands of U.S. dollars
	2018	2017	2018
Net unrealized gains on investment securities			
Net unrealized gains arising during the year	¥9,134	¥4,152	\$85,979
Reclassification adjustments	_	(6)	_
Sub-total, before tax	9,134	4,146	85,979
Tax expense	(2,796)	(1,271)	(26,322)
Sub-total, net of tax	6,337	2,875	59,657
Net deferred gains (losses) on hedging instruments			
Net deferred gains arising during the year	286	15	2,692
Reclassification adjustments	_	_	_
Sub-total, before tax	286	15	2,692
Tax expense	(87)	(4)	(823)
Sub-total, net of tax	198	10	1,869
Foreign currency translation adjustments			
Adjustments during the year	(297)	(933)	(2,803)
Reclassification adjustments	54	_	516
Sub-total, before tax	(242)	(933)	(2,286)
Tax expense	_	_	_
Sub-total, net of tax	(242)	(933)	(2,286)
Remeasurements of defined benefit plans			
Adjustments during the year	(5,787)	3,578	(54,478)
Reclassification adjustments	(660)	291	(6,217)
Sub-total, before tax	(6,448)	3,869	(60,695)
Tax expense	1,953	(1,187)	18,386
Sub-total, net of tax	(4,494)	2,682	(42,308)
Share of other comprehensive income of associates accounted for using the equity method			
Adjustments during the year	(46)	114	(436)
Total other comprehensive income	¥1,752	¥4,750	\$16,494

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15. Share Subscription Rights

Stock option plan

The Company's shareholders have approved annual stock option plans for directors and selected employees since the year ended March 31, 1999. The options under the plans vest immediately or over three-year period with restriction on exercise up to three years after the date of grant, and have

an exercise period of seventeen years from the date on which the options become exercisable.

Options to purchase 144,700 shares of the Company were authorized and granted at an exercise price of ¥1 (\$0.01) for the year ended March 31, 2018.

A summary of stock options outstanding and exercisable as of March 31, 2018 and 2017 is as follows:

		2018		2017	
	Number of	Weighted-average exercise price		Number of	Weighted-average exercise price
	shares	Yen	U.S. dollars	shares	Yen
Outstanding at the beginning of year	457,500	¥1	\$0.01	305,500	¥1
Granted	144,700	1	0.01	194,400	1
Exercised	38,600	1	0.01	42,400	1
Expired (forfeited)	_	_	_	_	_
Outstanding at the end of year	563,600	1	0.01	457,500	1
Exercisable at the end of year	88,800	1	0.01	127,400	1

Amounts expensed related to stock options

The amounts expensed related to stock options for the years ended March 31, 2018 and 2017, are as follows:

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Selling, general and			
administrative expenses	¥1,903	¥1,141	\$17,921

Valuation method of fair value per unit of stock options

Fair value as of the grant date for stock options granted for the year ended March 31, 2018 was ¥13,158 (\$123.85) per unit, which was evaluated as follows:

- (1) Valuation method used: Black-Scholes model
- (2) Major underlying assumptions and estimates:

	13th Stock Acquisition Rights
Volatility (Note 1)	39.97%
Expected residual period (Note 2)	11.5 years
Expected dividends (Note 3)	¥294.5 (\$2.77) per share
Risk-free interest rate (Note 4)	0.12%

- Notes: 1. Calculated based on the stock price performance for 11.5 years (from December 2005 to June 2017).
 - Calculated on the assumption that the share subscription rights would be exercised at the mid-point of the exercise period.
 - Based on the dividends paid for the years ended March 31, 2017 and 2016.
 - 4. Based on Japanese government bond yield corresponding to the expected residual period.

(3) Method of estimating the number of vested stock options It is not necessary to estimate the number of vested stock options as the rights to exercise stock options are vested immediately when granted.

16. Leases

Future minimum lease payments on non-cancelable operating leases are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018 2017		2018
Due within one year	¥ 3,772	¥3,554	\$ 35,505
Due over one year	7,039	6,272	66,255
Total	¥10,811	¥9,827	\$101,761

17. Fair Value of Financial Instruments

Policy for financial instruments

Tokyo Electron limits its fund management to short-term bank deposits and low-risk financial instruments.

Trade receivables, which consist of notes and accounts receivable, are exposed to credit risk in the event of non-performance by the counterparties. Execution and management of credit risk, maturity and receivable balance are conducted pursuant to the internal management rules for credit control. Credit risk of major customers is assessed on a regular basis.

Short-term investments consist of short term deposits and low-risk financial instruments and Tokyo Electron trade with highly-rated financial institutions to mitigate credit risks.

Investment securities consist of mainly equity interests in listed companies exposed to equity market risks. Conditions, including market prices, for these investment securities are monitored on a regular basis.

Trade payables, which consist of notes and accounts payable, mainly mature within one year. Trade payables are exposed to liquidity risks which are managed through activities such as implementing cash management plans.

See note 18 for detailed discussion on derivative financial instruments.

Fair value of financial instruments

Carrying amount and estimated fair value of financial instruments as of March 31, 2018 and 2017 are set out below. Fair value of financial instruments which is practically difficult to estimate are excluded.

	Millions	of yen	
2018:	Carrying amount	Estimated fair value ¹	
Assets			
Cash and cash equivalents	¥257,877	¥257,877	
Short-term investments	116,000	115,966	
Trade notes and accounts receivable, net of allowance for doubtful accounts (¥59 million)	159,510	159,510	
Investment securities	32,230	32,230	
Liabilities			
Trade notes and accounts payable	108,607	108,607	
Derivatives (see note 18)			
Hedge accounting not applied	(7)	(7)	
Hedge accounting applied	335	335	

Millions or yen		
2017:	Carrying amount	Estimated fair value ¹
Assets		
Cash and cash equivalents	¥164,366	¥164,366
Short-term investments	151,000	151,060
Trade notes and accounts receivable, net of allowance for doubtful accounts (¥63 million)	133,794	133,794
Investment securities	22,704	22,704
Liabilities		
Trade notes and accounts payable	79,217	79,217
Derivatives (see note 18)		
Hedge accounting not applied	(306)	(306)
Hedge accounting applied	49	49

Millions of ven

	Thousands o	f U.S. dollars
2018:	Carrying amount	Estimated fair value¹
Assets		
Cash and cash equivalents	\$2,427,314	\$2,427,314
Short-term investments	1,091,867	1,091,549
Trade notes and accounts receivable, net of allowance for doubtful accounts (\$563 thousand)	1,501,419	1,501,419
Investment securities	303,375	303,375
Liabilities		
Trade notes and accounts payable	1,022,284	1,022,284
Derivatives (see note 18)		
Hedge accounting not applied	(70)	(70)
Hedge accounting applied	3,154	3,154

Notes: 1. Fair value calculation of financial instruments

Cash and cash equivalents, short-term investments, trade notes and accounts receivable and trade notes and accounts payable.

The carrying amounts approximate fair value because of the short maturity of these instruments.

Investment securi

The fair values of marketable securities are based on quoted market prices.

See note 6 for further information by classification of investment securities.

Derivatives

See note 18 for detailed discussion on derivative financial instruments.

The following financial instruments are not included in the above as they do not have quoted market prices and therefore it is considered extremely difficult to measure their fair value.

	Millions	Thousands of U.S. dollars		
	2018	2017	2018	
	Reported amount In balance sheet			
Unlisted stocks	¥882	¥1,399	\$8,309	
Other	15	14	141	
Total	¥897	¥1,414	\$8,451	

3. Maturities of financial assets and securities are as follows:

	Millions of yen			
2018:	Within 1 year	After 1 through 5 years		
Cash and cash equivalents	¥257,877	¥—		
Short-term investments	116,000	_		
Trade notes and accounts receivable	159,570	_		

	Millions of yen				
2017:	Within 1 year	After 1 through 5 years			
Cash and cash equivalents	¥164,366	¥—			
Short-term investments	151,000	_			
Trade notes and accounts receivable	133,858	_			

	Thousands of U.S. dollars			
2018:	Within 1 year	After 1 through 5 years		
Cash and cash equivalents	\$2,427,314	\$-		
Short-term investments	1,091,867	_		
Trade notes and accounts receivable	1,501,982	_		

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18. Derivative Financial Instruments

Tokyo Electron is subject to risk from adverse fluctuations in foreign currency exchange rates in its operating and financing activities. The Company and certain subsidiaries enter into forward foreign exchange contracts in order to hedge such risks, but do not enter into such transactions for speculative purposes. The Company implements a ratio analysis of the total cumulative cash flow fluctuations to assess effectiveness of hedging for all derivative transactions, except for transactions where the critical terms of the hedging instrument and hedged item match and the Company could conclude that changes in fair value or cash flows are expected to completely offset. Execution and management of all derivative transactions are conducted pursuant to the internal management rule.

The estimated fair values of the derivative financial instruments as of March 31, 2018 and 2017 are as follows:

1. Derivative financial instruments not designated as hedging instruments

	Millions of yen					
2018:	Contract Gain amount Fair value (losse					
Sell U.S. dollars	¥ 703	¥18	¥18			
Buy U.S. dollars	3,639	(19)	(19)			
Buy Chinese yuan	1,515	(0)	(0)			
Buy Taiwan dollars	912	0	0			
Buy GBP	820	(2)	(2)			
Buy EURO	785	(1)	(1)			
Buy Singapore dollars	706	(2)	(2)			
Total	¥9,084	¥ (7)	¥ (7)			

	Millions of yen					
2017:	Contract Gains amount Fair value (losse					
Sell U.S. dollars	¥ 6,532	¥ 43	¥ 43			
Sell Korean won	589	(353)	(353)			
Sell Singapore dollars	55	(0)	(0)			
Buy U.S. dollars	2,013	4	4			
Buy Taiwan dollars	668	0	0			
Buy Chinese yuan	404	(0)	(0)			
Buy EURO	71	(0)	(0)			
Buy Singapore dollars	42	(0)	(0)			
Total	¥10,379	¥(306)	¥(306)			

	Thousands of U.S. dollars					
2018:	Contract amount	Fair value	Gains (losses)			
Sell U.S. dollars	\$ 6,622	\$172	\$172			
Buy U.S. dollars	34,257	(184)	(184)			
Buy Chinese yuan	14,265	(4)	(4)			
Buy Taiwan dollars	8,591	8	8			
Buy GBP	7,727	(20)	(20)			
Buy EURO	7,396	(18)	(18)			
Buy Singapore dollars	6,646	(24)	(24)			
Total	\$85,506	\$ (70)	\$ (70)			

Note: The fair values are based on the quoted forward foreign exchange rates.

Derivative financial instruments designated as hedging instruments

The contract amounts of forward foreign exchange contracts, entered into to hedge future transactions and receivables and payables denominated in foreign currencies that have been translated by the corresponding contracted rates, are as follows:

	Millions	of yen	Thousands o	nds of U.S. dollars		
2018:	Contract amount	Fair value	Contract amount	Fair value		
Future transactions denominated in a foreign currency						
Sell U.S. dollars	¥11,853	¥335	\$111,575	\$3,156		
Buy U.S. dollars	156	(0)	1,474	(2)		
Monetary assets and liabilities in foreign currency (Note)						
Sell U.S. dollars	555	_	5,230	_		
Total	¥12,566	¥335	\$118,280	\$3,154		

	Millions of yer			
2017:	Contract amount	Fair value		
Future transactions denominated in a foreign currency				
Sell U.S. dollars	¥4,117	¥50		
Sell Korean won	1	(0)		
Buy U.S. dollars	340	(0)		
Monetary assets and liabilities in foreign currency (Note)				
Sell U.S. dollars	130	-		
Buy U.S. dollars	127	_		
Total	¥4,717	¥49		

Note: The fair value of these derivative financial instruments, which is based on the quoted foreign exchange rates, is included in the carrying value of hedged assets and liabilities.

19. Segment Information

General information about reportable segments

A reportable segment is a component or an aggregated component of Tokyo Electron. For each of the components, discrete financial information is available and the operating result is regularly reviewed by management to make decisions about resources to be allocated to the segment and assess its performance.

The operation of Tokyo Electron consists of segments by products and services based on business units (BUs), and Tokyo Electron identifies as a reportable segment, "semiconductor production equipment (SPE)" and "flat panel display (FPD) production equipment".

Products of the SPE segment consist of coater/developers, etch systems, deposition systems, cleaning systems used in wafer processing, wafer probers used in the wafer testing process and other semiconductor production equipment. The SPE segment principally develops, manufactures, sells such products and provide services on them.

Products of the FPD production equipment segment consist of coater/developers and etch/ash systems used in the manufacture of flat panel displays. The FPD production equipment segment principally develops, manufactures, sells such products and provide services on them.

Basis of measurement of reportable segment net sales, segment profit (loss), segment assets and other items

The accounting policies applied in each reportable segment are generally consistent with those applied for the preparation of the consolidated financial statements. Intersegment sales or transfers are determined by negotiation between the Tokyo Electron group companies considering current market prices. Assets in common use have not been allocated to each reportable segment, while costs associated with those assets have been allocated to reportable segments on a systematic basis.

Information about reportable segment net sales, segment profit (loss), segment assets and other items

Reportable segment information as of and for the years ended March 31, 2018 and 2017 is as follows:

	Millions of yen					
	Reportabl	e Segment				
2018:	Semiconductor production equipment	FPD production equipment	Other	Total	Eliminations and Corporate	Consolidated
Net sales						
Sales to external customers	¥1,055,234	¥75,068	¥ 425	¥1,130,728	¥ —	¥1,130,728
Intersegment sales or transfers	_	_	19,469	19,469	(19,469)	_
Total	1,055,234	75,068	19,894	1,150,197	(19,469)	1,130,728
Segment profit (loss)	314,602	13,299	(57)	327,844	(52,601)	275,242
Segment assets	494,964	43,963	3,014	541,943	666,762	1,208,705
Depreciation and amortization	11,402	701	81	12,185	8,434	20,619
Amortization of goodwill	600	_	_	600	_	600
Loss on impairment	925	_	_	925	_	925
Capital expenditures, including intangible assets	16,392	935	247	17,575	33,722	51,297

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	Millions of yen					
	Reportable	e Segment			*	
2017:	Semiconductor production equipment	FPD production equipment	Other	Total	Eliminations and Corporate	Consolidated
Net sales						
Sales to external customers	¥749,893	¥49,387	¥ 438	¥799,719	¥ —	¥799,719
Intersegment sales or transfers	_	_	14,372	14,372	(14,372)	
Total	749,893	49,387	14,810	814,091	(14,372)	799,719
Segment profit	182,709	4,618	82	187,410	(38,294)	149,116
Segment assets	374,513	27,494	2,646	404,654	552,792	957,447
Depreciation and amortization	8,694	418	89	9,202	8,670	17,872
Amortization of goodwill	631	_	<u> </u>	631	_	631
Loss on impairment	362	_	<u> </u>	362	_	362
Capital expenditures, including intangible assets	10,881	562	472	11,917	10,347	22,264

	Thousands of U.S. dollars					
	Reportable	e Segment				
2018:	Semiconductor production equipment	FPD production equipment	Other	Total	Eliminations and Corporate	Consolidated
Net sales						
Sales to external customers	\$9,932,551	\$706,597	\$ 4,001	\$10,643,151	\$ —	\$10,643,151
Intersegment sales or transfers		_	183,255	183,255	(183,255)	_
Total	9,932,551	706,597	187,256	10,826,406	(183,255)	10,643,151
Segment profit (loss)	2,961,247	125,179	(542)	3,085,884	(495,121)	2,590,762
Segment assets	4,658,932	413,814	28,376	5,101,123	6,275,998	11,377,121
Depreciation and amortization	107,331	6,603	764	114,699	79,389	194,088
Amortization of goodwill	5,652	_	_	5,652	_	5,652
Loss on impairment	8,714	_	_	8,714	_	8,714
Capital expenditures, including intangible assets	154,292	8,804	2,332	165,429	317,414	482,844

- Notes: 1. "Other" includes all other operating segments which are not included in the reportable segments, including group-wide logistic services, facility maintenance and insurance.
 - 2. (1) "Eliminations and Corporate" segment loss totaling ¥52,601 million (\$495,121 thousand) and ¥38,294 million for the years ended March 31, 2018 and 2017, respectively, includes corporate expenses not allocated to any reportable segments. The corporate expenses consist of the Company's research and development costs of ¥22,263 million (\$209,561 thousand) and ¥17,830 for the years ended March 31, 2018 and 2017, respectively, pertaining to fundamental research and element research, not allocated to any of the reportable segments, the loss on revision of retirement benefit plan of ¥3,154 million (\$29,690 thousand) for the year ended March 31, 2018 and the loss on disaster of ¥7,521 million for the year ended March 31, 2017.
 - (2) "Eliminations and Corporate" segment assets totaling ¥666,762 million (\$6,275,998 thousand) and ¥552,792 million as of March 31, 2018 and 2017, respectively, consist mainly of cash and cash equivalents, short-term investments and buildings not allocated to any of the reportable segments.
 - (3) "Eliminations and Corporate" capital expenditures totaling ¥33,722 (\$317,414 thousand) and ¥10,347 million for the years ended March 31, 2018 and 2017, respectively, consist mainly of capital expenditures for buildings, machinery and equipment not allocated to any of the reportable segments.

Other information

(1) Domestic and overseas net sales by destination for the years ended March 31, 2018 and 2017 are as follows:

	Millions of yen							
2018:	Japan	North America	Europe	South Korea	Taiwan	China	Other	Total
Net sales	¥148,760	¥119,257	¥96,948	¥378,496	¥174,636	¥164,344	¥48,283	¥1,130,728

Note: Sales are classified in countries or regions based on location of customers.

	Millions of yen							
2017:	Japan	North America	Europe	South Korea	Taiwan	China	Other	Total
Net sales	¥101,122	¥101,566	¥59,998	¥145,216	¥233,754	¥115,126	¥42,935	¥799,719

Note: Sales are classified in countries or regions based on location of customers.

	Thousands of U.S. dollars							
2018:	Japan	North America	Europe	South Korea	Taiwan	China	Other	Total
Net sales	\$1,400,233	\$1,122,532	\$912,543	\$3,562,658	\$1,643,794	\$1,546,914	\$454,473	\$10,643,151

(2) Net property, plant and equipment by location as of March 31, 2018 and 2017 are as follows:

		Millions of yen		
2018:	Japan	Other	Total	: :
Property, plant and equipment	¥97,610	¥28,342	¥125,952	
		Million	s of yen	-
2017:	Japan	U.S.A.	Other	Total
Property, plant and equipment	¥77,407	¥11,228	¥11,805	¥100,441
	The	ousands of U.S. do	llars	
2018:	Japan	Other	Total	
Property, plant and equipment	\$918,772	\$266,777	\$1,185,550	

(3) Major customer information

Net sales to external customers that represent 10 percent or more of net sales are as follows:

		Millions of yen	Thousands of U.S. dollars
Name of customer	Related reportable segment	2018	2018
Samsung Electronics Co., Ltd.	Semiconductor production equipment and FPD production equipment	¥261,544	\$2,461,829
Intel Corporation	Semiconductor production equipment	181,053	1,704,197
SK hynix Inc.	Semiconductor production equipment	132,146	1,243,846

Note: The amounts include sales to the customer and its subsidiaries.

		Millions of yen
Name of customer	Related reportable segment	2017
Intel Corporation	Semiconductor production equipment	¥143,488
Taiwan Semiconductor Manufacturing Company Ltd.	Semiconductor production equipment	127,621
Samsung Electronics Co., Ltd.	Semiconductor production equipment and FPD production equipment	112,151
Micron Technology, Inc.	Semiconductor production equipment	84,111

Note: The amounts include sales to the customer and its subsidiaries.

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Information about reportable segment goodwill

Reportable segment information about amortization of goodwill for the years ended March 31, 2018 and 2017, and unamortized balances as of March 31, 2018 and 2017 are as follows:

	Millions of yen			
2018:	Semiconductor production equipment	FPD production equipment	Total	
Amortization of goodwill	¥ 600	¥—	¥ 600	
Goodwill	1,699	_	1,699	

	Millions of yen				
2017:	Semiconductor production equipment	FPD production equipment	Total		
Amortization of goodwill	¥ 631	¥—	¥ 631		
Goodwill	3,376		3,376		

	T	Thousands of U.S. dollars		
2018:	Semiconductor production equipment	FPD production equipment	Total	
Amortization of goodwill	\$ 5,652	\$-	\$ 5,652	
Goodwill	15,998	_	15,998	

20. Per-Share Information

Net income per share and net assets per share are computed based on the weighted-average number of shares of common stock outstanding during each year. Net income-diluted per share is computed based on the weighted-average number of shares of common stock outstanding during each year after incorporating the dilutive potential effect of shares of common stock to be issued upon the exercise of stock options.

Dividends per share has been presented on an accruals basis and include, in each fiscal year ended March 31, dividends approved or to be approved after March 31 but applicable to the year then ended.

The basis for the calculation of net income per share for the fiscal years ended March 31, 2018 and 2017 is as follows:

	Million	Millions of yen		
	2018	2017	2018	
Net income (loss) per share of common stock - Basic				
Net income attributable to owners of parent	¥204,371	¥115,208	\$1,923,674	
Less components not pertaining to holders of common stock	_	_	_	
Net income pertaining to holders of common stock	¥204,371	¥115,208	\$1,923,674	
Weighted-average number of shares of common stock outstanding (thousands)	164,090	164,054		
Net income (loss) per share of common stock - Diluted				
Adjustment of net income attributable to owners of parent	_	_	_	
Increase in number of common stock (Thousands of share)	562	446		
Increase in number of share subscription rights (Thousands of share)	562	446		



Independent Auditor's Report

To the Board of Directors of Tokyo Electron Limited:

We have audited the accompanying consolidated financial statements of Tokyo Electron Limited and its consolidated subsidiaries, which comprise the consolidated balance sheets as at March 31, 2018 and 2017, and the consolidated statements of income, comprehensive income, changes in net assets and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, while the objective of the financial statement audit is not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Tokyo Electron Limited and its consolidated subsidiaries as at March 31, 2018 and 2017, and their financial performance and cash flows for the years then ended in accordance with accounting principles generally accepted in

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2018 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

KPMG AZSA LLC

KPMG AZSA LLC June 19, 2018 Tokyo, Japan

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> **Financial Section Investor Information**

■ Consolidated Subsidiaries ■ Investor Information

Consolidated Subsidiaries (As of March 31, 2018)

▶▶ JAPAN

- Tokyo Electron Technology Solutions Limited
- Tokyo Electron Kyushu Limited
- Tokyo Electron Miyagi Limited
- Tokyo Electron FE Limited
- Tokyo Electron BP Limited
- Tokyo Electron Agency Limited

▶▶ U.S.

- Tokyo Electron U.S. Holdings, Inc.
- Tokyo Electron America, Inc.
- TEL Technology Center, America, LLC
- TEL Venture Capital, Inc.
- TEL Epion Inc.
- TEL FSI, Inc.

▶▶ EUROPE

- Tokyo Electron Europe Limited
- Tokyo Electron Israel Limited
- TEL Magnetic Solutions Limited

▶▶ ASIA

- Tokyo Electron Korea Limited
- Tokyo Electron Taiwan Limited
- Tokyo Electron (Shanghai) Limited
- Tokyo Electron (Kunshan) Limited
- Tokyo Electron Singapore Pte. Limited

33 consolidated subsidiaries in total, including the above 20 companies

Investor Information (As of March 31, 2018)

Corporate Name and Head Office:

Tokyo Electron Limited Akasaka Biz Tower 3-1 Akasaka 5-chome, Minato-ku, Tokyo 107-6325, Japan

Established:

November 11, 1963

Annual General Meeting of Shareholders:

June

Common Stock:

Stock trading unit 100 shares 300,000,000 shares Authorized 165,210,911 shares Issued

Number of shareholders 35,186

Common Stock Listed on:

Tokyo Stock Exchange 1st Section (Stock code: 8035)

Independent Auditor:

KPMG AZSA LLC

Administrator of Shareholders' Register:

Sumitomo Mitsui Trust Bank, Limited 4-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo Japan

Direct mail and inquiries to: Sumitomo Mitsui Trust Bank, Limited 8-4 Izumi 2-chome, Suginami-ku, Tokyo 168-0063, Japan

Tel (toll free): 0120-782-031 (available only in Japan)

For Further Information, Contact:

Investor Relations Tokyo Electron Limited Akasaka Biz Tower 3-1 Akasaka 5-chome, Minato-ku, Tokyo 107-6325, Japan

URL:

www.tel.com

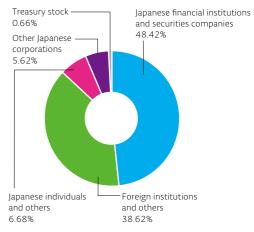
Tel: +81-3-5561-7000

Principal Shareholders:

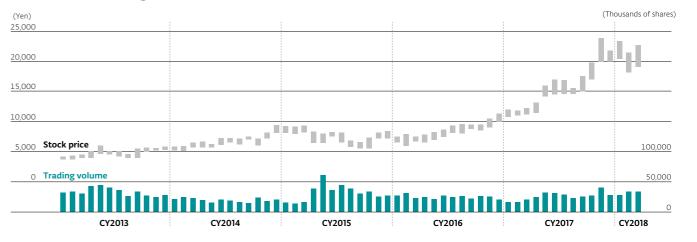
	(thousands)	(%)
The Master Trust Bank of Japan Limited (trust account)	28,747	17.51
Japan Trustee Services Bank Limited (trust account)	18,432	11.23
Tokyo Broadcasting System Holdings, Inc.	7,727	4.70
JP Morgan Chase Bank 380055	4,536	2.76
Trust & Custody Services Bank, Limited (securities investment trust account)	3,220	1.96
State Street Bank West Client Treaty 505234	2,932	1.78
Japan Trustee Services Bank Limited (trust account 5)	2,548	1.55
Japan Trustee Services Bank Limited (trust account 4)	2,446	1.49
Japan Trustee Services Bank Limited (trust account 7)	2,206	1.34
JP Morgan Chase Bank 385151	2,099	1.27

Notes: 1. Shares of less than one thousand have been rounded down in the "Number of shares held.

Distribution of Ownership among Shareholders:



Stock Price and Trading Volume



^{2.} Voting share ratio is calculated excluding treasury stock (1,097,342 shares). Figures are truncated after the second decimal place.