

Our Strategy

Our Market and Business Opportunities

Semiconductors are integrated into innumerable widely-used end products. During the semiconductor test process, test systems pass high-precision electrical signals through devices to test whether they work properly and have the required performance and durability.

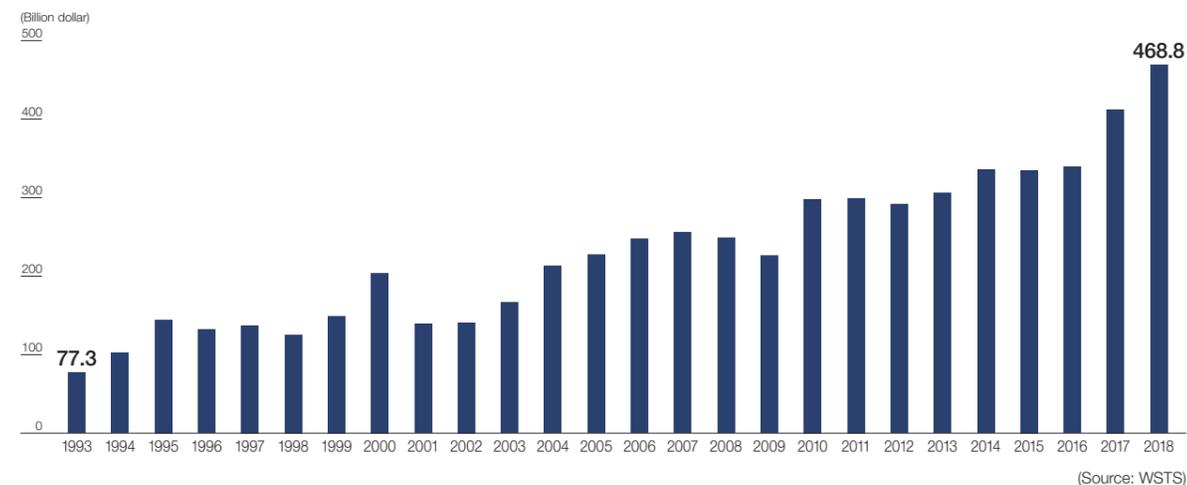


Semiconductors driving social evolution

Semiconductors are integrated into all types of products such as smartphones, computers, home appliances, automobiles, and industrial machinery, and are used in diverse activities ranging from communications and smart cities to social media and games. In 2018, the semiconductor market grew to six times its size 25 years earlier, setting a new record. The semiconductor market is also anticipated to grow significantly in the future with the evolution of technologies such as 5G and ADAS.

Semiconductor growth has been supported by Moore's law and the consequent reduction of chip size, increased speed of operation, and reduced power consumption. In addition, these advances have greatly contributed to progress in the functionality and performance of electronics. In the future, innovative technologies such as EUV lithography (technology for writing circuits using extremely short ultraviolet wavelengths) and 3D layering of circuits will further increase the performance of semiconductors, expanding their applications yet more.

World Semiconductor Market (1993-2018)



Types of Semiconductors

Semiconductors can be broadly classified into memory devices, for storing data, and system-on-chip devices (SoCs,) which refers to devices other than memory for uses such as computation, communications, data sensing, and

audio. Many SoCs incorporate various functions into a single semiconductor. The types of semiconductors and corresponding testers are described below.

Memory Semiconductors

Semiconductors specializing in storing and remembering data.

[Main types]

• DRAM

Capable of high-speed operation and mainly used as the memory of computers and smartphones. While DRAM operates at high speed, data is lost if the power is cut.



T5833

• Non-volatile memory

Used as memory for computers and smartphones due to its ability to retain data even when the power is cut. The most common type of NVM is NAND flash memory, and there are also devices called NOR that are used for storing software, etc.

[Corresponding testers]

T5503HS2, T5830, T5833, B6700, etc.

SoC Semiconductors

Semiconductors that perform various processing tasks such as computation, communication, data sensing, and audio. The market is divided up by many semiconductor manufacturers for each of the diverse functions available.

[Main types]

• Application processors (AP)

Control the main operations of smartphones.

• ICs for communication devices

A general term for baseband processors and RF transceivers for wireless communication of data.

• Microprocessors/Microcontrollers (MPU/MCU)

Controllers for various devices such as servers, personal computers and automobiles.

• GPUs

Excellent for high-speed graphic processing for games, etc., and also used in AI due to their high computational performance.

• CMOS image sensors

Convert different strengths of light into electrical signals to create images. They are the semiconductors that provide camera functions.

• Display driver ICs (DDI)

Control the displays of devices such as smartphones and televisions.

[Corresponding testers]

V93000, T2000, T6391, etc.



V93000

Our Strategy

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The Role of Semiconductor Testers

Semiconductor testers breathe life into semiconductors made through a long process of design, simulation, characterization and manufacturing by passing high-precision electrical signals through them to test whether they work and also whether they have the prescribed performance and durability, therefore our business opportunities widely come from design to mass production of semiconductors. This is aimed at not only sorting out good devices from defective ones, but also improving customer value by contributing to their time to market as product cycles grow shorter and volume at launch increases for end-products such as smartphones.



Semiconductor development and production launch phase

Contribution to Time to Market

Test supports the design evaluation and volume production ramp of semiconductors by passing electrical signals through the semiconductors to inspect design details and operational performance not visible to the naked eye, and by providing feedback on the test results.

Volume production phase

Contribution to Time to Volume

Test leverages customers' production volume with stable yield through high-speed, high-volume test using optimal test flows enabled by semiconductor testers.

Test contributes to production ramps through the timely supply and stable product quality to meet demand.

Improvement phase

Contribution to Time to Quality

Test contributes to improvements in volume production processes and reduction of the cost of products through test solutions that support the improvement of efficiency in the creation of test programs to match the diversification of semiconductor device types and the design details as customers' businesses expand.

Drivers of the Semiconductor Tester Business

Semiconductor tester business opportunities are mainly driven by the following factors.

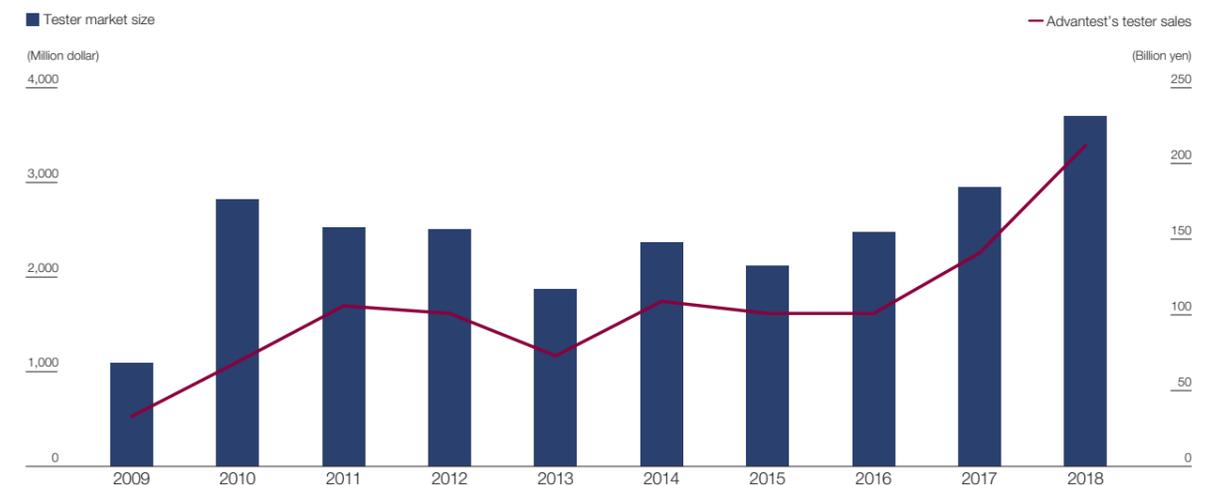
- 1 Expansion of semiconductor production volume (capacity buys)
- 2 Evolution of semiconductor technology/migration to next-generation standards (technology buys)
- 3 Digital Transformation (expand to car electronics, IoT)
- 4 Increasing demand on reliability of semiconductor as a part of social infrastructure

For some time, the semiconductor tester business has been driven by "technology buys" associated with the increase in test time resulting from the addition of new functions and the increase in complexity of devices based on changes in technology, and "capacity buys" for expanding production volume.

Recently, new business drivers have included increases resulting from new demand arising from the expansion of semiconductor applications, and increases in test time resulting from heightened reliability requirements as the biggest demand for semiconductors shifts from consumer electronics to social infrastructure.

Although the tester business was cyclical due to fluctuations in semiconductor demand, the expansion of the scope of demand is expected to transform the structure of the market to one of cyclical growth, growing in the medium- to long-term while being cyclical.

Tester Markets and Sales



(Source: VLSI research, Advantest)

Our strategy

Overview of the Mid/Long-Term Management Policy (FY2018-FY2027)

We announced our Mid/Long-Term Management Policy in April 2018. This comprises our Grand Design (next ten years) and the Mid-Term Plan (initial three years). The progress of the digital transformation, which gives semiconductors a greater role in society, is dramatically changing Advantest's business environment, and we expect demand for semiconductors will increase in the future. The Management Policy was established to ensure that we capture these business opportunities.

Business Environment (Megatrends and Changes in the Semiconductor Test Market)

Rapid population growth, urbanization, and globalization, in addition to climate change and security issues, are giving rise to serious social problems today. The "digital revolution" uses semiconductors to solve these social problems, and is driven by the spread and penetration of active technology and processing of so-called Big Data. As shown in Figure 2, the volume of data creation is expected to grow at an accelerating rate in the future, and this data explosion will open new vistas for the semiconductor industry.

In the past, demand for semiconductors was driven by demand for end products such as mainframe computers, digital cameras, personal computers, and smartphones. However, future demand for semiconductors will mainly be supported by data itself, rather than hardware terminals. As semiconductors handling data—a source of value—become a form of social infrastructure spreading through and penetrating the whole world, higher reliability will be required especially for data centers, cars, and the people who depend on them, and as a result, semiconductors will become more sophisticated and more complex with larger capacities, which will require reinforcement of testing (more test items and longer test times).

In short, the rapidly growing volume of data due to the data explosion will drive semiconductor production volumes, and along with the need for higher reliability due to semiconductors becoming more complex and sophisticated, this will lead to further growth of semiconductor market.

Grand Design

Our Grand Design is a ten-year management policy for ensuring that the above megatrends can be linked to acquiring business opportunities. Its vision statement is "Adding Customer Value in an Evolving Semiconductor Value Chain." Currently, our business domain is testers and test environments for the semiconductor production test market, as shown in Figure 3. We will grow our business by expanding into peripheral markets such as upstream design and evaluation processes and downstream product and system-level processes.

Figure 1

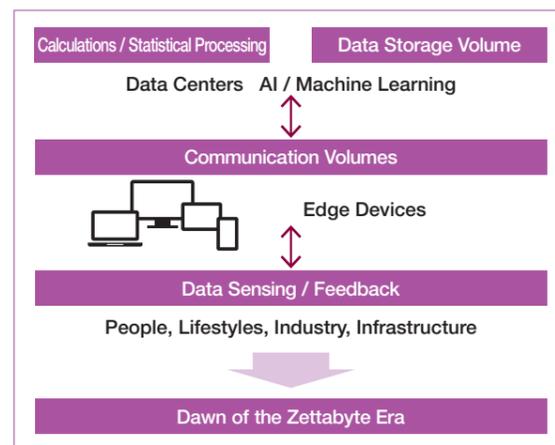


Figure 2

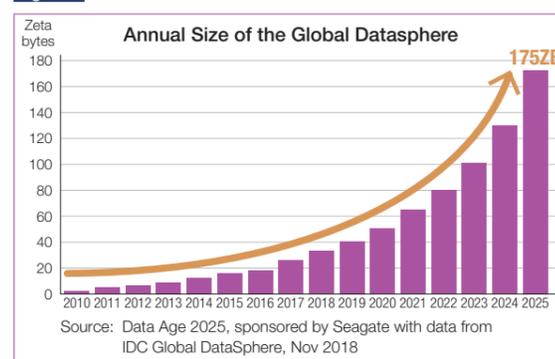
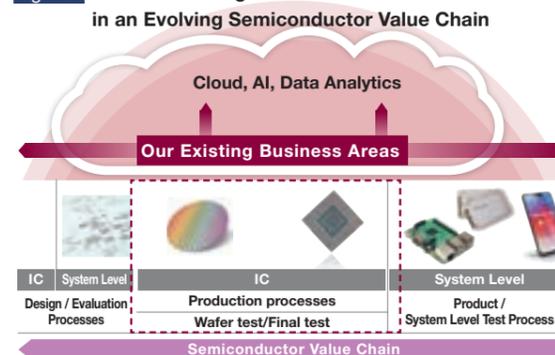


Figure 3



We have established six "commitments" as strategic guidelines for realizing this vision.

- 1 Be the No.1 provider of test & measurement solutions
- 2 Partner with leading-edge customers
- 3 Develop leading-edge technologies
- 4 Attract and retain the best talent in the industry
- 5 Learning organization
- 6 Improve financial KPI and increase corporate value

We have also formulated four strategies for the achievement of the vision.

- 1 Reinforce Core Business, Invest Strategically
 - We will focus investment on our core business and peripheral markets by riding the new phase (megatrends) of semiconductor test demand.
- 2 Seek Operational Excellence
 - We will seek to improve the efficiency and quality of all internal processes centered on R&D and production, etc.
- 3 Explore Value to Reach a Higher Level
 - We will strengthen the expansion of test solutions, broaden our solutions by adopting AI and new data analysis methods, and seek a profitable service business model.
- 4 Pioneer New Business Fields
 - We will strive to develop new businesses utilizing our measurement technologies.

Growth Scenarios

We think the semiconductor market will grow at a rate of 4% per year over the next 10 years based on various market surveys. We also assume that the size of the semiconductor tester market will similarly grow at a rate of 4% per year, and that we can reach net sales of 400 billion yen per year a decade from now in FY 2027, considering the strengthening and expansion of our core business as well as the acquisition of peripheral markets by means including M&A. This is our base scenario. In addition, we have considered a conservative case in which we think we can aim for sales of 300 billion

yen even if the tester market does not grow, although the semiconductor market does. In either case, we aim to expand our market share in the tester market by one point every year by focusing on future growth fields and strengthening partnerships with customers. (Figure 4)

The above is our long-term Grand Design forecasting the next ten years. Our Mid-Term Plan details concrete plans that apply to the initial three years, starting in 2018. This is introduced on the following page.

Figure 4

Sales Scenarios

	Billion yen
FY2017 (actual)	
Tester Market	363.0
Advantest Share	36%
Sales	207.2

Conservative Case	
Tester market growth rate = 0%	
FY2027 (Forecast)	Billion yen
Tester Market	380.0
Advantest Share	46%
Existing Business	240.0
New Business	60.0
Sales	300.0

Base Scenario	
Tester market growth rate = 4%	
● The same pace as the semiconductor market growth	
FY2027 (Forecast)	Billion yen
Tester Market	580.0
Advantest Share	46%
Existing Business	340.0
New Business	60.0
Sales	400.0

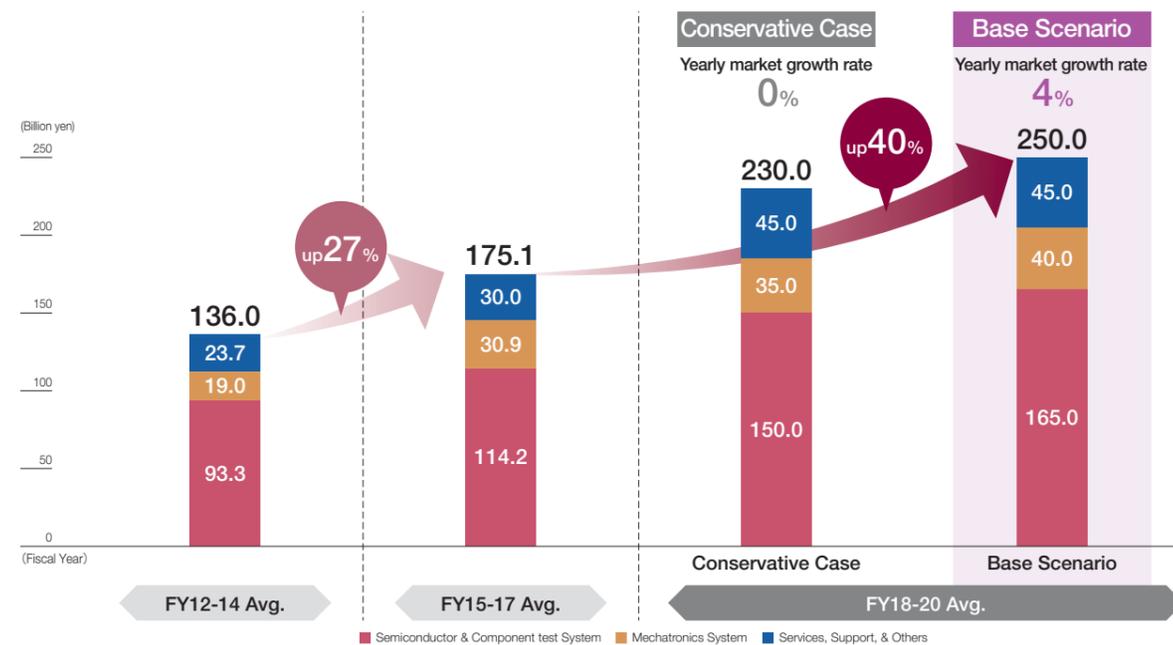
Mid-Term Plan (FY2018-FY2020)

We have formulated and are executing a Mid-Term Plan for the next three years in order to realize our Grand Design (Long-Term Management Policy).

Approach to the Mid-Term Plan

As mentioned when describing the Grand Design, we forecast substantial growth in tester demand over the next ten years, but the semiconductor manufacturing equipment industry tends to have cyclical growth in which it undergoes repeated ups and downs rather than steady annual growth. For this reason, we have established a target for average

growth over three years instead of establishing numerical targets for each fiscal year in our initial Mid-Term Plan starting in FY2018. We have assumed the above conservative case and base scenario. As mentioned earlier (p.28), we have assumed that we will increase our market share at a rate of one point every year under both scenarios.



The Advantest's strengths to increase our share in the semiconductor tester market are as follows.

Global No.1 Product Portfolio

- Highly scalable modular architecture platforms
- Dominant position in growth areas

Global No.1 Customer Base

- Unparalleled customer base nurtured over many years
- Greater presence in the growing Asia market

Total Test Solutions Including Peripherals, Global Support

- We offer complete test environments including device I/F peripherals

Management Metrics (KPIs)

Keeping in mind improvement of corporate value while remaining aware of both improvement in profit and loss and efficient utilization of capital, Advantest has determined key management metrics during the Mid-Term Plan period: sales, operating margin, return on equity (ROE), and earnings per share (EPS).

Each of these KPIs (three-year averages) are shown below. (Reference: actuals for the year ended March 31, 2019, greatly exceeded all KPIs in the base scenario, making it a solid first year.)

	Conservative Case (FY18~FY20 Avg.)	Base Scenario (FY18~FY20 Avg.)	Result of FY18
Yearly tester market growth ratio	0%	4%	—
Sales (Billion yen)	230.0	250.0	282.5
Operating margin	15%	17%	22.9%
ROE	15%	18%	35.3%
EPS	¥135	¥170	¥302

Main Initiatives

Semiconductor and Component Test System Segment

- Pioneering the capture of the wave of increasingly complex and sophisticated next-generation test demand for applications such as HPC (High-Performance Computing) and 5G communication
- Maintaining a robust business foundation in DRAM and NVM (Non-volatile Memory)

Mechatronics System Segment

- Expansion of sales opportunities by providing solutions integrated with testers, and catering to demand for advanced test environments

Services, Support and Others

- Increased post-sales revenue through initiatives such as catering to the need for factory automation, expansion of SSD tester sales, and expansion into peripheral markets through M&A

Strengthening Business Management

- Strengthening business management and introducing business management and evaluation tools based on ROIC (return on invested capital ratio) for internal business performance evaluation

Financial Policy & Shareholder Returns

Sustaining a Healthy Financial Status

- Stable Free Cash Flow**
 - Create ¥85B – ¥100B of cash flow in 3 years
- Minimum Cash Reserves**
 - Hold ¥50B – ¥60B for stable business activities
 - Excess cash will preferentially be invested in business growth, M&A, etc.

Enhance Corporate Value through Mid-Term Investment

- R&D Investments**
 - Continuous R&D investments of more than ¥30B annually
- M&A Investment Frame**
 - ¥100B
 - Expand solutions across the semiconductor value chain

Shareholder Returns

- Returns Policy**
 - Half-term consolidated payout ratio 30%
 - If long-term residuals remain, we will aim to review our payout ratio, improve returns by repurchasing shares, etc.

Governance, Human Resources Strategy & Mid-term Action Items

Enhance Corporate Governance

- Diversity of Board of Directors (nationality, gender)
- Start performance-based stock remuneration plan

Internal Business Management

- Introduction of ROIC-based tools for internal business management

Human Resources Investment

- Foster global, frontier personnel
- Innovative workstyles

Towards the Next Level

- Next wave business research team creation
- Greater involvement with customer processes in search of test solutions for each process
- AI data analysis introduction and utilization
- Explore ways to win more recurring business

Financial Strategy

Financial Strategy - CFO Message

Implementing a rapid-response financial strategy while balancing offense and defense



Director & Managing Executive Officer (CFO)
Atsushi Fujita

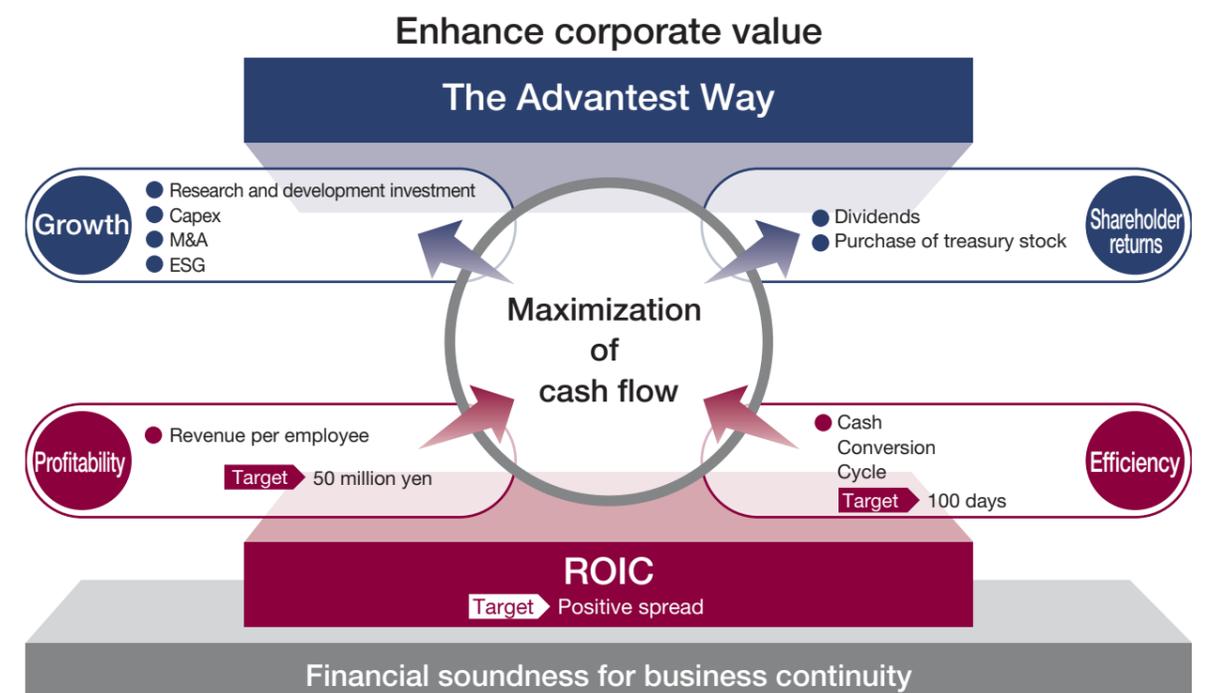
Basic Financial Policy and My Role as CFO

Since joining Advantest in 1983, in addition to my eight years working overseas, I have worked mainly in the accounting department as well as human resources and the general affairs department of our administrative division. Generally, the administrative division tends to have a conservative approach in terms of doing things as they have been done in the past, but mindful of the Company's guiding principle of "Quest for the Essence," I consciously aimed to incorporate ideas and initiatives not previously used within the Company, such as a performance evaluation system based on return on invested capital (ROIC), an accounting system using a single global platform, and a global cash management system, while considering trends in society at large. Our basic financial policy is to maximize cash flow by seeking profitability and efficiency based on ROIC, with the basic stance of determining the direction of our corporate management according to "The Advantest Way," which defines the Company's mission, vision, and core values founded upon the continuation of the Company's business to support the quality assurance of semiconductors, which

can now be considered social infrastructure. I believe that our greatest challenge is to further increase shareholder value by sharing our business profits with stakeholders as shareholder returns while also allocating it to activities for growing our business and fulfilling our responsibilities to society. As the CFO of Advantest, my specific roles are to increase corporate value through evaluating our business, and to allocate and manage assets for global development, evaluating new investments such as M&A and new developments, and to engage with institutional investors. I constantly seek the best approach to increase Advantest's corporate value and adopt strategies that meet the needs of the moment.

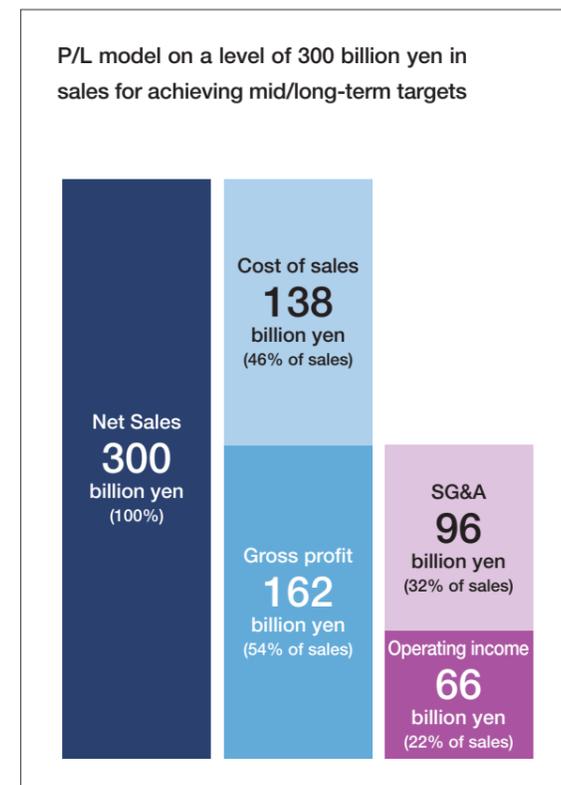
Financial Approach for the Grand Design

In April 2018, the Company announced its Grand Design for the next decade. As depicted in the Grand Design, semiconductor applications and demand are rapidly expanding, backed by the data explosion, and this is establishing an environment for further growth of the Company's



Financial Strategy

Financial Strategy-CFO Message



business. The base scenario for the next decade is for the Company to achieve 400 billion yen in sales in FY2027. We posted record sales of 282.5 billion yen in FY2018, and we need growth of 4% per annum to reach this target of 400 billion yen in sales. However, the semiconductor industry does not grow steadily, and tends to experience repeated ups and downs, which also affect the Company. Considering these industry characteristics, Advantest does not expect to accumulate 4% growth every year and will implement growth investment including M&A to account for conditions several years ahead. In order to achieve the scenario depicted in the Grand Design, we will consider ongoing investment in research and development, improvements to the cost of sales ratio, a flexible production system responsive to fluctuations in demand, and improvements to our SG&A ratio as important issues for the profit structure, while paying attention to financial soundness, which enables a single A level credit rating. Amid an environment where there is much expectation of future business growth, we intend to increase corporate value by

investing funds taking account of our Mid/Long-Term Management Policy while maintaining a dividend payout ratio of 30% to provide returns to shareholders. However, if we determine that there is a surplus of funds or capital even when implementing such business growth measures, we will dynamically consider overall shareholder returns such as reviewing the dividend payout ratio and purchasing treasury stock after also giving consideration to investment in growth.

Execution of Mid/Long-Term Investment while Maintaining a Sound Financial Base

In the Mid-Term Management Plan ending in the fiscal year ending March 31, 2021, which was announced as a milestone for the Grand Design for the next decade, sales, operating income margin, return on equity (ROE), and earnings per share (EPS) are managed as the four KPIs intended to promote the improvement of P/L for the period and the efficient utilization of capital. In particular, we are strongly aware that ROE should exceed the cost of shareholders' equity, meaning that the equity spread must be positive. For this reason, we have adopted the ROIC approach in the evaluation of products, and specifically require that each product is not only profitable, but has profitability that exceeds a certain hurdle rate in relation to the assets used. The figures for the hurdle rate of each product are obtained by adding the spread covering costs not directly generating profit to the weighted average cost of capital (WACC) based on the cost of shareholders' equity, and must be higher than the WACC required for the Company as a whole. If a product does not exceed the hurdle rate, we implement measures to improve profitability such as expanding sales, reducing costs, and lowering expenses, in addition to checking and making improvements to ensure that assets such as equipment and inventories are not excessive. This has the same meaning as improving profitability, the asset turnover ratio, and leverage, which are all elements of ROE, and in particular profitability and the asset turnover ratio, which ultimately leads to the improvement of companywide ROE.

To maintain a sound financial base, we aim to generate 85 to 100 billion yen in free cash flow over the three years of the Mid-term Plan, retain 50 to 60 billion yen in net cash to respond to short-term risks, and prioritize the utilization of excess funds in business investment such as investment in growth and M&A. With regard to the Company's

global asset distribution and management, we will utilize cash pooling to facilitate the availability of funds in regions where they are required while taking care to ensure funds are not lost due to currency fluctuations by utilizing currency hedging, etc.

We intend to continually invest over 30 billion yen per year in research and development, and have established a framework for 100 billion yen in M&A investment aimed at expanding our capability to provide solutions in the semiconductor value chain. Evaluation of M&A deals and development projects is carried out by determining recoverability of funds using a certain hurdle rate in the same manner as ROIC to guard against investment losses.

Furthermore, in addition to improving profitability by expanding sales, reducing the cost of sales, and cutting costs, we are taking steps to quickly amass funds by increasing efficiency with an awareness of ROIC and the cash conversion cycle (CCC). Shortening the number of days in the CCC will enable us to quickly utilize funds, begin investing in development earlier, and create a virtuous cash cycle for improving profitability, which results in an advantage over our competitors.

Investment in the Future

To increase corporate value, we will actively invest in intangible assets and particularly in personnel and in research and development as appropriate for our business aims. We will continue to invest more than 30 billion yen per year in research and development, which is the source of our competitiveness. Investment in development aimed at expanding our wide product lineup is essential for maintaining our advantage over the competition and for remaining the leading company in the semiconductor tester industry. In addition, we anticipate that it will become more difficult to secure the necessary human resources in the future, amid concerns about the global aging of society. We plan to actively invest in securing and developing human resources inside and outside the Company, including engineers who support our relationships with customers. Furthermore, there are also concerns about the enormous cost of maintaining existing IT systems and the prospect of the systems themselves becoming obsolete due to technological advances. We will remain conscious of the digital transformation as we implement plans to upgrade our IT resources, including production systems and internal infrastructure.

Increase Shareholder Value

Advantest is engaged in improving ROE in order to achieve a positive equity spread, and lowering the cost of capital can have a significant impact on a positive equity spread. The semiconductor sector tends to have larger fluctuations in stock price than the stock market as a whole, so the industry tends to have a high cost of capital. The Company's sales are also affected by customers' enthusiasm for capital investment, which is influenced by economic trends, but we are attempting to stabilize performance to a greater extent through steps such as strengthening our subscription base with annual maintenance contracts. Performance has also deteriorated in the past due to the impairment of assets, and we are raising awareness of excess assets by ensuring the ROIC approach permeates throughout the Company.

With regard to increasing shareholder returns, we are always mindful of the potential of measures utilizing the purchase of treasury stock, but we believe that corporate value can best be realized by expanding the Company's business based on the idea that the semiconductor industry is a growth industry and not one that is mature. Dividends are paid based on a policy linked to performance in the same manner as bonuses for employees, who are also stakeholders, and we wish to increase dividends to all our shareholders as a result of future growth of the Company.

Strategy Feature 1

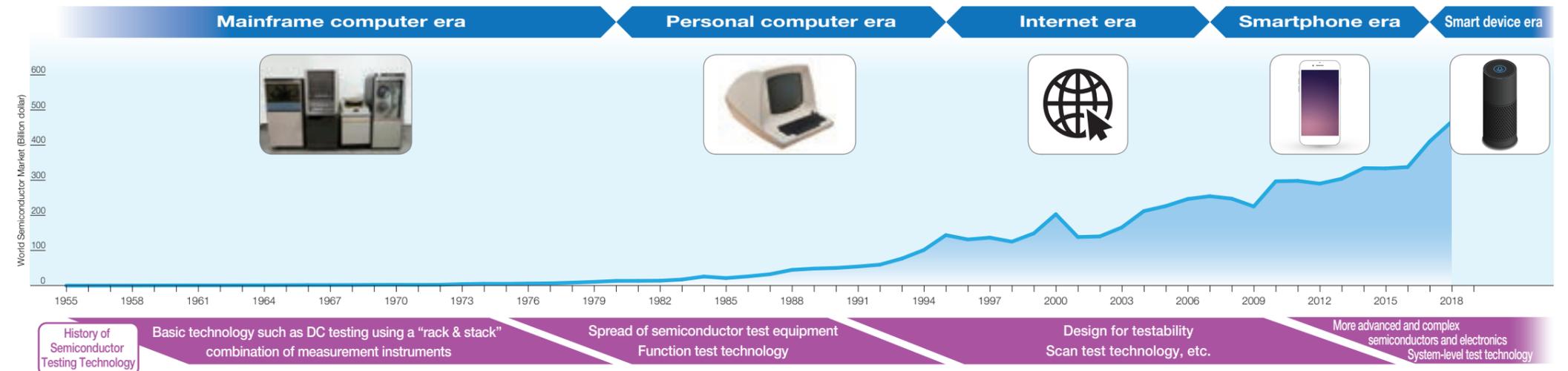
Research and Development:
Focusing on “Waves”Catching the Waves of
Technology & Further
Building on Our Strengths

Our corporate mission is “Enabling Leading-Edge Technologies.” This is both a source of pride and a responsibility for our R&D division. It is important to constantly hone and amass state-of-the-art technologies, but we do not consider our business successful until our technologies are commercialized, or packaged as solutions, and accepted by the customers (markets) that need them at a sufficiently large scale. It is the mission of the business unit to quickly and accurately identify these future business opportunities and to successfully capture them by incorporating them into our development planning, where the R&D division is responsible for giving shape to these dreams.

Hans-Juergen Wagner

Director & Managing Executive Officer
Test Technology
Leader, ATE Business Group

Trends in test technologies brought by the “waves”



(Source: SIA, WSTS)

Catching the waves of technology in
partnership with our leading customers

Separately from economic fluctuations, the evolution of semiconductor manufacturing technology and increases in production volumes have become the growth drivers of the semiconductor testing business. They generate sequential “waves” of progress. With the progress of semiconductor process shrinks, semiconductors become more complex, more functional, more high-performance and lower cost. New integration and packaging technologies are developed to implement these advances, and new markets and business models are created by end-products that hitherto did not exist. At the same time, technological innovation and the shifting roster of players cause dynamic changes in the supply chain. These big changes drive future innovations and the creation of new products and new markets. This is what we mean by “waves.” In order to quickly and accurately catch these waves, collaboration with customers who lead the industry in terms of products and technology is essential. The challenges these leading customers face, in terms of their advancement, investment scale, and impact on existing markets and supply chains, serve as Advantest’s compass as we seek to capture the profit opportunities generated by coming waves and set the direction of our R&D accordingly. This business unit’s most important mission is to collaborate with these leading customers and develop concrete development plans for commercializing the solutions that meet their needs.

Reinforcing our strengths

Our core business is ATE (Automated Test Equipment, which includes handlers and device interface products). In CY2018, we held the No.1 market share in the global ATE industry. We are extremely proud of this accomplishment and of the product portfolio and customer base that supports it. Further strengthening our ATE business unit is Advantest’s top priority in terms of revenue sources and as a driving force for enhancement of our corporate value. Since our acquisition of Verigy in 2011, our V93000 development division and T2000 and memory tester development divisions had been separated, but in FY2018 we consolidated these divisions into a single organization. This will have a significant effect on the sharing of technologies and will reduce development times, and we are already developing a global personnel rotation system to better cross-fertilize our R&D projects.

Major achievements from FY2018 through the beginning of FY2019 include:

- (1) Launch of a new memory burn-in tester family for NAND flash and DRAM (model name B6700 series)
- (2) Expanding the served markets of the V93000 to include power and automotive devices (AVI64 & FVI16)
- (3) Launch of a system-level test system for high-speed NAND (T5851 STM16G)
- (4) Delivery of a test solution for 5G-NR devices (V93000 Wave Scale Millimeter Solution)
- (5) Expanding the served markets of the V93000 to include chip makers’ process monitoring and development processes (V93000 SMU8)

- (6) S Development of STT-MRAM switching current measurement technology using our memory tester

Capture of related markets

As we explained in our Grand Design, which was announced in April last year, we believe there exist untapped markets in proximity to our core business that can be developed by utilizing our measurement technology. Our \$135M acquisition of the SLT (System Level Test) business of Astronics, announced in February 2019, is one of our planned measures to expand our business to these related markets. Furthermore, in July 2018, we established our new ARTeam (Applied Research & venture Team), which has an organizational structure that transcends our R&D division, to sensitively capture the opportunities generated by new waves of technology in our core business as well as related markets and incorporate them into our R&D planning. The ARTeam gathers together both highly capable engineers and individuals with entrepreneurial gifts and insight. Collaborations with universities and research institutes will be another way that we aim to expand our expertise and contribute added value to our customers.

Strategy Feature 2

Aiming to Develop Talented Human Resources at the Cutting Edge of the Industry



Keith Hardwick

Managing Executive Officer
Global HR Executive Vice President

We will develop and utilize global human resources in a global system within a new corporate culture

overtime (12.8 hours in FY2017) in Japan, where most of the personnel in the production division are located.

In this way, we have implemented working-style reform programs in locations worldwide, in addition to proceeding with innovative initiatives such as performance-based stock remuneration, job rotation programs, and the provision of a wide range of opportunities to work overseas.

Culture that Brings Out the Capabilities of Employees

Advantest places importance on providing training opportunities to all employees who are motivated to continue learning and growing. At the same time, we actively create opportunities for employees to enhance their own strengths and address their weaknesses. Through this training and growth, Advantest employees are encouraged to make decisions independently. Advantest is proud to have a stance of not only achieving success, but also learning and improving through failure. By encouraging such training, growth, and independence, we enable every single employee to contribute to the success of Advantest.

Employee Engagement

Advantest is continually striving to establish a culture in which all employees are recognized for their value, respected, and able to work toward common goals. In 2018, 91% of employees participated in a global employee engagement survey. As a result, we were able to learn how employees feel about their work and workplaces and gained hints about what kind of support the company can provide.

Since the beginning of FY2019, Advantest has been working to improve engagement globally, in each country and in each division. Furthermore, based on the results of the employee engagement survey, Advantest has come to realize that we should engage in a global reform of our corporate culture over several years. Our new corporate culture is expressed by the word "INTEGRITY," taking the first letter of nine phrases that define the values we should

emphasize in all our actions within the Company and on behalf of the Company.

Along with this reform of corporate culture, we will collaborate with colleagues, customers, and partners to hold workshops for providing deeper understanding among all employees to enable them to better communicate, progress with their work, and improve by learning from others.



CORE VALUES	
Innovation	INNOVATION is our Lifeblood
Number One	NUMBER ONE is our Aspiration
Trust	TRUST is our Foundation
Empowerment	EMPOWERMENT is our Motivation
Global	GLOBAL is our Reach
Respect	RESPECT is our Heart
Inclusion and Diversity	INCLUSION AND DIVERSITY is our Commitment
Teamwork	TEAMWORK is our Approach
Yes	YES is our Attitude

Global Human Resource Management

Advantest allocates human resources strategically to provide support to our global customer base.

The Company's global presence and influence is one of the keys to our success. For many years, a large portion of our revenue has come from customers outside Japan. At present more than 95% of sales originate outside Japan. Addressing this reality, 48% of our total of 4,936 employees are based in various locations worldwide to provide support to our customers. Advantest's utilization of global human resources can be clearly seen in our commitment to promoting local employees to presidents of local subsidiaries and executive officers, resulting in 42% of the Company's executives hailing from outside Japan.

In order to fairly treat and assess our employees worldwide, Advantest has unified qualification systems and personnel evaluation systems, in addition to having a common global bonus system as an incentive for the distribution of profit. Furthermore, a performance-based stock remuneration system was introduced last fiscal year as a common global mid- to long-term incentive-based remuneration system. These forms of performance-based remuneration are calculated based on performance of the Company as a whole without segmentation by business division, country, or region. This has enabled us to



establish a framework for all global employees to cooperate by considering the profit of the Company as a whole.

Furthermore, in FY2014, we established a global personnel database, which is effectively utilized for project team composition and smooth personnel changes on a global scale. In addition, from FY2015, we began using a global personnel evaluation system. In the future, we will be improving our global human resource development systems, promoting employee diversity through active efforts to hire and promote employees with differing backgrounds, and taking decisive steps toward forging an employee recruitment strategy that accords with our business strategies in each country.

In this way, Advantest will continue to make large investments in human resources. Both revenue and earnings are expected to decrease in FY2019, but we will continue to invest in a wide range of overseas human resources including research and development, system engineering, and sales, with the aim of maintaining and expanding our market share in and beyond FY2020, which is the final year of the Mid-Term Management Plan.



Global human resource system

Approach to Risk Management

Risk Management

Advantest implements continuous strategic risk management in response to the global, diversifying risks we face.

Basic Approach

Advantest faces diverse risks arising from both internal and external factors as in the course of our global business. The Company aims to curb risks and minimize damage by predicting major risks that may cause significant

harm to the Company's business activities, corporate management, performance, shareholder value, or external reputation, analyzing their impact and continuously taking appropriate steps to address them.

Internal Control

Advantest has established an Internal Control Committee to oversee the internal control activities of the Advantest Group. The Internal Control Committee is made up of the heads of business divisions, corporate divisions, and major overseas affiliates, and is chaired by the President.

The members of the committee periodically conduct risk assessments in their own units, and conduct appropriate

risk management through activities to recognize and assess potential risks in the management environment, business activities, and the company's assets, as well as through improvement activities. The Internal Control Committee conducts risk monitoring for the Group as a whole once every six months, and assesses and takes steps to address major risks.

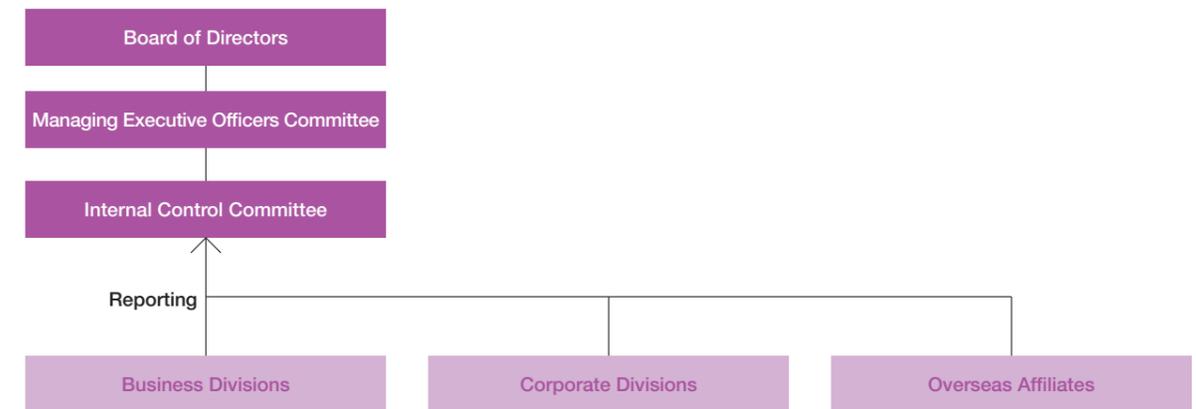
Major Risks and Countermeasures

	Major Risks	Major Countermeasures
1	Significant demand volatility in the semiconductor industry	We are building a structure capable of responding to fluctuations in demand by reinforcing our service business, expanding into areas outside the semiconductor industry, and promoting outsourcing of production.
2	Global economic and political impact of conducting business worldwide	Keep paying attention to the trend of world economy and international politics and put the first priority on customer's value when take any business activity.
3	Reduction of market share due to possible inability to deliver new products meeting customers' requirements in a timely manner	We are striving to quickly ascertain the needs of customers through close communication with them.
4	Missed opportunities due to dependence on a limited number of suppliers	We are standardizing components and design, and building a structure that is not overdependent on specific suppliers.
5	Reduction of market share due to intense competition	We are endeavoring to ensure our products remain competitive by providing unique functions and high added-value solutions.
6	High dependence on sales to largest customers	We are aiming to secure a broad customer base by developing new customers.
7	Price pressure on product lines	We are endeavoring to maintain appropriate pricing for our products by providing unique functions and high added-value solutions.
8	Impact of exchange rate fluctuations on profitability	We are endeavoring to limit the impact of fluctuations in exchange rates by adjusting the balance of currencies held.
9	Recovery of development costs for new products	We are seeking to improve the recovery of costs through stronger marketing and versatile product development.



Risk Management System

Advantest aims to organize our risk management system and clarify the roles of management, business divisions, and corporate divisions.



	Major Risks	Major Countermeasures
10	Limited sales opportunities due to key market concentration	We are aiming to expand the scope of our business through steps such as the development of new businesses and M&A.
11	Significant impairment losses on goodwill and intangible assets	When acquiring assets through methods such as M&A, we consider the cost of capital in our investment decisions.
12	Suspension of business operations due to natural disasters or cyber attack against our IT systems	In addition to formulating a business continuity plan, we are endeavoring to ensure business operations are not impeded by adopting steps such as diversifying production locations and external suppliers, and utilizing distributed cloud storage of data.
13	Recovery of capital expenditure	We consider the ability to recover expenditures based on the cost of capital in our investment decisions.
14	Decline of reputation or brand power due to product defects, etc.	We are striving to provide highly reliable products by conducting reviews in the design phase and implementing cross-checks by the Quality Assurance Division.
15	Incurring costs to comply with more stringent regulations for chemical substances	In addition to monitoring trends in environmental regulations for chemical substances, we are investigating alternative technologies.
16	Infringement of intellectual property by our employee or by 3rd party	Provide training to employee, and confirm whether there is any issue on IP at the time of development. And immediately claim our right when any 3rd party infringes against our IP.
17	Shortage of highly specialized personnel	We are aiming to secure a stable pool of talent through measures such as the establishment of a mid/long-term recruitment plan and global rotation of personnel.
18	Operational degradation due to legacy IT system	Keep recruiting and retaining talented IT engineers, and regularly monitoring the gap between current IT environment and advanced IT technology.