Investors Guide

October 28, 2025

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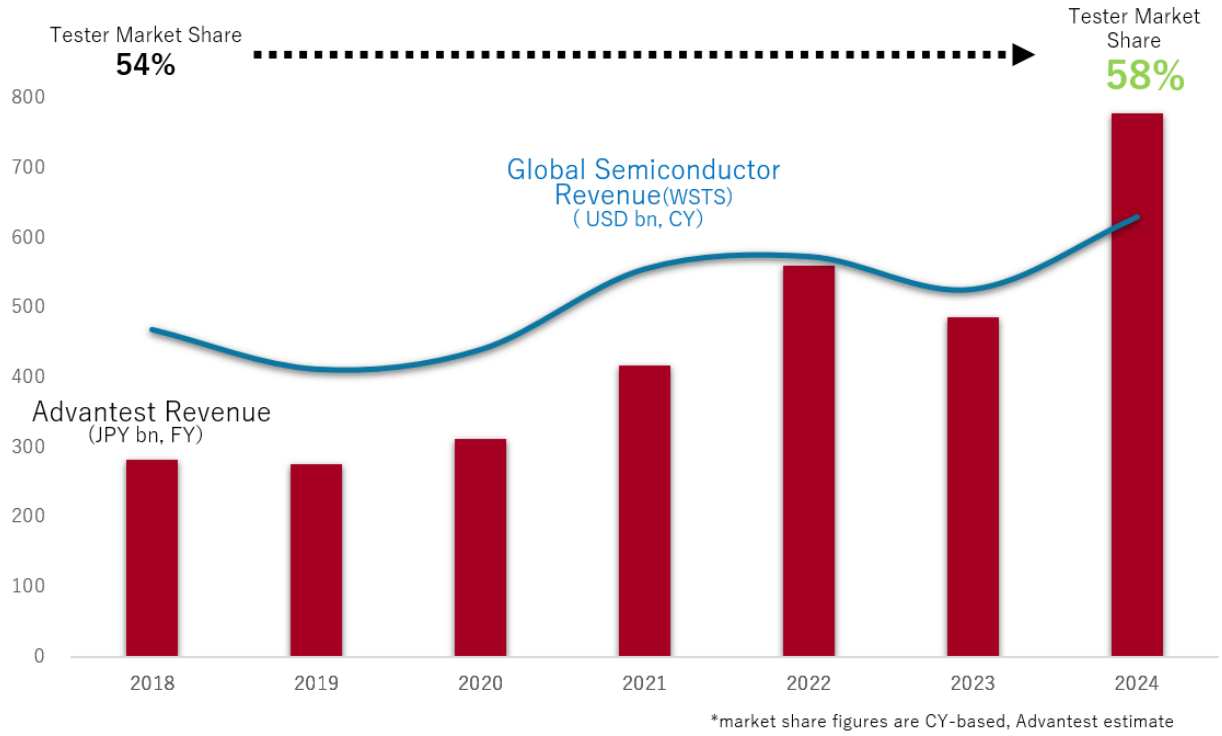
Overview



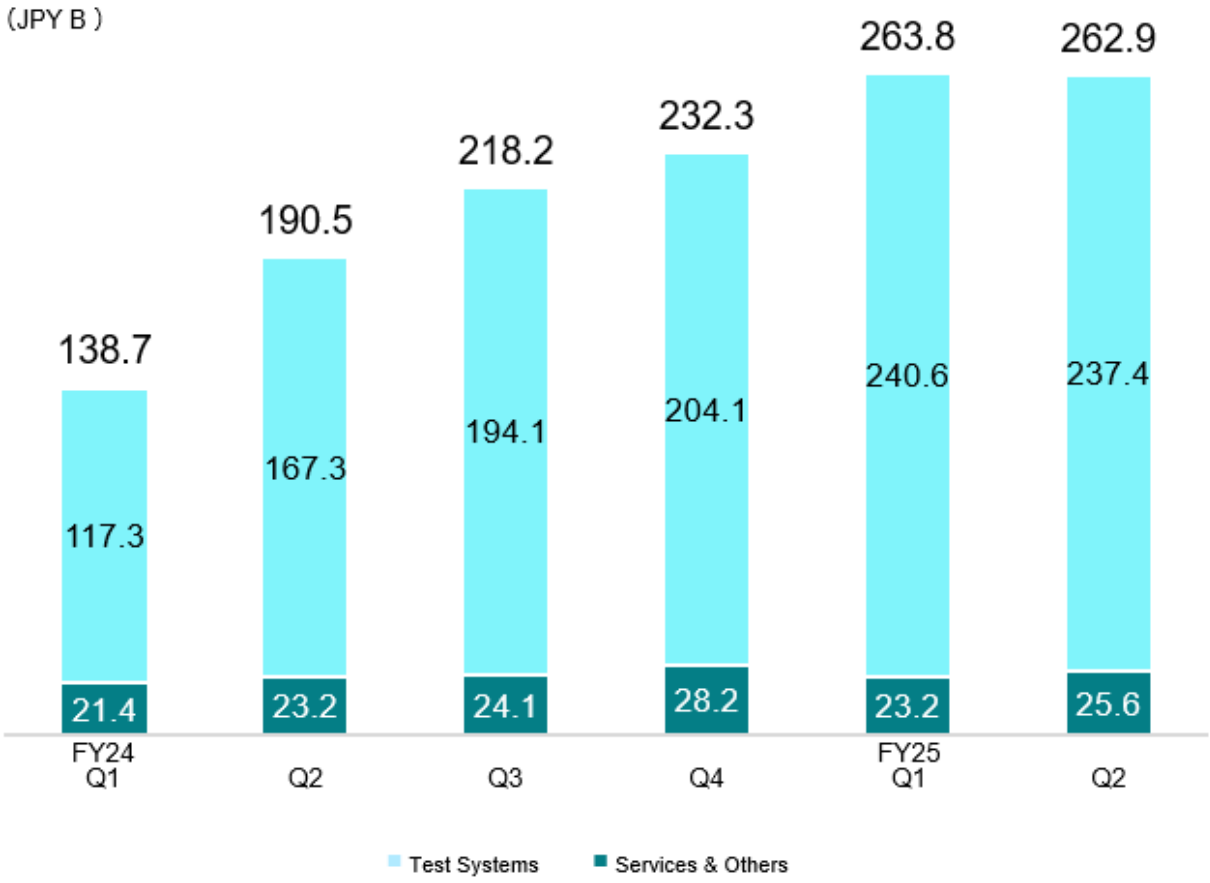
The Investors' Guide is an attempt for us to explain, for example, our sales composition, growth drivers, market characteristics, business model and competitive environment[1].

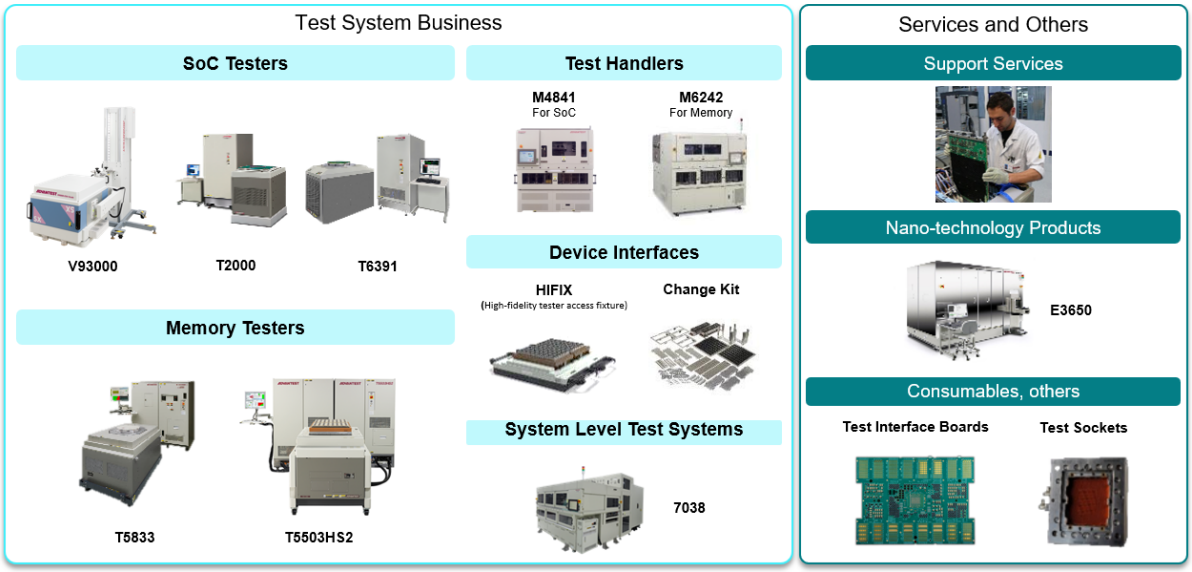
The chart above shows global semiconductor sales and Advantest's consolidated sales over the past seven years. The semiconductor and tester markets both grew significantly from 2020 to 2022 due to the acceleration of digitization caused by Covid-19. However, in 2023, the semiconductor market entered a correction phase, and the tester market shrank, partly as a reaction to the elevated demand triggered by Covid-19. In 2024, the semiconductor and tester markets both grew significantly due to increasing complexity of semiconductors, driven primarily by AI-related high-performance semiconductors. As a result, Advantest posted record high sales, operating income, and net income on a full year basis in FY2024. In the medium to long term, our sales are expected to expand along with the secular growth of the semiconductor market, while fluctuations are also to be expected.

[1] This document contains "forward-looking statements" that are based on Advantest's current expectations, estimates and projections. These statements include, among other things, the discussion of Advantest's business strategy, outlook and expectations as to market and business developments, production and capacity plans. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "anticipate," "believe," "estimate," "expect," "intend," "project," "should" and similar expressions. Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause Advantest's actual results, levels of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking statements. Except as required by law, we do not intend to update or revise any forward-looking statements as a result of new information, future events or otherwise.

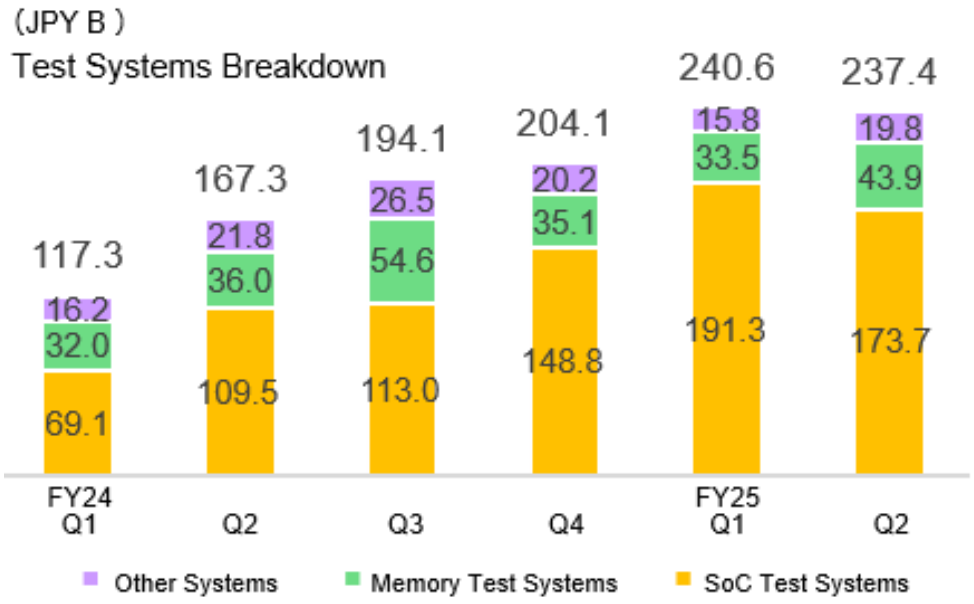
Chapter 1. Sales Composition

The Company's business segments consist of (1) Test System Business and (2) Services and Others. The core business is the Test Systems business. Historical sales by segment and the main products included in each segment are as follows.





Test Systems Business



The Test Systems business is divided into three sub-segments: SoC testers, memory testers and other systems. Historically, the memory testers had been the company's main business. However, in the 2000s, the Company began strengthening the SoC tester business, which now accounts for the majority of segment sales, thanks in part to the acquisition of Verigy in 2011. Other Systems contain test handlers, device interfaces, and the system level test systems. For more information on test processes in the semiconductor development and manufacturing processes, please refer to Chapter 2.

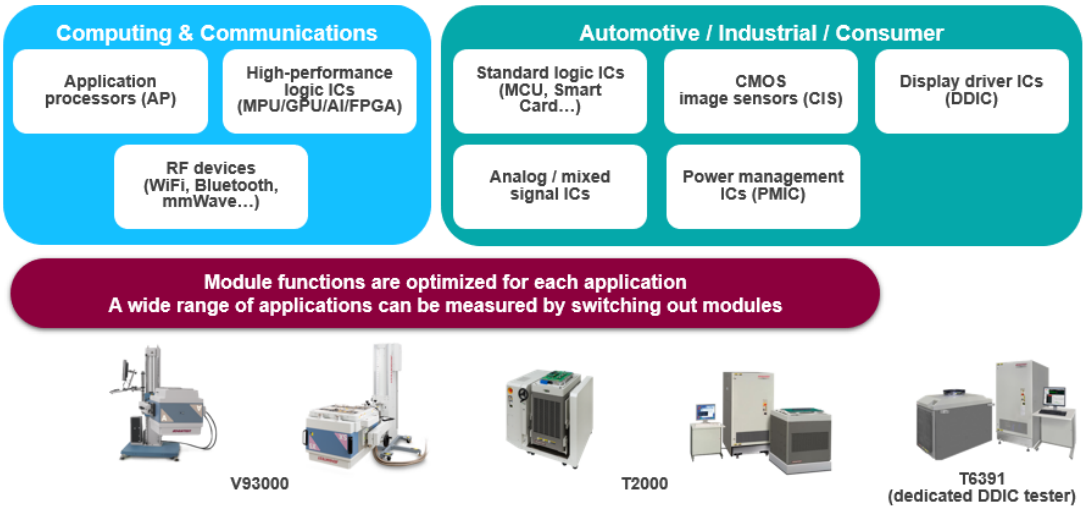
- SoC Testers

The SoC testers mainly fall in two categories: "Computing and Communications" and "Automotive, Industrial, Consumer, and DDIC (display driver ICs)". The table below shows the sales breakdown of SoC testers.

Applications	FY22	FY23	FY24
Computing / Communications	65%	60%	90%
Automotive / Industrial / Consumer / DDIC*	35%	40%	10%

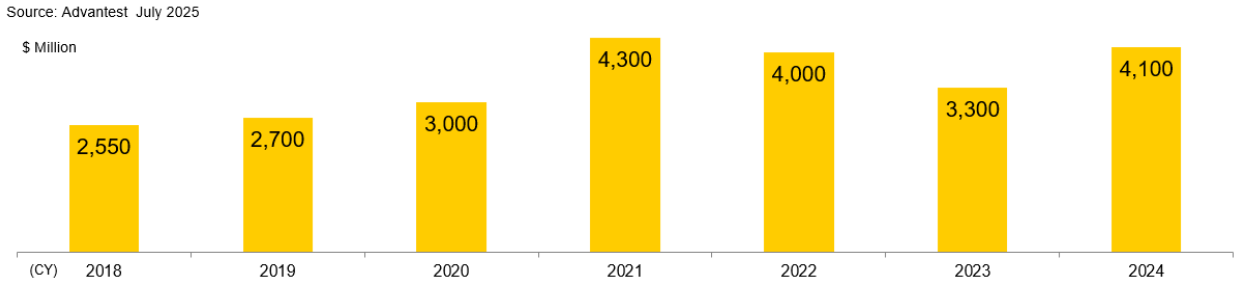
Numbers are rounded to the nearest 5% * DDIC: Display Driver IC

“Computing” in "Computing and Communications" includes leading-edge devices such as HPC (High Performance Computing) and AI, and “Communications” include application processors (APs) for smartphones. "Automotive, Industrial, Consumer and DDIC" includes a wide range of semiconductors for automotive, industrial and consumer markets, as well as display driver ICs (DDICs). The semiconductors tested in the Computing and Communications category are mainly high-performance semiconductors that are manufactured using leading-edge processes, while the Automotive, Industrial, Consumer, and DDIC categories are mostly semiconductors that are manufactured using mature processes.



SoC Tester Market Size Trends

The SoC tester market size has been on an increasing trend, albeit with cyclicality. While the market exhibits cyclicality depending on the level of capital investment by customers, such cyclicality is expected to moderate as the breadth of semiconductor demand expands. Against the backdrop of changes in the demand structure described below, the market is likely to continue its medium- to long-term growth trend. For market share, please refer to Chapter 3, “Competitive Environment and Our Competitive Advantage.”

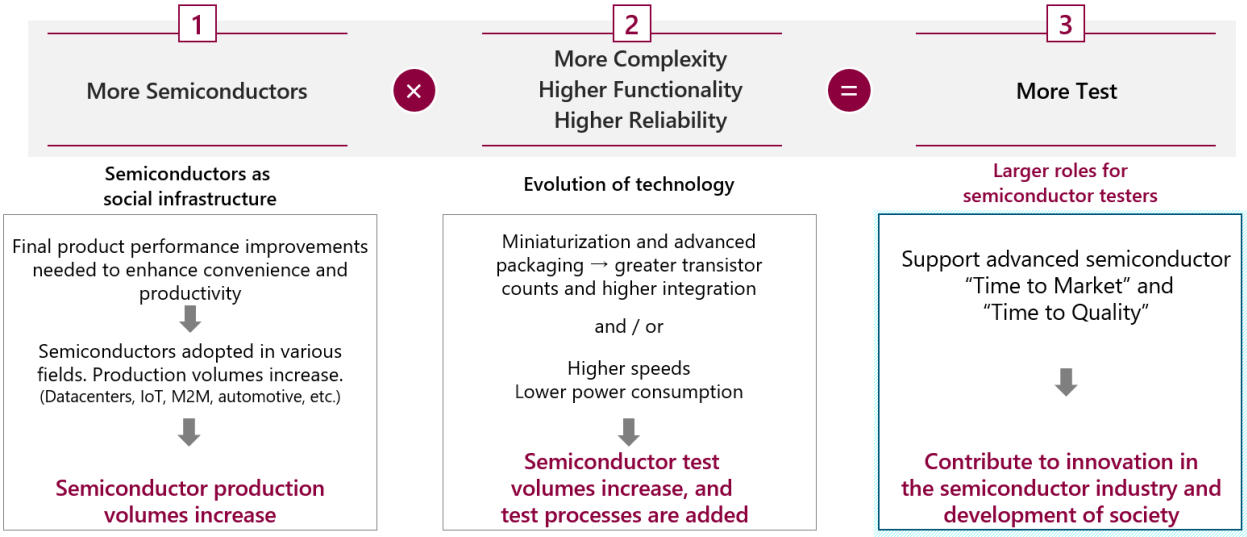


SoC test demand is determined by the capacity expansion (capacity buy) and demand based on the performance evolution cycle of semiconductors (technology buy). In addition to the increase in tester demand due to the broadening base of semiconductor demand, the need to ensure reliability predicated on growing complexity is also driving test demand. Moreover, the challenges associated with miniaturization and increasing complexity of semiconductors are driving importance of testing and are tailwinds to tester demand.

The capacity buy is influenced by semiconductor manufacturers' production plans, the design and manufacturing proficiency of individual target devices under test, improvements in test efficiency, and fabless companies' plans for selecting and switching test supply chains.

On the other hand, demand for technology buys is increasing year by year against the backdrop of technological advancements such as smartphone performance improvements and new technology trends such as HPC/AI/machine learning. These are driving semiconductor miniaturization,

heterogenous integration, and complexity growth, as represented by advanced packaging. The resulting increase in transistor counts and the level of integration cause an increase in test volume and test insertions.



➢ Memory Testers

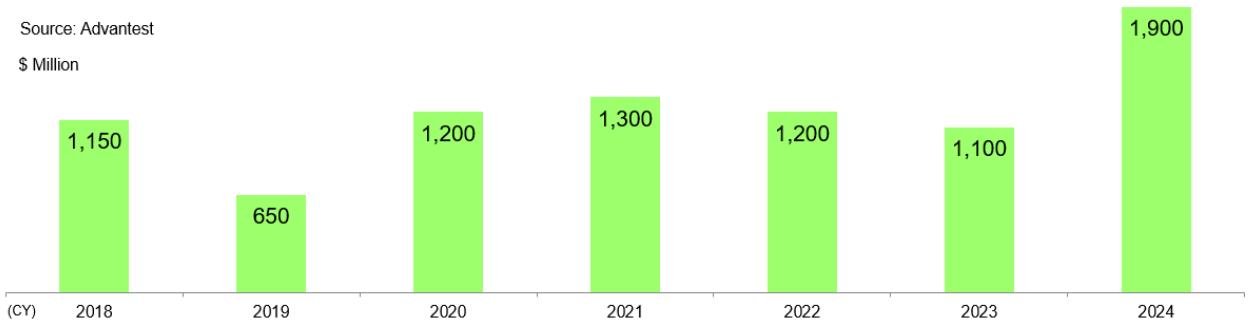
The memory testers are broken down by application: DRAM and non-volatile memory, and the table below shows the sales breakdown.

Applications	FY22	FY23	FY24
DRAM	60%	90%	95%
Non-Volatile Memory	40%	10%	5%

Numbers are rounded to the nearest 5%

Memory Tester Market Size Trend

The memory tester market shows an expanding trend due to a broadening range of memory semiconductor applications and rising quality assurance requirements in response to technological advancements. For market share, please refer "Chapter 3. Competitive Environment and Our Competitive Advantage".



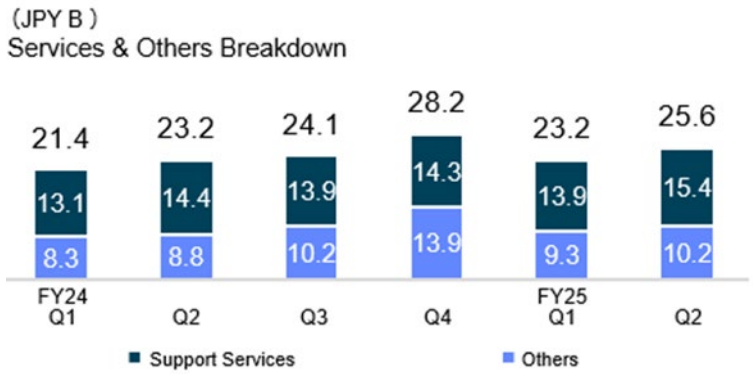
The demand for memory testers is essentially determined by the industry's bit growth rate and the trend in memory bandwidth (data transmission speed). This is because as bits on a chip increases, test time increases, and the increase in bandwidth drives demand for faster speed for test. In addition to higher memory density and interface speeds, the trend toward higher reliability requirement is also an important driver of demand.

- Other Systems

Other Systems consists of test handlers, device interfaces, and system level test systems. Test handlers are products that automatically handle and sort semiconductor devices. Device interfaces serve as interfaces for a device under test. Sales of test handlers and device interfaces tend to move in tandem with sales of semiconductor testers. The system level test systems are test equipment that are used to test devices in final application mode. With the increasing complexity of semiconductors, there is a growing need to screen defects that escape device level tests. Therefore, the Company is working to expand the system level test business.

Services and Others

Services and Others consists of Support Services, Nano-technology products, the Consumables, and others. Support Services provides maintenance services to products installed at customers. For nanotechnology the main product is CD-SEM (critical dimension-scanning electron microscope) which is based on electron beam control technology. Applications include dimensional measurement of wiring patterns on photomasks which are used in the semiconductor manufacturing front-end process. Consumables include semiconductor test interface boards and test sockets.

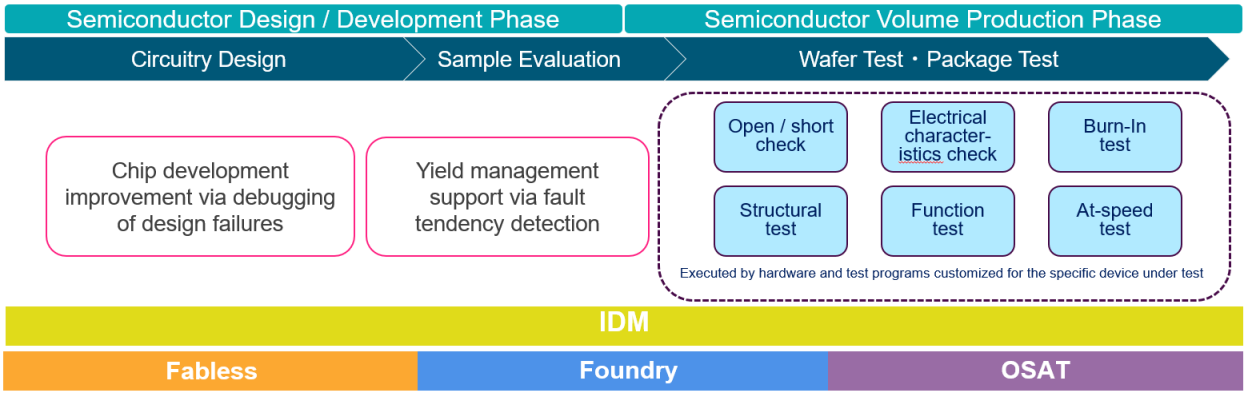


Chapter 2. Business Model

The value that we provide to our customers in relation to semiconductor tests mainly lies in our technical and support capabilities for supporting their semiconductor development and volume production. In the following sections, we will show how we support our customers by introducing our customer base, explaining the role of testers and our testing processes, and presenting our product portfolio.

Customer Base

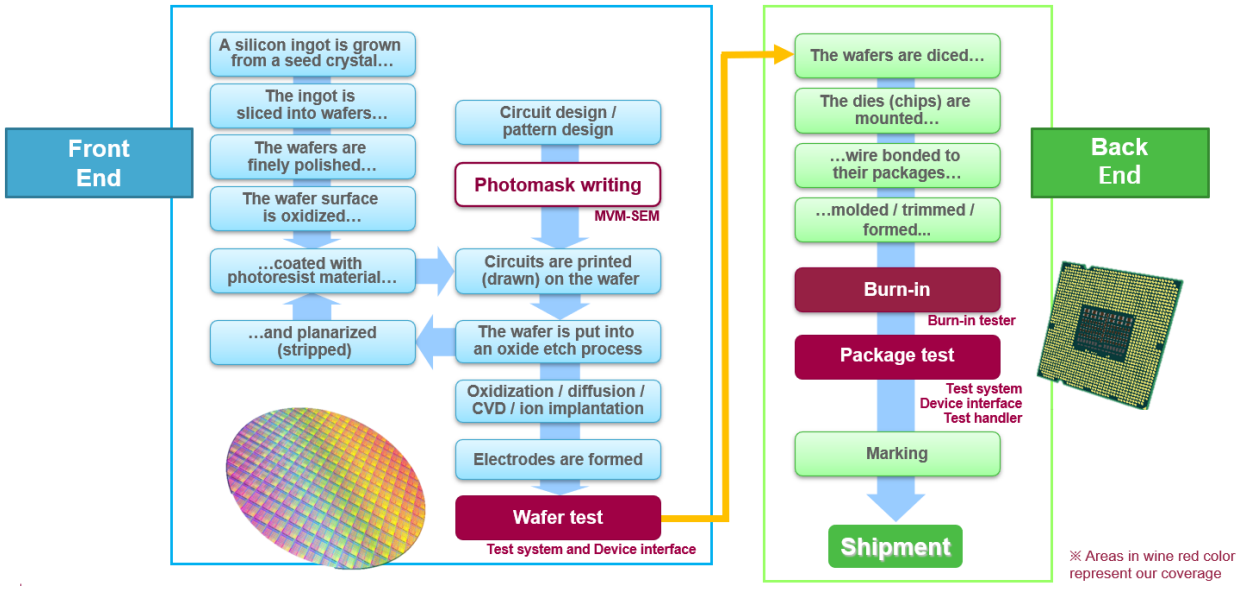
Our customers include semiconductor manufacturers, and we supply testers primarily to IDMs (Integrated Device Manufacturers), fabless semiconductor design companies, foundries (such as wafer fabrication companies), and OSATs (outsourced semiconductor assembly and test companies). We have strong relationships with a wide variety of customers, whether they are IDMs, fabless, foundries, or OSATs. Traditionally, in the semiconductor industry, IDMs with a vertically integrated model that handled everything from design to manufacturing to sales were the main players. In the last 20 years or so, however, the rise of fabless, foundries, and OSATs has become prominent, and the global disaggregated model (the fabless-foundry-OSAT model) has grown. Under the disaggregated model, the same testers selected by fabless companies for verification during device design are often used by foundries for sample evaluation and wafer testing, and by OSATs for post-assembly package testing. Therefore, decision-making by a fabless customer is an important point for tester selection in the disaggregated model.



Role of testers and testing process

Semiconductor testers test the performance of semiconductors, and their role is mainly divided into design evaluation and volume production of semiconductors. Although the volume is larger for volume production, recently the demand for testers used in the design and development phase has been increasing. With the growing complexity of semiconductor design, testers are helping customers shorten their development time by screening design defects and providing feedback at the semiconductor's evaluation phase.

In volume production, testers are used for wafer testing and for package testing. The front-end process is for wafer fabrication, and takes place at the very end of wafer fabrication process by testing wafers. The back-end process is to assemble and package chips which have been singulated from wafers. The package test is conducted at the final stage of the back-end process to screen defects.



In semiconductor testing, electrical signals are applied to semiconductor devices, and the output signals are compared with reference data and expected values to determine whether the device has passed or failed. Semiconductor manufacturing is said to involve more than 1,000 individual process steps. Among these steps, semiconductor testing is the only process that uses electrical signals to test devices, playing a critical role in quality assurance.

Advantest plays a role in supporting device quality by providing seamless technical testing support from semiconductor development to volume production across a full range of customers such as IDMs, fabless, foundries, and OSATs. This long-standing commitment to advancing test solutions by overcoming technical challenges throughout the test supply chain, from fabless to foundries to OSATs, has strengthened the trust between the Company and each of the players in the supply chain.

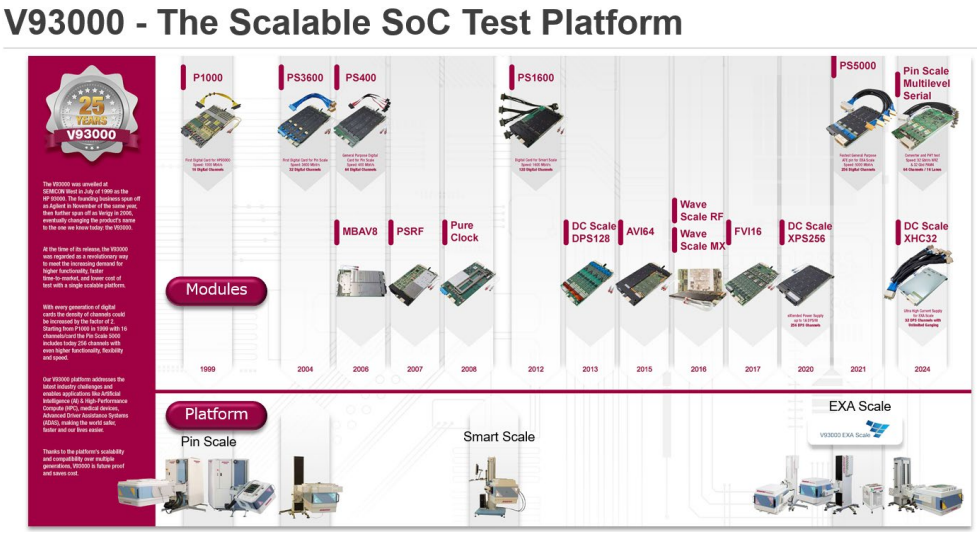
Product Portfolio

In recent years, with increasing complexities of semiconductors and challenges of their development and manufacturing, test challenges are also growing. These challenges are heightening the increasing importance of providing a comprehensive test environment, as opposed to just providing a tester, in order to achieve highly accurate testing. In its product portfolio, Advantest owns different pieces of technology that enable a comprehensive test environment including the contact technology necessary for measurement, test handlers with active thermal control capability, and device interfaces necessary for high-performance measurement.

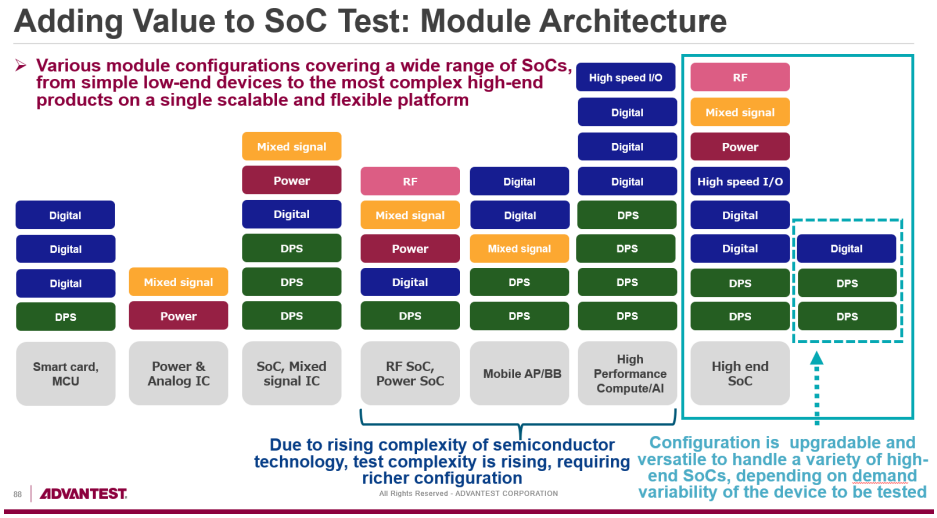
Our technological capability to provide optimal combination of testers and peripheral equipment simultaneously enables us to speedily create the optimal measurement environment for our customers.

Our customers are able to bring their products to market faster, thereby enhancing their competitive advantage. The higher the performance of a device, the more it highlights Advantest's strength in providing a one-stop solution in a timely manner.

Testers are at the core of our comprehensive solution approach. Based on our close relationship with customers, we are able to gain insight into their technological needs and challenges, and design products with the scalability to support the technological evolution over the next 10 years.



What is at the core of our tester scalability is our module architecture approach in SoC testers. For devices such as SoCs that boast a large number of applications and fast device upgrade cycles, the module architecture helps customers secure a return on their tester investment. This is because the ability to flexibly reconfigure testers through the module architecture. Necessary functions can be reconfigured in modules according to the application, leading to a higher return on investment for customers. As shown in the table below, by preparing a wide range of modules, including digital, analog, and power-mixed signal, technological advancements can be made flexibly.

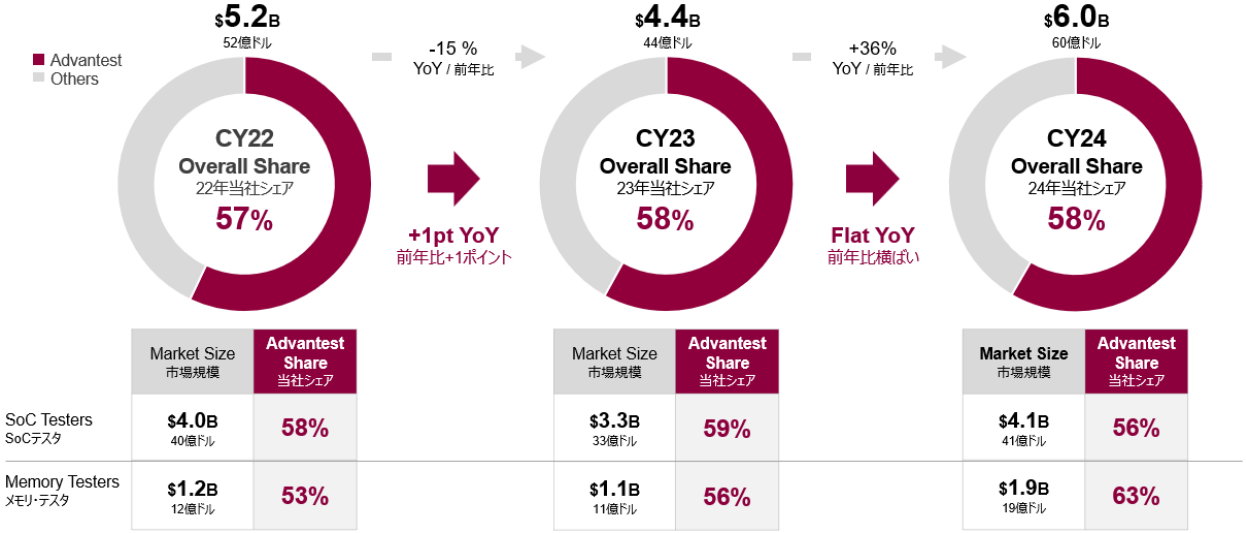


Chapter 3. Competitive Environment and Our Competitive Advantage

Testers are critical for ensuring the quality of customer devices. Changing a tester platform is essentially equivalent to rebuilding the entire environment for device development, evaluation, and mass production, resulting in significant additional costs for the customer.

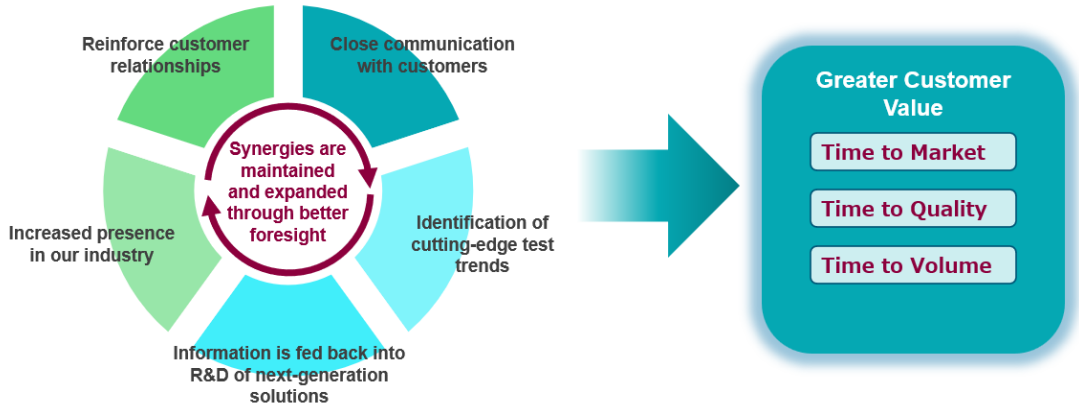
We believe that our current position is largely the result of continuous efforts to innovate and expand our product portfolio to meet the ever-changing demands of a broader customer base.

Source: Advantest

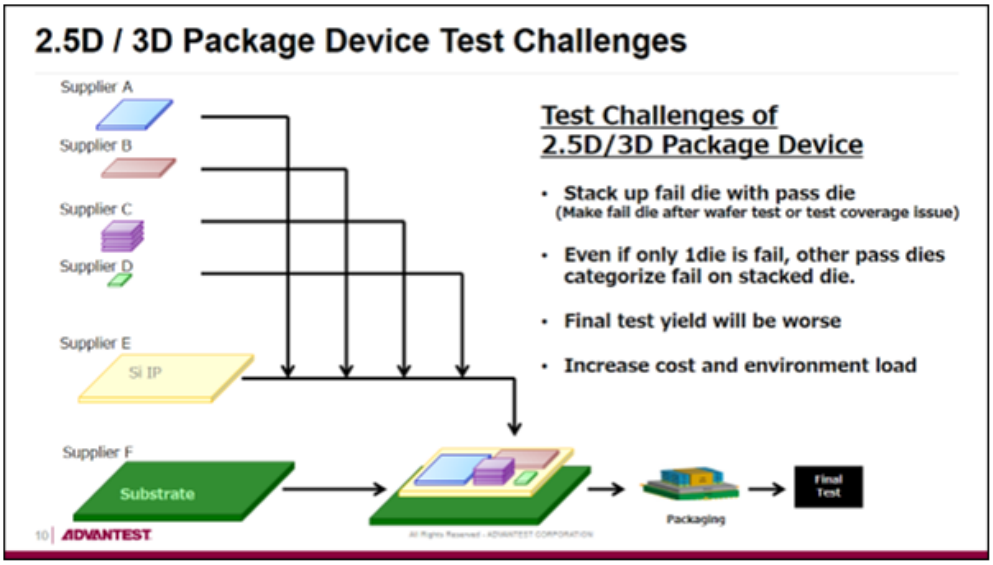


	Market Size 市場規模	Advantest Share 当社シェア	Market Size 市場規模	Advantest Share 当社シェア	Market Size 市場規模	Advantest Share 当社シェア
SoC Testers SoCテスタ	$4.0B 40億ドル	58%	$3.3B 33億ドル	59%	$4.1B 41億ドル	56%
Memory Testers メモリ・テスタ	$1.2B 12億ドル	53%	$1.1B 11億ドル	56%	$1.9B 19億ドル	63%

Advantest has the largest customer base in the industry. The expansion of the customer base creates a virtuous cycle and can also be a starting point for the next growth cycle. By meeting the demands and challenges of a broader customer base, we can more effectively identify the needs of the next-generation tester development, which in turn reduces risk and improves the efficiency of R&D projects and increases the value of the solutions we provide. By continuing the process of feeding test trends into the next-generation tester development, we have evolved to serve a broader range of applications.



As for our product portfolio, the increasing complexity of devices is leading to further increase the importance of our broad portfolio. A concrete example of this is advanced packaging. While circuit integration in semiconductors has traditionally been pursued in the 2D (planar) direction, development in the 2.5D and 3D directions is accelerating with a focus on increased computational efficiency and energy savings. With such technological advancement, customers are re-evaluating their test methodologies. Advantest's broad product portfolio and comprehensive test coverage are contributing to this shift by supporting the need for more advanced testing and enhanced quality assurance.



By expanding the economic and social benefits it provides, Advantest aims to become the most trusted and valued test solution company in the semiconductor value chain.

Chapter 4. Mid-Term Management Plan

The Third Mid-Term Management Plan (MTP3, FY2024-2026), announced in June 2024, promotes four strategies and aims to achieve the following five management metrics. Management metrics were raised in October 2025 due to expected record-breaking results.

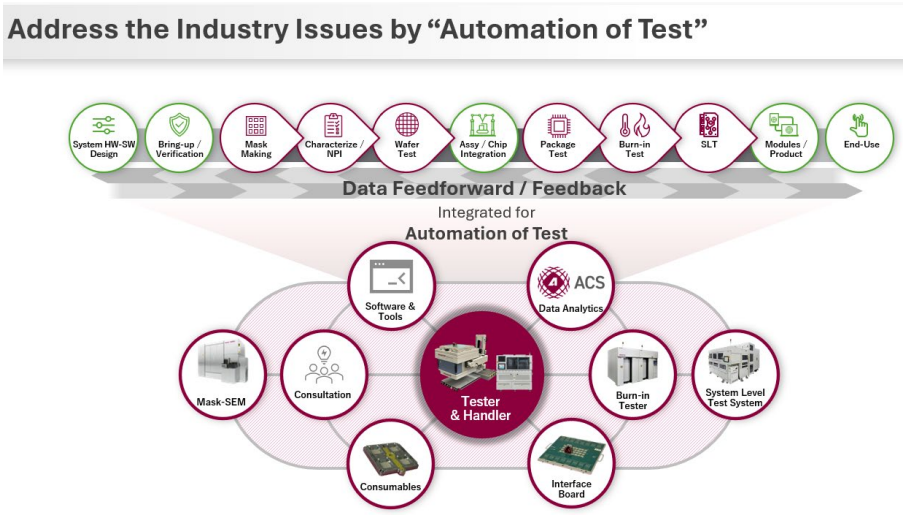
	Announced in Jun. 2024 Previous Targets		Revised in Oct. 2025 New Targets*
Sales	JPY 560 - 700B	⇒	JPY 835 - 930B
Operating Profit Margin	22 - 28%	⇒	33 - 36%
Net Income	JPY 93 - 147B	⇒	JPY 207 - 248B
ROIC	18 - 28%	⇒	34 - 39%
Basic EPS	JPY 127 - 202	⇒	JPY 284 - 341

* The exchange rates used in the previous announcement were 140 JPY to the US dollar and 155 JPY to the Euro. The revised targets use the same exchange rates for FY25 Q3-Q4 and FY26. Actual rates in FY24 were 153 JPY to the U.S. dollar and 164 JPY to the Euro, FY25 Q1 were 146 JPY to the U.S. dollar and 162 JPY to the Euro, and FY25 Q2 were 146 JPY to the U.S. dollar and 170 JPY to the Euro.

* Return on Invested Capital = NOPAT / Invested capital (average at beginning and end of period). NOPAT = Operating income x (1 - tax ratio 25%). Invested Capital = Borrowings + Corporate bonds + Total equity, with excluding Lease liabilities.

① Outpace the growth in our core market

In line with its growth strategy, Advantest has expanded its business domains year by year. In the past, the semiconductor tester (ATE) market has been the main market that Advantest focused on. However, from MTP3 onwards, while ATE will remain the central axis, Advantest will aim for further growth based on a larger footprint enabled by past efforts it has made related to that axis. In this expanded core market, Advantest expects future growth opportunities to arise from increased semiconductor production volume, higher performance semiconductors, and the increasing complexity of semiconductors. To address these opportunities, Advantest will not only improve the performance of individual test solutions, but also create new value for its customers through “Automation of Test,” – specifically, by improving the efficiency of semiconductor testing, by organically integrating its diverse portfolio of products and solutions, and by collaborating with external partners. Through these efforts, Advantest will continue to grow faster than its core market.



② Expand adjacently / new businesses

As semiconductors continue to become more high-performance and complex, there is a demand for broader and more integrated test solutions. Advantest has been expanding its business into system level test and test peripherals, and will continue this initiative to further increase the value it provides to customers.

③ Drive operational excellence

Advantest has already transitioned to a CxO structure in which the CxOs are in charge of all operations in the entire group. Advantest will continue to solve testing issues in the semiconductor industry by leveraging in-house technology on a cross-functional basis under the strong ownership of each CxO. In addition to the above, to become a company that is valuable to all of the stakeholders, Advantest believes that it needs to improve not only the excellence of its products and technologies, but also the efficiency and effectiveness of all of its operations. To this end, Advantest is committed to accelerating internal operations and streamlining manpower by using DX (digital transformation), building a resilient supply chain, strengthening our human capital through recruiting competent talents and expanding employee training, and improving internal productivity through the use of AI and data analytics.

④ Enhance sustainability

Advantest's long-term management goal is to enhance the value it provides to its stakeholders in a well-balanced and multifaceted manner. Advantest will further strengthen its foundation for enhancing corporate value through proactive and positive action on sustainability issues such as climate change and human rights, the execution of responsible business activities, including legal compliance and adherence to ethical business practices, and the reinforcement of risk management and enhancement of corporate governance, to earn greater trust from each stakeholder. Ultimately, Advantest hopes to contribute to sustainability, i.e., to meet the needs of the present without compromising the ability of future generations to meet their own needs. Advantest will also strive to cultivate and instill a common culture and shared values within the company, as these are the starting point for promoting initiatives related to sustainability.