

You live it. We measure it. Life, tested by Advantest.



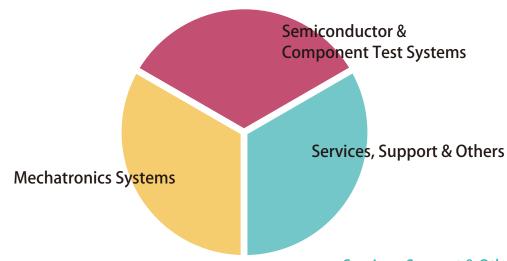
## **Business Segments**

## **Technology Support on the Leading Edge**

Since 1954, Advantest's measurement technologies have contributed to the safety and security of end users around the globe. To provide the advanced solutions and services that meet the needs of our customers, we strive continuously to improve. Our commitment to ongoing innovation keeps us on the leading edge of technological progress.

# **Semiconductor and Component Test Systems**Our flagship product line of semiconductor test systems deliver

Our flagship product line of semiconductor test systems deliver high productivity and coverage for diverse device types, supporting our customers' evolving needs, and sustaining our leading global market share in this market.



## **Mechatronics Systems**

Advantest's mechatronics products support our customers in the semiconductor industry across a broad range of needs.

Our test handlers and device interfaces are essential to efficient test processes, while our nanotechnology products, including wafer / mask measurement tools and lithography systems, contribute to leading-edge device development.

## Services, Support & Others

From installation and maintenance to high-added-value solutions, such as applications that maximize utilization rates,
Advantest's global service and support network helps our customers to get the most out of our products. In our New Business Segments, our measurement technologies are finding new applications, and opening up new markets with ground-breaking products.

## Semiconductor & Component Test Systems

#### ■ Semiconductor Test Systems

Semiconductor test systems are used for testing semiconductor devices during production to ensure they function properly. Since different types of devices have different functions, they must be tested separately, using test systems that support their performance specifications.

#### **Non-Memory Test Systems**

These test systems employ modular configurations so that their performance boards can easily be exchanged to flexibly support the requirements of testing diverse non-memory devices, such as microprocessors, applications processors, communications ICs, power ICs, and others.

Advantest also supplies display driver IC test systems, which test the chips used in the touch panels of smartphones, flat-screen televisions, and other displays. With a worldwide installed base of more than 1,500 units, our display driver IC test systems are the global standard in this market.



#### **Memory Test Systems**

Our memory test systems contribute to customer productivity by testing DRAM, NAND, and other memory devices with high-quality, high-speed, highly parallel capabilities unmatched in the field.





#### **EVA** (Evolutionary Value Added Measurement System)

Advantest's groundbreaking new Evolutionary Value Added Measurement System (EVA) provides powerful support for analog, sensor, mixed signal IC, and other semiconductor devices, from R&D through to volume production. EVA combines superior measurement precision and system scalability with an intuitive user interface that does not require the use of programming languages. It offers the benefits of a semiconductor test system and an electronic measurement instrument—all in one.



EVA100

#### ■ Electronic Measurement Instruments

Our lineup of RF measurement instruments includes cross domain analyzers, which can simultaneously measurement the phases of two signals with a single instrument; spectrum analyzers; board and network analyzers, and more. Offering electromagnetic wave characteristics evaluation and electromagnetic interference (EMI) solutions, among other functions, they are used by customers in a wide range of industries.



U3800 Series

### ■ Burn-In Systems

Burn-in systems apply thermal and electrical stress to weed out faulty devices at an early stage in the semiconductor manufacturing process.



B6700

## Mechatronics Systems

#### Test handlers

Handlers deliver packaged devices to test systems at high speed, and automatically sort them into pass / fail trays based on test results. Advantest's handlers also provide thermal control functionality to manage the temperature requirements of various devices under test.





M4871

#### Device Interfaces

Devices differ in shape depending on type, requiring specialized device interfaces. Advantest's DI products connect devices to test systems electronically and mechanically, with industry-leading precision.





**Probe Card** 

Change Kit

#### MVM-SEM®

Utilizing electron beams, Advantest's scanning electron microscopes measure 3D patterns on wafers and photomasks, providing real-time data on width, height, and side-wall measurement.





E3640

E3310

\*MVM-SEM® = Multi Vision Metrology Scanning Electron Microscope \*\* MVM-SEM is either a registered trademark or a trademark of Advantest Corporation in Japan, the United States and other countries.

### EB Lithography Systems

Advantest's EB lithography tools also utilize electron beams to etch patterns directly on substrates such as wafers with the nanoscale precision required at the 1Xnm node.



F7000

#### **Test Cells**

Advantest uniquely manufactures and provides customers with complete semiconductor test cell solutions encompassing test systems, test handlers, and device interfaces. These "test cells" significantly boost device quality and production efficiency, and have been widely adopted by customers.



## Services, Support & Others

#### **New Businesses**

In line with our medium-term objectives for sustainable growth, Advantest is incubating a range of new businesses. These groundbreaking products and technologies expand the boundaries of our existing businesses to offer innovative measurement solutions to customers in growth sectors.



#### SSD Test Systems

The expansion of data traffic worldwide is driving increased demand for high-end data servers, which utilize solid state drives (SSDs). Our solid state drive test systems are poised to support projected growth in SSD production volumes.



### ■ Terahertz Spectroscopy and Imaging Analysis Systems

Utilizing terahertz waves, Advantest's terahertz systems enable non-destructive analysis of samples that cannot be analyzed with existing technologies such as ultrasound and infrared. They offer a new evaluation method to customers in many fields, such as pharmaceuticals and leading-edge semiconductors.



TAS7500 Series

### ■ AirLogger<sup>™</sup>

This unique data logger measures temperatures at multiple points and transmits measurements wirelessly, massively improving efficiency by doing away with cabling. It also enables easy measurement of temperatures in small, enclosed spaces and rotating objects such as wheels.



AirLogger temperature measurement unit.



Measurement of temperature of a rotating object.

#### ■ Wireless System Level Test

W2Bl, Inc. is a member of the Advantest Group offering wireless device test automation products for the world's top mobile operators and suppliers. Our system level test solutions ensure interoperability across regions and carriers, assisting customers worldwide to significantly improve their device quality and time-to-market.



Click to view a video introducing W2BI.

## ■ CloudTesting<sup>™</sup> Service

This on-demand test service, offered by Advantest subsidiary Cloud Testing Service, Inc., gives customers the ability to download test software from the cloud and run it on our compact test terminals (available for lease). CTS's unique monthly fee structure brings world-class test IP within easy reach, making the service optimal for educators and researchers.



 $Cloud Testing ^{\mathsf{TM}} \, Station$