

**ADVANTEST**<sup>®</sup>

**FY2022 3Q**  
**(Three months ended December 31<sup>st</sup>, 2022)**

**Financial Briefing**

January 31<sup>st</sup>, 2023  
Advantest Corporation

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# NOTE

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## Accounting Standards

– Our results and outlook, described in this presentation, have been prepared in accordance with IFRS.

## Cautionary Statement with Respect to Forward-Looking Statements

– This presentation 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.

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```
...mirror_object = ...
operation == "MIRROR_X":
    mirror_mod.use_x = True
    mirror_mod.use_y = False
    mirror_mod.use_z = False
    operation == "MIRROR_Y":
    mirror_mod.use_x = False
    mirror_mod.use_y = True
    mirror_mod.use_z = False
    operation == "MIRROR_Z":
    mirror_mod.use_x = False
    mirror_mod.use_y = False
    mirror_mod.use_z = True

selection at the end -add
obj.select= 1
obj.select= 1
context.scene.objects.active
obj.select= 0
obj.select= 0
```

## Financial Results for FY2022 3Q

Atsushi Fujita

Director, Senior Executive Officer, CFO & CCO

(Chief Financial Officer & Chief Compliance Officer),

Executive Vice President, Corporate Administration Group

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## FY22 3Q Summary of Results

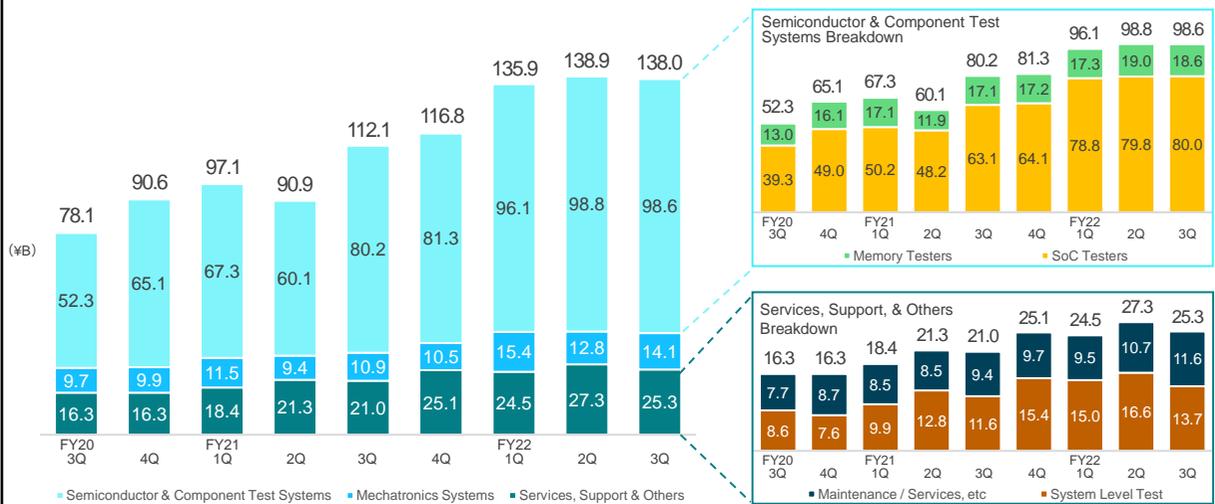
(¥B)

	FY21				FY22				QoQ		YoY	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	(Δ)	(%)	(Δ)	(%)	
Sales	97.1	90.9	112.1	116.8	135.9	138.9	138.0	-0.9	-0.6%	+25.9	+23.1%	
Gross Profit	54.7	50.1	64.8	66.3	78.9	79.9	81.6	+1.8	+2.2%	+16.8	+25.8%	
Gross Margin	56.4%	55.0%	57.9%	56.7%	58.1%	57.5%	59.1%	+1.6pts		+1.2pts		
Operating Income	26.1	21.4	33.5	33.7	44.8	43.1	41.2	-1.9	-4.4%	+7.7	+22.8%	
Operating Margin	26.9%	23.5%	29.9%	28.8%	32.9%	31.1%	29.9%	-1.2pts		0.0pts		
Income Before Tax	25.7	21.6	34.0	35.0	48.4	46.8	37.7	-9.2	-19.7%	+3.5	+10.4%	
Net Income	19.3	15.9	25.7	26.4	36.5	34.7	28.6	-6.0	-17.4%	+3.0	+11.7%	
Net Income Margin	19.9%	17.5%	22.9%	22.6%	26.8%	25.0%	20.8%	-4.2pts		-2.1pts		
Exchange Rate	1 US\$	¥109	¥110	¥112	¥115	¥124	¥135	¥144	¥9 Depreciation		¥32 Depreciation	
	1 Euro	¥131	¥131	¥130	¥130	¥134	¥139	¥144	¥5 Depreciation		¥14 Depreciation	

### ○ FY2022 3Q Summary of Results

- First, a look back at our business environment in the third quarter.
- Due to macroeconomic recession fears, final demand remained sluggish, especially for PCs and smartphones, and the semiconductor market overall experienced some deceleration.
- Advantest was also affected by the postponement of customer investments, especially for devices used in consumer electronics, due to the softer market conditions.
- However, high-end SoC performance gains and strong demand for analog semiconductors drove higher test demand, which compensated for the impact of the decline in consumer-related demand.
- Sales for the third quarter were at the same level as in our record-high second quarter, partly due to yen depreciation.
- Operating income increased by 22.8% YoY, but decreased QoQ due to higher SG&A expenses and other factors.
- Net income decreased by 17.4% QoQ due to foreign exchange losses triggered by a stronger yen at the end of the third quarter compared to the previous quarter.
- Details of these results will be explained in the following slides.

# Quarterly Sales by Segment



Note: Intersegment transactions have been eliminated from totals

○ FY2022 3Q Sales by Segment

○ Semiconductor & Component Test Systems

- ¥98.6 billion      Flat QoQ
- Sales of SoC testers held strong at 80.0 billion yen. Although application processors (APUs) for smartphones declined QoQ, in addition to robust demand for automotive and industrial applications, sales also continued to be strong for high performance computing (HPC) and AI-related semiconductor test.
- Although the memory semiconductor market is decelerating, customers have stuck to their capital investment plans for both DRAM and non-volatile memory, and memory tester sales held the high level of ¥18.6 billion.

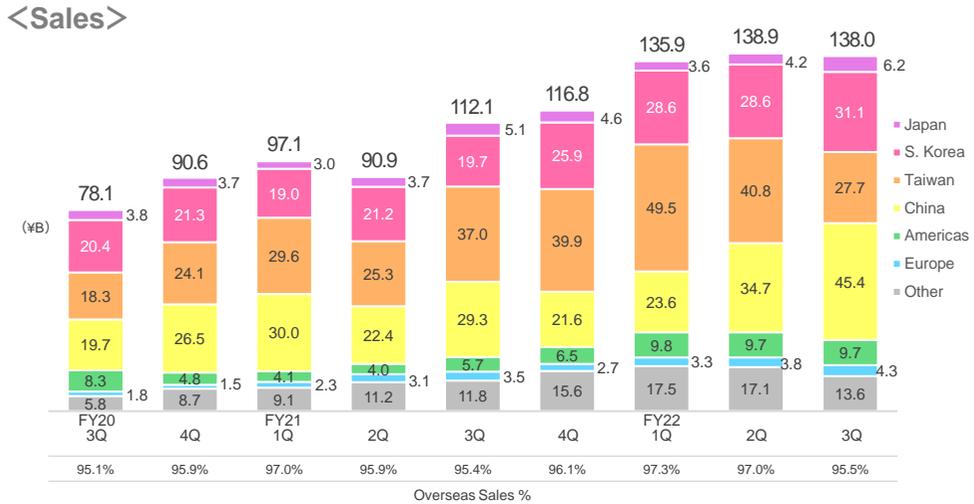
○ Mechatronics Systems

- ¥14.1 billion      +11.3% QoQ
- Sales of SEM metrology products grew amidst increased adoption of EUV lithography.

○ Services, Support & Others

- ¥25.3 billion      -7.6% QoQ
- Demand for maintenance and services continued to be firm due to steady growth of our installed base. On the other hand, system-level test (SLT) sales declined as customers revised their investment plans against the backdrop of deteriorating market conditions.

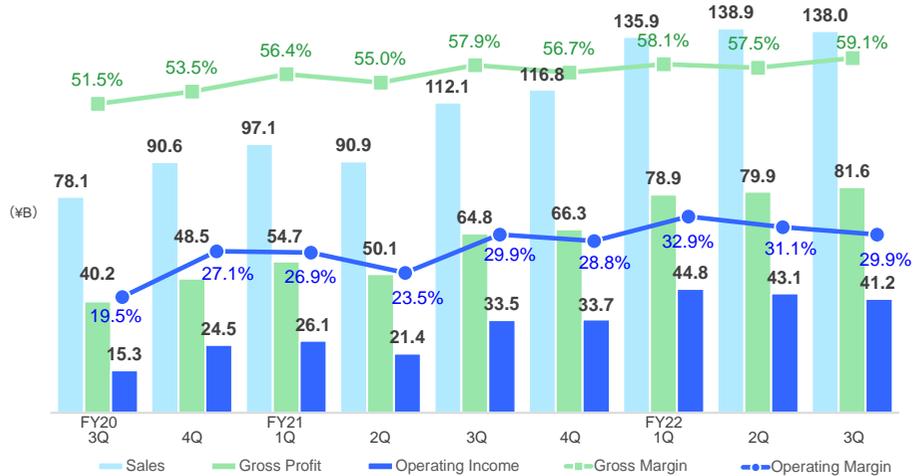
# Quarterly Sales by Region



## ○ FY2022 3Q Sales by Region

- Taiwan  
Tester sales decreased due to lower demand for SoC testers, mainly for devices used in consumer electronics.
- China  
Deliveries of SoC testers progressed to meet the growing demand for semiconductors for IoT and industrial equipment.
- South Korea  
Sales of both SoC and memory testers grew.

## Sales / Gross Profit / Operating Income

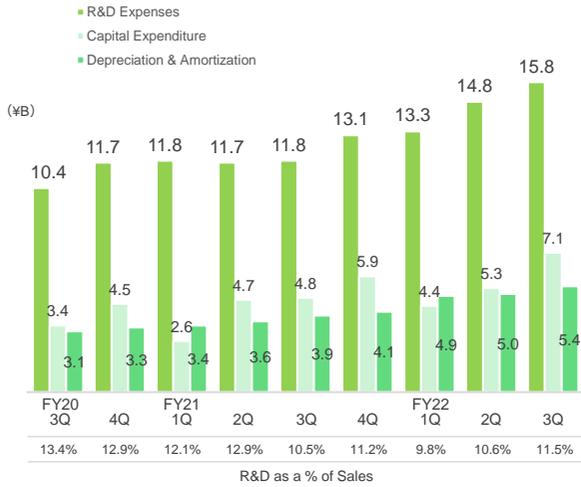


### ○ FY2022 3Q Sales / Gross Profit / Operating Income

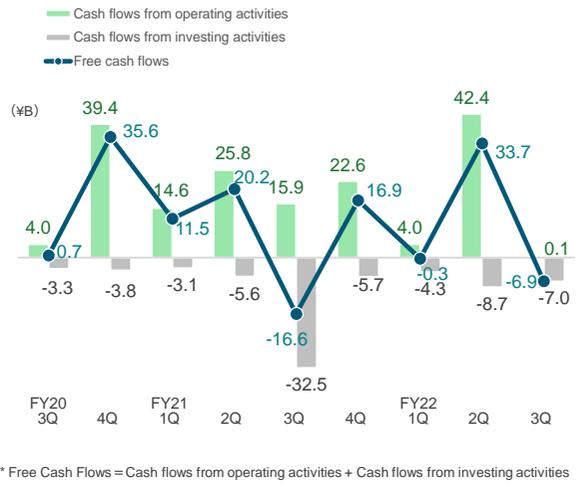
- Gross margin 59.1%  
Our sales mix tilted towards higher-margin products, boosting gross profit margin QoQ.
- SG&A (including all other income and expenses) ¥40.4 billion  
SG&A expenses, etc. increased due to our growing headcount and higher costs driven by yen depreciation.
- Operating income ¥41.2 billion
- Operating margin 29.9%  
Operating margin almost exactly matched our estimates.

# Investments / Cash Flow

## <Investments>



## <Cash flow>



○ FY2022 3Q R&D Expenses/CapEx/D&A

- R&D Expenses           ¥15.8 billion
- CapEx                    ¥7.1 billion
- Depreciation and Amortization       ¥5.4 billion

○ FY2022 3Q Cash Flow

- Free cash flow dipped into negative territory (-¥6.9 billion) due to higher inventories and payment of income taxes and bonuses.





## **FY2022 Outlook**

Yoshiaki Yoshida  
Representative Director, President and Group CEO

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## Business Environment / Semiconductor Tester Market Trends: Jan. 2023 Outlook

### < Business Environment : Recessionary Fears Loom >

– Uncertainty about the future of the global economy is increasing due to ongoing inflation, interest rate hikes, and intensifying geopolitical risk factors such as the tightening of U.S. export restrictions on China.

### < Semiconductor Market : A Patchy Picture of Sector-Specific Oversupply and Undersupply >

– In CY22, a decline in demand for chips used in cornerstone consumer electronics products spurred suppliers of devices for these applications to adjust their inventories and revise their capital expenditure plans. Overall, semiconductor market demand growth has been gradually decelerating.

– The mosaic of oversupply and undersupply is expected to continue in CY23. We anticipate that the extent of investment plan revisions will vary by application and customer.

### < Semiconductor Tester Market : Risk of 2<sup>nd</sup> Straight YoY Decline in CY23 >

– Customers will continue to develop next-generation devices and make strategic investments. Our belief that high-performance semiconductors will drive sufficient increases in test volume to support tester demand remains unchanged. On the other hand, it is possible that demand will decline amidst market uncertainty.

	CY21 Actual	CY22 Actual (Prelim.)	CY23 Estimate
SoC Tester Market	Approx. \$4.3B	Approx. \$3.9B-4.1B (October estimate: approx. \$4.1B - 4.4B)	Approx. \$3.5B - 4.2B
Memory Tester Market	Approx. \$1.3B	Approx. \$1.2B-1.3B (October estimate: approx. \$1.2B - 1.3B)	Approx. \$0.9B - 1.2B

Source: Advantest

## ○ Business Environment / Semiconductor Tester Market Trends

- In 2022, fears of a global recession mounted.
- The semiconductor market showed increasing signs of slowing down as the year progressed. Inventory adjustments of semiconductors for cornerstone consumer electronics, and moves to revise capital expenditure plans, have become visible. On the other hand, there are still chip shortages in sectors such as automobiles, where EV adoption is progressing, and industrial equipment.
- In the 2022 SoC tester market, demand for testers for high-performance semiconductors grew due to ongoing miniaturization, and demand for testers for automotive and industrial applications remained firm. However, softer demand for testers for devices used in consumer electronics impacted overall market growth. We estimate the market to have declined YoY to between USD \$3.9 billion and \$4.1 billion. We believe our market share rose into the 55%-60% range.
- The 2022 memory tester market is estimated to have been worth USD \$1.2 billion to \$1.3 billion, flat YoY, due to continued strategic investments by customers despite the deterioration of the memory semiconductor market. We believe our market share was around 50%.
- Unlike in past cycles, when demand fell across the board, resulting in oversupply and overall market deterioration, the current situation is characterized by patchy demand. In 2023, we expect semiconductor to continue to be a mixed picture, with the extent of investment plan adjustments varying by application and customer.
- The factors that drive tester demand are also more diverse now than in the past. We expect semiconductor technology evolution, upfront investments by customers in anticipation of the future, new players from other industries entering the semiconductor industry, and other factors will boost tester demand and mitigate the demand fluctuations caused by macroeconomic softening.
- However, if the recovery of the global economy is delayed, the tester market in 2023 may shrink up to 20% YoY.

## FY22 Forecast

(¥B)

	FY21	FY22					vs. FY21	
	Results	1Q Results	2Q Results	3Q Results	4Q Forecast	Full-Year Forecast	(Δ)	(%)
Sales*1	416.9	135.9	138.9	138.0	137.2	550.0	+133.1	+31.9%
Operating Income	114.7	44.8	43.1	41.2	40.9	170.0	+55.3	+48.2%
Operating Margin	27.5%	32.9%	31.1%	29.9%	29.8%	30.9%	+3.4pts	
Income Before Tax	116.3	48.4	46.8	37.7	41.1	174.0	+57.7	+49.6%
Net Income	87.3	36.5	34.7	28.6	30.2	130.0	+42.7	+48.9%
Net Income Margin	20.9%	26.8%	25.0%	20.8%	22.0%	23.6%	+2.7pts	
R&D Expenses	48.4	13.3	14.8	15.8	16.1	60.0	+11.6	+24.0%
CapEx	18.0	4.4	5.3	7.1	5.2	22.0	+4.0	+22.2%
D&A	15.0	4.9	5.0	5.4	5.7	21.0	+6.0	+40.0%
Exchange Rate*2	1 US\$	¥112	¥124	¥135	¥144	¥130	¥22 Depreciation	
	1 Euro	¥130	¥134	¥139	¥144	¥140	¥9 Depreciation	

\*1: Intersegment transactions have been eliminated from totals

\*2: Our latest forecast for the impact of exchange rate fluctuations on FY22 operating income is plus ¥1.3 billion per 1 yen of JPY depreciation vs USD, and minus ¥0.2 billion per 1 yen of JPY depreciation vs Euro

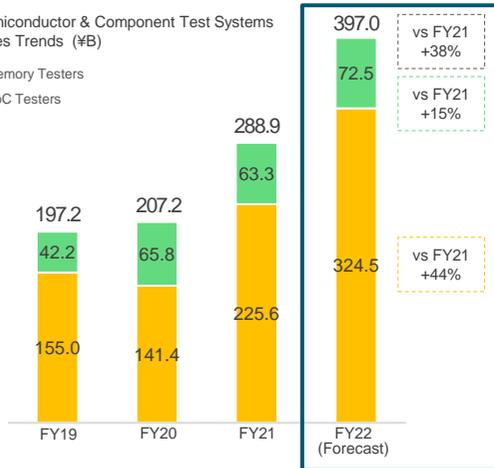
### ○ FY2022 Forecast

- Though the semiconductor market is in an adjustment phase, in view of our large order backlog, we have not changed our full-year consolidated earnings forecast for FY2022. As published in October 2022, we expect net sales of ¥550.0 billion, operating income of ¥170.0 billion, income before income taxes of ¥174.0 billion, and net income of ¥130.0 billion.
- This forecast is based on exchange rate assumptions of 1 USD to 130 JPY and 1 EUR to 140 JPY for the fourth quarter.
- Our latest forecast for the impact of exchange rate fluctuations on FY22 operating income is plus ¥1.3 billion per 1 yen of JPY depreciation vs USD, and minus ¥0.2 billion per 1 yen of JPY depreciation vs the euro.
- Gross profit margin is expected to be around 58%.
- Regarding capital expenditures, extended supplier lead times have caused the delivery of equipment to be delayed. We have consequently lowered our CapEx forecast by ¥5.0 billion from our October forecast, to ¥22.0 billion.
- Our business environment is becoming increasingly uncertain. But by responding nimbly and flexibly to demand fluctuations, we expect to set new record highs in FY2022 for both sales and profits for the third consecutive year.
- Our year-end dividend is expected to be ¥70. Combined with the interim dividend of ¥65, our annual dividend is expected to be ¥135 yen, an increase of 15 yen from the previous fiscal year.

# FY22 Outlook by Segment

Semiconductor & Component Test Systems Sales Trends (¥B)

■ Memory Testers  
■ SoC Testers



## Semiconductor & Component Test Systems

### < SoC Testers > (+¥4.5B vs Oct. forecast)

– Although we expect the slowdown in smartphones and other consumer electronics to have a prolonged impact on tester demand, this will be offset by high demand from the automotive and industrial sectors.

Applications	FY19	FY20	FY21	FY22*2
Computing / Comms	70%	55%	60%	70%
Automotive / Industrial / Consumer / DDIC*1	30%	45%	40%	30%

Numbers are rounded to the nearest 5%

### < Memory Testers > (+¥3.5B vs Oct. forecast)

– We expect softer market conditions to have a certain impact on tester demand, but technology buys, mainly for high-end memory, will continue. Demand trends are estimated to be firm.

Applications	FY19	FY20	FY21	FY22*2
DRAM	70%	60%	60%	60%
Non-Volatile Memory	30%	40%	40%	40%

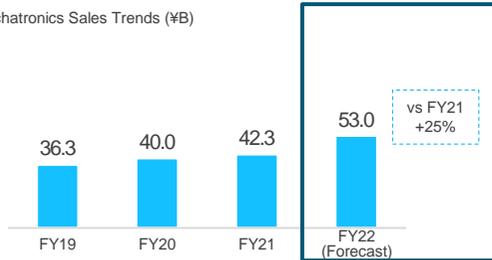
Numbers are rounded to the nearest 5%

## ○ FY2022 Semiconductor & Component Test Systems Outlook

- We have raised our FY2022 full-year SoC tester sales forecast by ¥4.5 billion from our October forecast, to ¥324.5 billion.
- In data center and AI-related applications, tester demand is expected to continue due to the adoption of advanced device manufacturing processes.
- On the other hand, demand for testers for major consumer devices such as APUs, display drivers ICs (DDIC), used in smartphones and PCs, is declining due to the impact of customers' production plan revisions and postponement of investment plans.
- However, in the automotive and industrial sectors, we expect that demand for testers will continue to increase, driven by factors such as the shift to EVs, which requires higher numbers of semiconductors to be used in vehicles, and that this will compensate for weakness in consumer-related demand.
- We have raised our FY2022 full-year memory tester sales forecast by ¥3.5 billion from our October forecast, to ¥72.5 billion.
- In the memory semiconductor market, more semiconductor manufacturers are moving to adjust inventories and restrain their capital investments. However, other customers continue to make aggressive capital investments in anticipation of long-term growth in demand for high-end memory. Regardless of the current situation, we expect the market to remain firm.

## FY22 Outlook by Segment

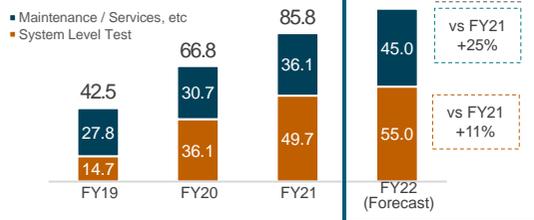
Mechatronics Sales Trends (¥B)



### Mechatronics Systems (+¥2.5B vs Oct. forecast)

- We expect strong demand for device interface products in correlation with tester demand.
- In addition to the spread of EUV lithography, increased demand for mature process masks is driving demand for SEM metrology products.

Services, Support, & Others Sales Trends (¥B)



### Services, Support, & Others (-¥10.5B vs Oct. forecast)

- Maintenance services are delivering strong sales as Advantest's installed base grows.
- Demand for system-level test is expected to lag behind estimates as some customers revised their investment plans due to softness in the consumer electronics semiconductor market. We have lowered our full-year sales forecast.

### ○ FY2022 Mechatronics / Services & Other Business Outlook

- We have raised our FY2022 full-year Mechatronics Systems sales forecast by ¥2.5 billion, to ¥53.0 billion.
- Demand for device interface products, correlated with tester demand, is expected to stay strong. Additionally, the spread of EUV lithography and increased demand for mature process masks will drive demand for SEM metrology products.
- We have lowered our FY2022 full-year Services and Others sales forecast by ¥10.5 billion, to ¥100.0 billion.
- Steady growth in our installed base is expected to drive robust demand for services and maintenance.
- On the other hand, in the midst of a weak market for semiconductors for consumer electronics, demand for system-level test, including consumables, will decline due to the revision of investment plans by some customers. Therefore, we have lowered our full-year sales forecast.

# Acquisition of Shin Poo

## Overview



- Advantest's US subsidiary has signed a definitive agreement to acquire Shin Poo Technology Co., Ltd ("Shin Poo").
- Shin Poo, established in 2001, with 264 employees, is an integrated manufacturer of printed circuit boards (PCBs) located in Taoyuan City, Taiwan (R.O.C.).
- The closing of this transaction is tied to regulatory approvals from the government of Taiwan, which we expect to receive by the end of April 2023.

## Strategic Significance

- After closing this acquisition, Advantest's PCB manufacturing footprint will be expanded to Taiwan, more than doubling global production capacity for Advantest Group company R&D Altanova's high-performance, high-density PCB test boards, which are used with ATE and SLT systems.
- The acquisition will strengthen our portfolio of turnkey solutions.
- It is part of Advantest's mid/long-term strategy to expand our test and measurement solutions across the continuously evolving semiconductor value chain.

## ○ Acquisition of Shin Poo

- In January 2023, our U.S. subsidiary concluded an agreement to acquire Taiwanese company Shin Poo.
- Shin Poo is a manufacturer of printed circuit boards used in electronic devices.
- Subject to regulatory approvals, we expect to close this transaction by the end of April 2023.
- Through this acquisition, we will be able to secure a production base in Taiwan for high-end test boards designed by R&D Altanova, which we acquired in November 2021, enabling us to meet ever-increasing customer demand for these products.
- The acquisition will contribute to strengthening the turnkey solutions that are one of our focuses to deliver further customer value. The high-end test boards used with our testers have hitherto been sold mainly to US customers, but we will now be able to offer them to major customers in Asia as well.

## Accelerating Further Growth

- From January, Advantest transitioned to a system with three representative directors: Group CEO, Group COO, Group Co-COO

Name	New Title
Yoshiaki Yoshida	Representative Director, President & Group CEO
Douglas Lefever	Representative Director, Corporate Vice President & Group COO
Koichi Tsukui	Representative Director, Corporate Vice President & Group Co-COO

- ✓ This enables faster responses to changes in our management environment as our business expands
- ✓ It also lays the groundwork for smooth execution of our succession plan

### ○ Accelerating Further Growth

- At the end of last year, Advantest's board of directors decided to shift to a system with three representative directors as written in this slide, and the transition was executed in January. As our business expands, the three of us will lead Advantest's expansion on a global scale by responding more quickly to changes in our business environment.
- Both Douglas Lefever and Koichi Tsukui have been appointed as Representative Directors, Corporate Vice Presidents.
- That business environment is becoming more complex, underlining our belief that we need a system with clearer delineation of roles and responsibilities so that we can manage for overall optimization of our company. Looking ahead to FY2023 and FY2024, when our third mid-term management plan will be launched, we plan to build a strong management team that will be able to lead Advantest to even greater strides forward.
- We will continue to reinforce our management system for sustainable growth.

## Summary

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- Recession fears, driven by ongoing inflation and rising interest rates, are mounting.
- Adding in growing concerns over geopolitical risks, such as the tightening of U.S. export restrictions on China, the outlook for our business environment is becoming more uncertain. We will respond swiftly and flexibly by implementing initiatives coping with changes in the environment.
- The semiconductor market at present is a mosaic of oversupplied and undersupplied sectors. Tester demand has become more uneven as compared to the recent past.
- We will strive to achieve our full-year forecast by converting our large order backlog into sales.
- We will continue to optimize our management structure for responsiveness in today's ever more complex business environment.
- We are confident in our thesis that the semiconductor market will grow over the mid/long-term. We will continue to make disciplined investments to deliver sustainable growth and earnings.

### ○ Summary

- So far in FY2022, fears of a global recession, driven by ongoing inflation and interest rates hikes, have been mounting with each passing quarter.
- In addition to concerns about growing geopolitical risks, such as the tightening of U.S. export restrictions on China, the outlook for Advantest's business environment is becoming increasingly uncertain. We will respond swiftly and flexibly by implementing initiatives coping with changes in the environment.
- The semiconductor market at present is a mosaic of oversupplied and undersupplied sectors, and tester demand has become more uneven as compared to the recent past. We will continue to pay close attention to the risk of demand fluctuations that may occur due to prolonged inventory adjustments in the semiconductor market and customers' investment plan revisions.
- For the remainder of FY2022, we have a large order backlog, and will strive to achieve our full-year forecast by responding swiftly and flexibly to changes in demand.
- Our business environment is changing rapidly and becoming more complex. We see a need to improve our management capabilities for the future. As a first step, we have increased Advantest's number of representative directors from one to three.
- Semiconductor innovation is indispensable for making people's lives more convenient and resolving society-wide issues. In the mid/long-term, the semiconductor market will march steadily upwards. As a participant in that market, we will leverage our product portfolio, which covers a wide range of applications, and our unique platform strategy, to strengthen ties with customers who are at the forefront of technological innovation. To that end, we will continue to pursue a disciplined program of investment in human capital and plant and equipment.

## ESG & External Evaluation

- **Advantest Selected for the First Time for DJSI Asia Pacific**

Advantest press release : <https://www.advantest.com/news/2022/20221222.html>

Member of  
**Dow Jones  
Sustainability Indices**  
Powered by the S&P Global CSA

- **Advantest Honored at Frost & Sullivan Institute's 2022 Enlightened Growth Leadership Awards**

2022 Enlightened Growth Leadership Awards virtual awards banquet  
(Advantest introduced at 11:55, President Yoshida's speech starts from 13:33)  
<https://www.youtube.com/watch?v=7w2cUq21oQ0>

FROST & SULLIVAN INSTITUTE  
**E** NLIGHTENED GROWTH LEADERSHIP **P**  
BEST PRACTICES RECOGNITION, 2022

- **Advantest Wins National Award for Factory Greening from Kanto Bureau of Economy, Trade and Industry**

Advantest press release : <https://www.advantest.com/news/2022/20221209.html>



- **Advantest plans to hold a sustainability briefing in late March.**

More information to follow.



- ESG & External Evaluation

- Finally, a few topics related to our ESG initiatives and external evaluations.
- As mentioned here, we are planning a briefing session in late March as an opportunity to deepen stakeholder understanding of our sustainability management.
- Please stay tuned for more information on this and other topics.
- Thank you for your attention.

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