



ADVANTEST[®]

FY2020 2Q
(Three months ended September 30th, 2020)

Financial Briefing

October 29th, 2020
Advantest Corporation

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NOTE

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= 1
obj.select= 1
```

Financial Results for FY2020 2Q

Atsushi Fujita
Director, Managing Executive Officer (CFO)

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FY20 2Q Summary of Results

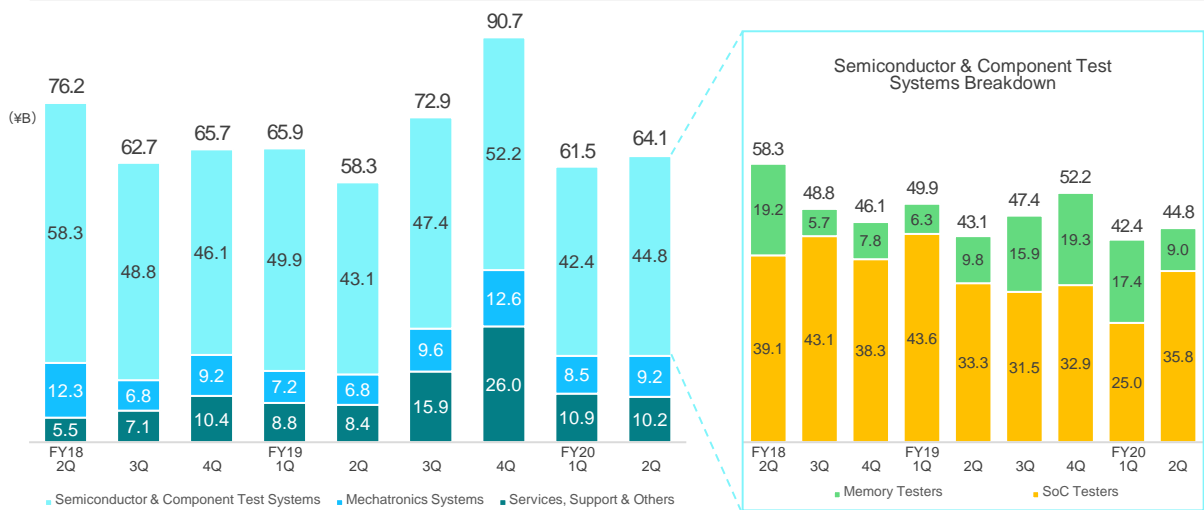
(¥B)

	FY19				FY20						
	1Q	2Q	3Q	4Q	1Q	2Q		QoQ		YoY	
						Forecast	Actual	(Δ)	(%)	(Δ)	(%)
Orders	65.9	58.3	72.9	90.7	61.5	55.5	64.1	+2.7	+4.4%	+5.9	+10.0%
Sales	66.2	71.6	69.9	68.2	66.7	73.3	77.4	+10.7	+16.0%	+5.8	+8.1%
Gross Profit	39.4	41.0	39.4	36.7	38.0	-	41.6	+3.7	+9.8%	+0.7	+1.6%
Gross Margin	59.5%	57.3%	56.4%	53.8%	56.9%	-	53.9%	-3.0pts		-3.4pts	
Operating Income	15.2	17.7	14.2	11.6	13.5	14.2	17.4	+4.0	+29.9%	-0.2	-1.3%
Operating Margin	22.9%	24.8%	20.4%	17.0%	20.2%	19.4%	22.6%	+2.4pts		-2.2pts	
Income Before Tax	14.9	18.4	14.5	10.8	12.9	14.2	16.4	+3.5	+27.4%	-1.9	-10.4%
Net Income	12.1	14.7	11.9	14.8	10.6	11.3	13.9	+3.4	+32.1%	-0.7	-5.1%
Net Income Margin	18.3%	20.5%	17.1%	21.7%	15.8%	15.5%	18.0%	+2.2pts		-2.5pts	
Backlog increased due to M&A				+4.2							
Backlog	74.6	61.3	64.3	91.0	85.7	68.0	72.5	-13.2	-15.4%	+11.2	+18.3%
Exchange Rate	1 US\$	¥111	¥108	¥108	¥110	¥108	¥105	¥107	¥1 Appreciation	¥1 Appreciation	
	1 Euro	¥125	¥121	¥119	¥121	¥118	¥120	¥123	¥5 Depreciation	¥2 Depreciation	

○ FY2020 2Q Summary of Results

- Firstly, we would like to express our deep gratitude to all of our business partners and other related parties, and to our own employees, for their efforts to support our business amidst the Covid-19 pandemic.
- A quick look back at our forecast three months ago. Given the intensifying conflict between the United States and China, and the impact of Covid-19, we expected orders for 2Q to decrease QoQ.
- However, inquiries for SoC testers were stronger than expected, and 2Q orders ultimately exceeded 1Q.
- Quarter-on-quarter, sales and profits came in higher than expected, and both exceeded the levels of 1Q.
- Compared to the corresponding period in the previous fiscal year, profits decreased due to a lower proportion of products with a high gross profit margin in Advantest's sales mix, and the impact of foreign exchange losses.
- Details of orders, sales, and profits will be given in the following slides.

Quarterly Orders by Segment



Note: Intersegment transactions have been eliminated from totals

○ FY2020 2Q Orders by Segment

○ Semiconductor & Component Test Systems

- ¥44.8 billion +5.6% QoQ
- SoC tester orders were ¥35.8 billion, an increase of ¥10.8 billion from the previous quarter. Tighter U.S. regulations on a major Chinese smartphone maker are having ripple effects such as increased inventory build-up and active jostling by competitors seeking to take advantage of the situation, causing inquiries for testers for application processors (APU), image sensors (CIS) and display driver ICs (DDI) to increase more than expected. Demand for high performance computing (HPC)-related testers was also strong.
- In memory testers, server-related demand was robust throughout the first half of CY20, but has now softened, resulting in a QoQ decrease in orders of ¥8.5 billion.

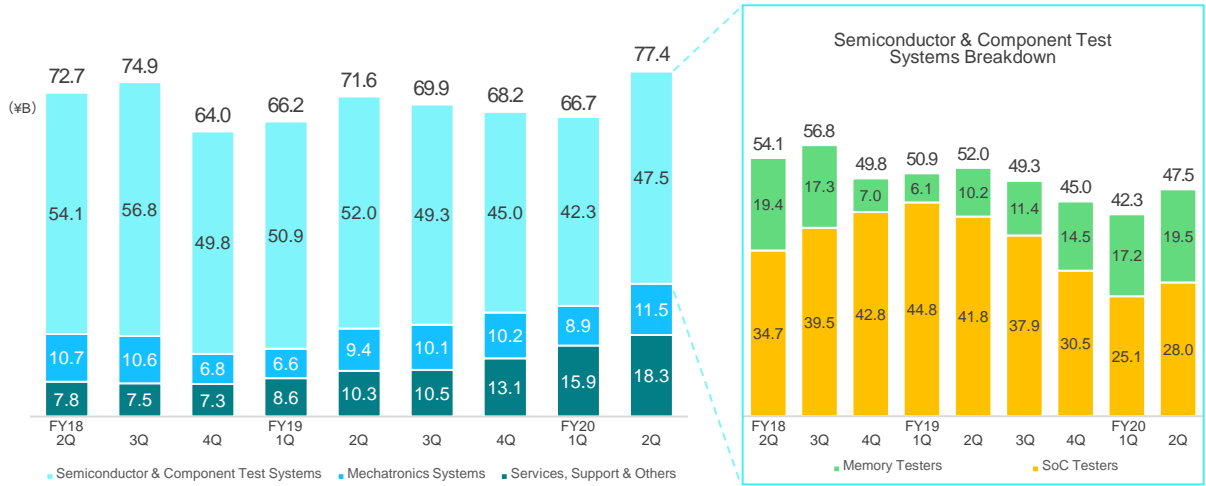
○ Mechatronics Systems

- ¥9.2 billion +7.7% QoQ
- Orders for EUV-related nanotechnology products increased.

○ Services, Support & Others

- ¥10.2 billion -6.0% QoQ
- System level test orders increased, compensating for a seasonal decrease in annual maintenance contract renewals, with the result that orders were roughly flat QoQ.

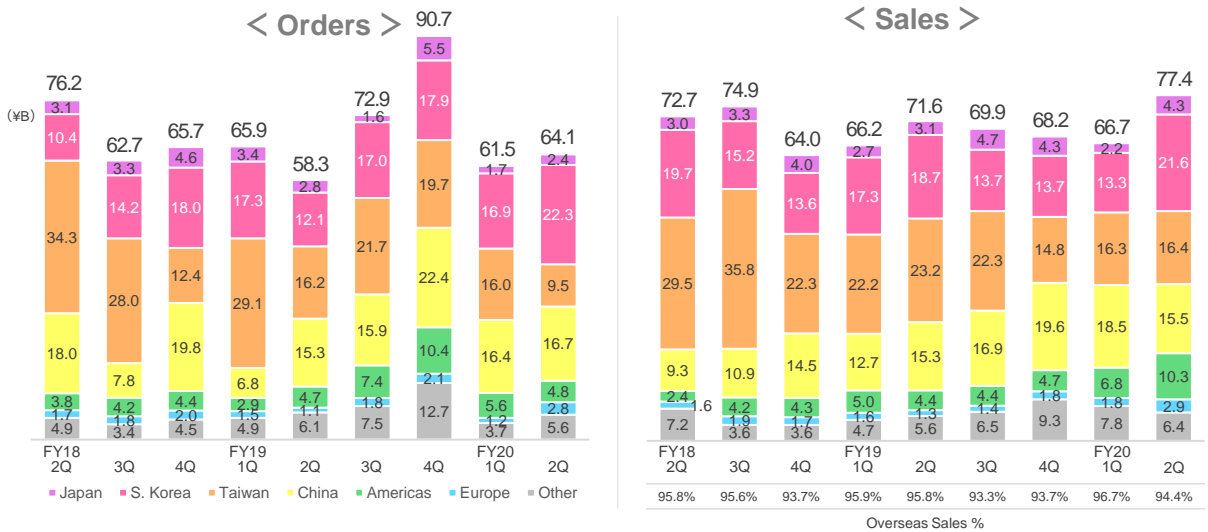
Quarterly Sales by Segment



Note: Intersegment transactions have been eliminated from totals

- FY2020 2Q Sales by Segment
- Semiconductor & Component Test Systems
 - ¥47.5 billion +12.4% QoQ
 - Sales of SoC testers for smartphone applications increased.
 - Both DRAM and non-volatile memory (NVM) tester sales increased.
- Mechatronics Systems
 - ¥11.5 billion +29.5% QoQ
 - Sales increased overall in Advantest’s mechatronics business.
- Services, Support & Others
 - ¥18.3 billion +15.4% QoQ
 - SoC system level test system sales were steady.

Quarterly Orders / Sales by Region



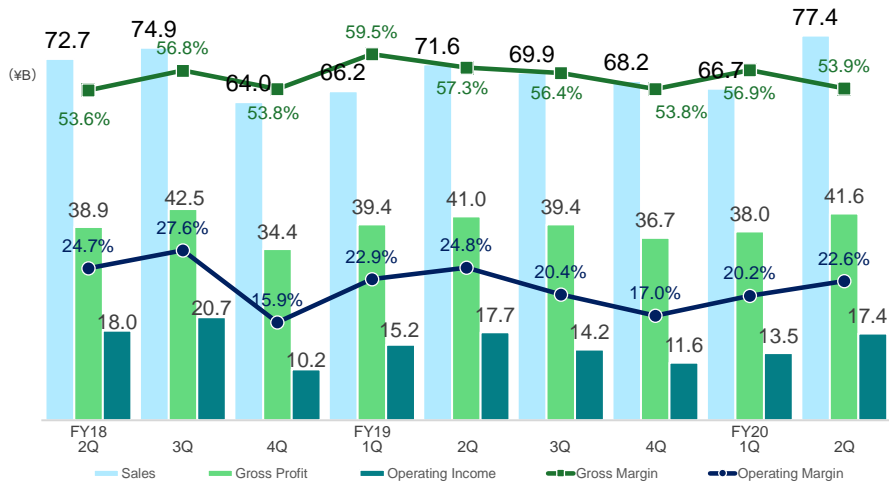
○ FY2020 2Q Orders / Sales by Region

- South Korea
Smartphone-related orders increased.
- Taiwan
Triggered by US-China conflict, orders declined due to test capacity adjustments at OSATs.

○ FY2020 2Q Sales by Region

- South Korea
In addition to increased sales of SoC testers related to smartphones, sales of memory testers also increased against the backdrop of high orders received in the previous quarters.
- Americas
System level test sales increased.

Sales / Gross Profit / Operating Income



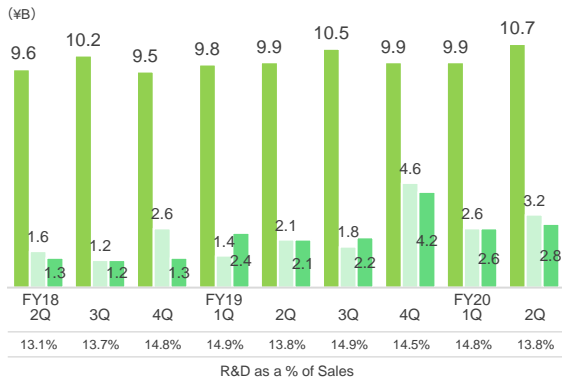
○ FY2020 2Q Sales / Gross Profit / Operating Income

- Gross margin 53.9%
Sales mix fluctuations caused a QoQ decline.
- SG&A (including total other income and expenses) ¥24.2 billion
- Operating income ¥17.4 billion
- Operating margin 22.6%
- 2Q operating income includes a gain of approximately ¥2.5 billion from the transfer of Advantest's probe card business.

Investments / Cash Flow

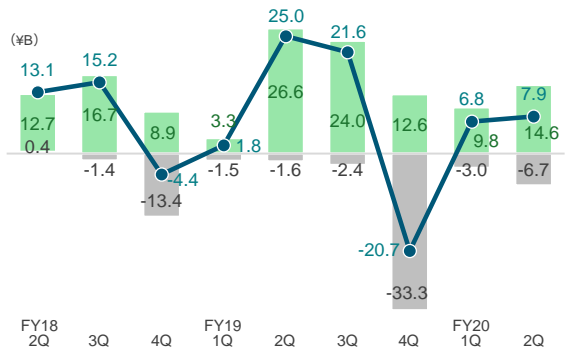
<Investments>

- R&D Expenses
- Capital Expenditure
- Depreciation & Amortization



<Cash flow>

- Cash flows from operating activities
- Cash flows from investing activities
- Free cash flows



*Free Cash Flows = Cash flows from operating activities + Cash flows from investing activities

○ FY2020 2Q R&D Expenses/Capex/D&A

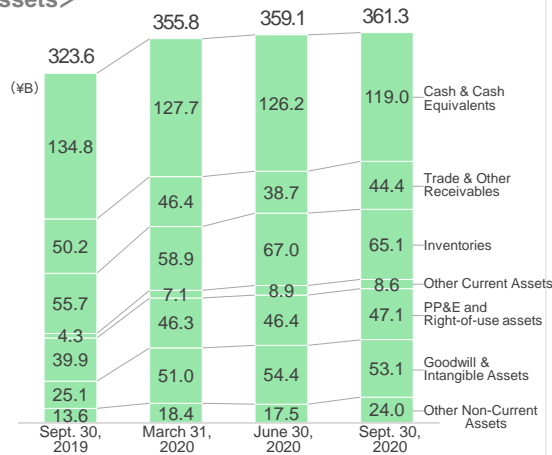
- R&D Expenses ¥10.7 billion
- R&D to sales ratio 13.8%
- Capex ¥3.2 billion
- Depreciation and Amortization ¥2.8 billion

○ FY2020 2Q Cash Flow

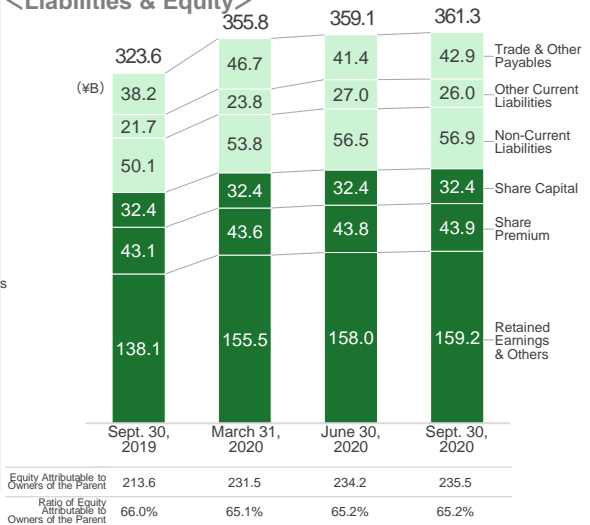
- Free cash flow ¥7.9 billion
- Investment cash flow expenditures increased due to Advantest's capital participation in PDF Solutions, Inc., announced in July.

Financial Position

<Assets>



<Liabilities & Equity>



○ Balance Sheet for Period Ending September 30th, 2020

- Total Assets ¥361.3 billion
- Cash & Cash Equivalents ¥119.0 billion
Down ¥7.1 billion from the end of the previous quarter
- Equity Attributable to Owners of the Parent ¥235.5 billion
- Ratio of Equity Attributable to Owners of the Parent 65.2%
Unchanged from the end of the previous quarter
- Share repurchase completed by the end of September amounted to 10.9 billion yen (2.09 million shares), about 80% of the 2.5 million share limit set.



FY2020 Outlook

Yoshiaki Yoshida

Representative Director, President & CEO

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Semiconductor Tester Market Trends: October 2020 Outlook

CY20 Forecast

–SoC Tester Market: Upward revision to approx. \$2,700M

- Demand for testers for advanced process devices has been stronger than expected. Investment in testers for HPC / AI applications as well as smartphone-related semiconductors, such as application processors, image sensors, and display driver ICs, is also growing more than anticipated.
- The surplus of testers at OSATs caused by the tightening of US regulations on a major Chinese smartphone maker is likely to turn the corner by the end of CY20. In addition to proactive test capacity reallocation, test demand from advanced process devices is also expected to grow in CY21.

–Memory Tester Market: No Change to July Outlook

- In the first half of the calendar year, tester investment in both DRAM and NVM progressed more than previously expected, thanks to active data center investment. Despite an expected pause in the second half of the calendar year, CY21 should see further market growth as memory density and speed increase.

	CY17 Actual	CY18 Actual	CY19 Actual	CY20 Estimates
SoC Tester Market	Approx. \$2,200M	Approx. \$2,550M	Approx. \$2,700M	Approx. \$2,700M (July estimate: approx. \$2,400M)
Memory Tester Market	Approx. \$750M	Approx. \$1,150M	Approx. \$650M	Approx. \$1,000M (July estimate: approx. \$1,000M)

○ Semiconductor Tester Market Trends: October 2020 Outlook

- Three months ago, Advantest forecast weaker demand for SoC testers due to tighter US regulations on a major Chinese smartphone maker.
- Subsequent developments were as expected, causing OSATs to prioritize test capacity adjustment.
- However, in the aftermath of enforcement of the new regulations, in addition to inventory build-up, other major smartphone makers have begun to eye the position occupied by the affected company. This has stimulated smartphone-related test demand, pushing demand for APU, CIS, and DDI testers to a higher level than expected.
- As supply chain reconstruction progresses within the industry, our broad customer base and diverse SoC tester product portfolio have enabled Advantest to successfully capture additional demand from customers who are planning to increase production. This has covered the decline in demand for SoC testers from the affected smartphone maker's supply chain.
- In addition, as strong demand for HPC-related products continues, it seems likely that OSATs will work through their tester surplus by the end of CY20.
- Reflecting these changes in the market, we have raised our CY20 outlook for the SoC tester market to approximately \$ 2,700M. Although Advantest's market share will decrease year-on-year due to the characteristics of our customer mix, we feel that we are well placed to respond to the anticipated scenario of market growth heading into CY21.
- For memory testers, as forecast in July, memory demand for data center-related investment is likely to level off in the short term, but this will also rebound in CY21 thanks to anticipated tester market growth drivers such as DRAM process shrinks and 3D NAND layer count increases.

FY20 Forecast

	FY19		FY20				(¥B)	
	Results	1H Results	2H Forecast	Full-Year Forecast	vs. FY19 (Δ) (%)		FY20 Forecast as of July	Δ
Orders	287.8	125.6	134.4	260.0	-27.8	-9.7%	240.0	+20.0
Sales	275.9	144.1	130.9	275.0	-0.9	-0.3%	260.0	+15.0
Operating Income	58.7	30.9	21.6	52.5	-6.2	-10.6%	45.0	+7.5
Operating Margin	21.3%	21.5%	16.5%	19.1%	-2.2pts		17.3%	+1.8pts
Income Before Tax	58.6	29.3	21.6	50.9	-7.7	-13.1%	44.4	+6.5
Net Income	53.5	24.5	18.0	42.5	-11.0	-20.6%	35.8	+6.7
Net Income Margin	19.4%	17.0%	13.8%	15.5%	-3.9pts		13.8%	+1.7pts
Backlog	91.0	72.5	76.0	76.0	-15.0	-16.5%	71.0	+5.0
R&D Expenses	40.1	20.6	20.4	41.0	+0.9	+2.2%	41.0	-
Capex	9.9	5.8	6.2	12.0	+2.1	+21.2%	10.0	+2.0
D&A	10.9	5.4	5.6	11.0	+0.1	+0.9%	11.0	-
Exchange Rate	1 US\$	¥109	¥107	¥105	¥106	¥3 Appreciation	¥106	-
	1 Euro	¥121	¥120	¥120	¥120	¥1 Appreciation	¥119	¥1 Depreciation

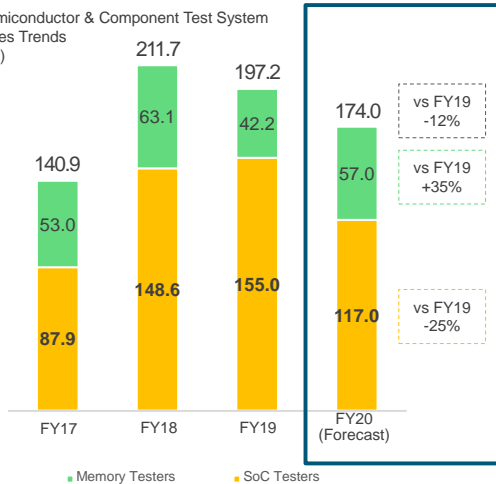
Our latest forecast for the impact of exchange rate fluctuations on FY20 operating income is plus ¥600 million per 1 yen of JPY depreciation vs USD, and minus ¥150 million per 1 yen of JPY depreciation vs the euro.

○ FY20 Forecast

- Based on 2Q results, Advantest has raised our full-year forecast as follows: orders received, ¥260.0 billion; sales, ¥275.0 billion; operating income, ¥52.5 billion; income before income taxes, ¥50.9 billion; net income, ¥42.5 billion.
- This forecast assumes exchange rates of JPY 105 to 1 USD and JPY 120 to 1 euro in 2H. For the full year, we assume JPY 106 to 1 USD and JPY 120 to 1 euro.
- Gross profit margin is expected to decrease from 56.7% in the previous fiscal year to about 54%, and operating income margin is also expected to decrease YoY.
- In addition to the impact of changes in our product mix, this is due to our commitment to ongoing R&D investment and customer support system reinforcement, which we see as up-front investments necessary to meet the new test demands driven by customer needs for test reinforcement and highly sophisticated test methods for higher-performing semiconductor devices.

FY20 Outlook by Segment

Semiconductor & Component Test System
Sales Trends
(¥B)



Semiconductor & Component Test Systems

<SoC Testers> (+¥13.0B vs July forecast)

- OSATs are adjusting new investment plans due to the impact of the US-China conflict, although the trend toward higher-performance semiconductors continues
- Meanwhile, competition among smartphone players has sparked higher-than-expected tester demand. In addition, reallocation of surplus testers to other uses will accelerate the reconstruction of customer supply chains
- End demand is recovering in the automotive, industrial machinery, and consumer arenas, and Advantest is closely watching for the return to investment in testers

[Progress toward mid-term sales growth targets (forecast)]

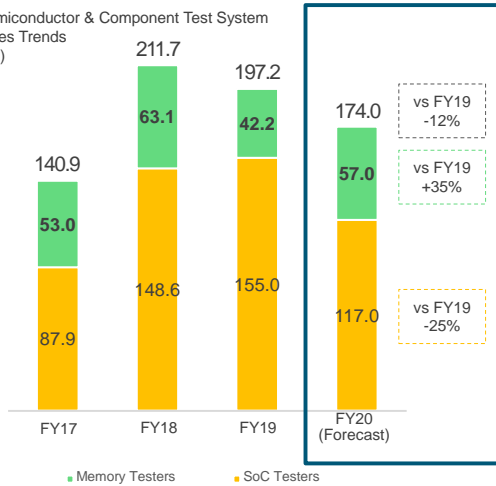
	FY15-17 average	FY18-20 average	Change
SoC Testers	¥79.1B	¥140.2B	+77%
Memory Testers	¥35.3B	¥54.1B	+53%
Total	¥114.2B	¥194.3B	+70%

○ SoC Tester Business Outlook

- Although OSAT investment in new testers is currently weak due to the tightening of US regulations on a major Chinese smartphone maker, competition among smartphone players is also understood to be stimulating demand for testers across a wide range of applications.
- OSATs are diverting surplus testers to different uses, in line with the restructuring of industry supply chains, and we are cooperating with their efforts. We expect that test capacity adjustments will turn the corner within the year.
- Based on these trends, we have raised our full-year sales forecast for SoC testers to ¥117.0 billion, ¥13.0 billion higher than our July forecast.
- There are also signs of recovery in end demand for automobiles, industrial machinery, and consumer products heading into CY21. In preparation for growing demand, we are closely watching the timing of renewed full-scale customer investment.

FY20 Outlook by Segment

Semiconductor & Component Test System Sales Trends (¥B)



Semiconductor & Component Test Systems

<Memory Testers> (Forecast unchanged from July)

- Tester demand remained strong in 1H amidst increased demand for server memory linked to data center investment
- Sales are still expected to decline in 2H, but 2H orders are expected to remain firm against the backdrop of test reinforcement for DRAM process shrinks in CY21 and the trend toward higher 3D NAND layer counts

[Progress toward mid-term sales growth targets (forecast)]

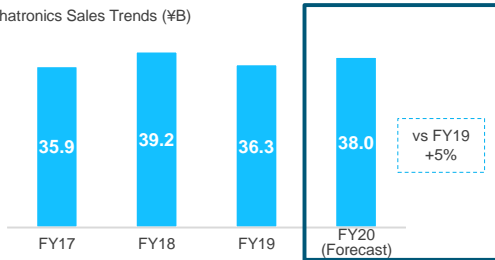
	FY15-17 average	FY18-20 average	Change
SoC Testers	¥79.1B	¥140.2B	+77%
Memory Testers	¥35.3B	¥54.1B	+53%
Total	¥114.2B	¥194.3B	+70%

○ Memory Tester Business Outlook

- In the first half of FY20, investment in data centers boomed, and demand for DRAM and 3D NAND testers was strong.
- As server-related memory demand has paused, tester sales are expected to be weighted towards 1H.
- However, with the increasing acceptance of "new normal" lifestyles around the world, data traffic volumes are expected to increase further. Memory demand is predicted to grow in CY21 and thereafter.
- Advantest will comprehensively capture the growing demand for memory testers in response to DRAM process shrinks, the shift to LPDDR5 and DDR5, the expansion of memory demand for HPC, and increases in 3D NAND density.

FY20 Outlook by Segment

Mechatronics Sales Trends (¥B)



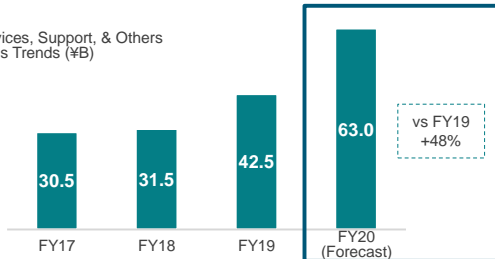
Mechatronics Systems (Forecast unchanged from July)

– YoY sales forecasted to rise slightly, principally driven by DI products

[Progress toward mid-term sales growth targets (forecast)]

	FY15-17 average	FY18-20 average	Change
Mechatronics Systems	¥30.9B	¥37.8B	+22%

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



Services, Support, & Others (+¥2.0B vs July forecast)

– Efforts to grow the customer base of Advantest's system level test business have been successful, and significant sales growth is expected

– Field services also remained firm due to growth in Advantest's installed base

[Progress toward mid-term sales growth targets (forecast)]

	FY15-17 average	FY18-20 average	Change
Services, Support & Others	¥30.0B	¥45.7B	+52%

○ Mechatronics / Services & Other Business Outlook

- In our Mechatronics segment, Advantest forecasts full-year sales of ¥38.0 billion, centered on device interface products.
- In our Services, Support, & Other segment, we expect solid field services sales, as well as increased sales of system level test products. Therefore, we have revised our forecast for segment sales upwards by ¥2.0 billion, to ¥63.0 billion.
- The growth of the two system level test business acquired from Astronics and from Essai will compensate for the decline in SoC tester sales resulting from US-China conflict.

Summary

- Despite the Covid-19 pandemic, customers' motivation to invest has stayed resilient. In light of strong 2Q results, which exceeded our plan, and our 2H outlook, Advantest has revised our full-year orders and sales forecasts upwards by ¥20.0 billion and ¥15.0 billion respectively.
- The impact of tighter US regulations on Chinese companies will continue to affect our flagship SoC test platform, but our diverse product portfolio will cover the decline whilst supply chain reconstruction progresses.
- It is expected that the impact of the US regulations, which had raised concern for Advantest's business, will turn the corner by the end of the year, and that end demand recovery in fields such as automotive, 5G-related products, and HPC will create new demand for SoC test equipment.
- Advantest's SLT business, which has been reinforced through M&A, is performing well, helping to boost sales.
- Advantest will continue to strengthen R&D investment and customer support capabilities to capture new tester demand.

○ Summary

- Despite significant uncertainties such as the Covid-19 pandemic, US-China conflict, and negative global economic growth, customers' motivation to invest has not trended downwards as much as was feared. In light of our 2Q results, which exceeded our plan, and our 2H outlook, Advantest has revised our full-year orders and sales forecasts upwards by ¥20.0 billion and ¥15.0 billion respectively.
- Although it cannot be denied that the impact of tighter US regulations on a major Chinese smartphone maker has had a marked impact on the SoC test supply chain, supply chain restructuring is underway. Advantest's broad customer base and diverse product portfolio enable us to capture the new demand created by this structural change in the smartphone market, and will compensate for the decline in SoC tester demand from the affected Chinese smartphone maker.
- The impact of tighter US regulations is expected to turn the corner by the end of the year, and SoC test demand for automotive semiconductors and other devices is on a recovery trend. Business conditions are expected to improve in CY21, although the prospects of the global economy remain uncertain.
- Advantest's system level test business, which has been strengthened through M&A over the past two years, is steadily growing, contributing to overall sales.
- Both SoC and memory devices will continue to evolve in CY21 and thereafter. Advantest will continue to invest in R&D and strengthen our customer support system to ensure we capture the growing demand for testers driven by semiconductor performance and reliability improvements.
- Finally, I would like to once again thank all Advantest's suppliers who supported our production system amidst the Covid-19 pandemic, and the employees who unflinchingly did their jobs under these unusual circumstances.