Advantest Corporation

FY2021 2Q (Three months ended September 30, 2021) Financial Briefing Q&A Summary

October 28, 2021

- Q: 2Q orders substantially exceeded expectations, but could you confirm what it was that drove this overshoot? Also, it seems as though you are anticipating strong orders again in 2H, but could you also describe what sort of structural changes are underway in the test market?
- A: Total company orders exceeded our estimate by ¥105 billion in 2Q, breaking down to an ¥88-billion overshoot for SoC testers; a ¥3-billion overshoot for memory testers; a ¥10-billion overshoot for mechatronics systems; and a ¥4-billion overshoot for services, support & others.
 - In our view, the three drivers of order growth for SoC testers, which saw the greatest overshoot, were production capacity expansions designed to address the tight supplies of semiconductors, the longer lead times for our products, and demand growth associated with application processors (APUs) and high-performance computing (HPC) chips, which are poised to migrate to more advanced nodes in 2022 and beyond.
 - While we do not expect orders to remain on par with those of 2Q going forward, the 2H forecast for orders of ¥200 billion that we presented this time works out to ¥100 billion per quarter, which we believe is higher than the historical level.
- Q: I would like to ask you about how you are benefitting from economic security policies. OSAT companies purchase testers, and I believe that their construction of numerous facilities in the US, Europe, and Japan going forward should stimulate tester demand. Could you share your views on this?
- A: We do expect the building of redundancies into the supply chain to serve as a tailwind in the short term. However, once test capacity has been built up all over the world in an effort to better ensure economic security, a return to liberalization could result in excess capacity. We intend to closely monitor developments in the industry going forward.
- Q: Could you share a segment breakdown for your 2H order forecast of ¥200 billion? Also, how do you expect the balance between 3Q and 4Q to look like?
- A: We picture a roughly 50/50 split of the ¥200 billion in 2H orders between 3Q and 4Q. However, it is going to take a bit more time for us to gain better visibility on 4Q. In terms

of a segment breakdown, we expect fewer orders in 2H than in 1H for SoC testers; mechatronics systems; and services, support & others; but for memory tester orders to hold flat versus 1H.

- Q: Is it possible that your planned production capacity expansion in Arizona and acquisition of R&D Altanova will shrink the distance between yourselves and the US MPU manufacturers, thereby enabling you to expand your tester business with them?
- A: We will refrain from discussing the specifics of our business with any particular customers. Regardless of the customer, we always strive to provide them with greater value from a variety of different angles, and our consumables business also provides us with such opportunities.
- Q: You are planning higher sales in 2H than in 1H. Is it fair to assume that the logistical disruptions that prevented you from meeting your sales forecast in 2Q were only a temporary drag?
 Also, your forecast for an end-FY2021 order backlog of ¥273.8 billion suggests that FY2022 sales could easily top ¥400 billion. Do you foresee any issues with your
- A: The logistical disruptions that we experienced in 2Q owed to flight cancellations stemming from a mid-September typhoon in the China/Taiwan area. We see this as a one-off and do not expect continued impact in 2H.

production capacity, including EMS, and with the upward elasticity of your sales?

- On the question of production capacity, we believe we have capacity in place to support roughly ¥120 billion in quarterly sales and nearly ¥500 billion on an annual basis. Our concern is procuring components. Producing our testers requires some 500,000 components, which is roughly 10 times the number required to build an automobile. As such, we are very much struggling to keep up with the sharp rise in orders. Semiconductor manufacturers are also our customers, so to ensure that we have enough components, we have asked them to prioritize supplies of components for semiconductor testers, which will help them to also increase their own production capacity.
- Q: How far out can you cover your production needs with the components you have secured thus far?
- A: The full-year sales forecast of ¥400 billion that we announced today is naturally the number that we intend to achieve. Some seem to believe that the semiconductor shortage will reach a gradual resolution by mid-FY2022, but conditions remain in constant flux, and we are not so certain as to take an optimistic outlook on the way forward.

- Q: Could you elaborate on why it was that SoC tester orders exceeded your expectations by so much in 2Q? You have said that advances in semiconductor performance and miniaturization are driving tester demand, but could you explain specifically what sort of technological changes are bolstering demand?
- A: Lately, APUs and HPC/AI chips, which are moving to leading-edge processes, have been strong drivers in the SoC tester business. US fabless players and the Taiwanese foundry company are driving our business related to leading-edge chips.

 In recent years, migrations to more advanced nodes have been planned each year, and the resulting sustained growth in transistor counts has made test times longer and underpinned the growth in tester demand. We expect this trend to continue for quite some time.

 In addition, we expect over the next two to three years to see the adoption of new transistor architecture as an alternative to FinFET. When they adopt the new architecture, our customers will have to be even more careful than before in assessing how the transistors work so that they are able to ensure reliability. Given that we deal in equipment that helps ensure chip quality, we believe that this should also serve as a tailwind for us.
- Q: I would like to ask about your visibility as regards your 3Q order forecast. Your 2Q orders proved to be substantially different than the forecast that you had issued three months prior. Could that happen with your 3Q forecast as well? Or has advance ordering subsided or trends otherwise changed in such a way to give you better visibility on 3Q orders?
- A: What we were unable to fully factor into our 2Q order forecast was the substantial portion of orders that customers placed to serve needs farther out than they normally do based on considerations of the market environment for semiconductor equipment. However, that trend is in the process of subsiding. Our customers are beginning to place orders for testers based on their production plans under the assumption that the lead time for our products will be roughly six months, which is the current figure. As such, we do not believe that 3Q orders will deviate significantly from our forecast. Meanwhile, customers are still in the process of firming up their production plans for the latter half of 2022, so there is a limit to how accurate our order forecasts for 4Q and beyond can be.
- Q: I believe that a considerable number of new players are joining the existing major US fabless players in the HPC chip market. Could you describe how successfully you are competing for business from such new players and how you are differentiating yourself from your peers?

- A: Whereas HPC chips were previously used primarily in gaming, their use has expanded in recent years, with data centers among the newer applications. In keeping with that trend, emerging players have appeared on the scene in the US and elsewhere, and we have established a very strong position with them.
 - This is the result of the sophisticated insight we have amassed in the field of HPC testing through our deep engagement with our major customers.
 - Our engagement with them has also enabled us to incorporate technologies that will be effective in future HPC testing into our new V93000 EXA ScaleTM SoC Test Systems. That is another differentiator of ours. As the HPC/AI field grows further going forward, we believe that we will be able to maintain the extremely high market share that we have had to date.
- Q: You are forecasting an operating margin of 27.1% for 2H, but growth in SoC testers is likely to result in an even better product mix in FY2022. What is the thinking on your operating margin going forward?
- A: Our 2H operating margin forecast reflects impact from the recent rise in components costs and from our growth investments. We will naturally strive to improve our operating margin going forward, but we will also steadily undertake strategic investments in the form of M&A activity, the recruitment of experienced talent, and capital expenditure. The dynamics would change if our annual sales were to exceed ¥400 billion, but provided that they are on the order of ¥400 billion, we believe that the forecast we have presented for 2H FY2021 represents a reasonable operating margin.
- Q: We are seeing quite a few instances where higher semiconductor prices are adversely affecting CoGS at other companies. Do we not need to worry too much about your costs?
- A: The semiconductor manufacturers are our customers, so if, in their capacity as our suppliers, they were to raise the prices we pay for their semiconductors, the sales prices of our products would also rise. This gives us negotiating leverage. However, the greater issue for us as regards procurement is that we do not purchase semiconductors in the volumes that automakers, for example, do. This means that the semiconductor manufacturers tend to assign us a lower priority. We are therefore working to get our customers to give us higher priority by explaining to them that doing so will ease bottlenecks more quickly and that not doing so will prolong the semiconductor shortage.

Note

This document is prepared for those who were unable to attend the information meeting and is intended only for reference purposes. The original content has been revised and edited by Advantest for ease of understanding.

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.