

ULVAC, Inc.

Q&A for FY2024/6 Q2 Financial Results Presentation (held on Feb. 13, 2024) and Analyst Meetings

Orders received

1. **Why is it that the actual orders received in H1 increased YoY and also exceeded the original plan, but are expected to fall in H2?**

A: Investments in SiC power devices in Japan and China and battery-related investments for double-sided aluminum evaporation film were concentrated in H1, especially in Q1. It was originally planned that the orders would concentrate in H1 and decline in H2.

In Japan, SiC investment in power devices is now in full swing, but in Q1, it was mainly for 6-inch wafers, and the investment intends to shift to 8-inch wafers in the future. In H2 of this fiscal year and H1 of the next fiscal year, investment in power devices in Japan is expected to remain calm, centering on investment in 8-inch pilot lines, and investment in full-scale mass production of 8-inch wafers is expected to pick up in H2 of the next fiscal year. We also expect Chinese power device investment to decline in H2, as the pace of business negotiations may slow down due to the Chinese New Year holidays, but expect continuous investment from next fiscal year onward.

The first round of investment for switching from aluminum foil to double-sided aluminum evaporation film for cathode current collectors, which is aimed at making EV batteries smaller, larger capacity, and safer, began in Q1. All companies have active investment plans for the second stage after the first investment equipment goes into operation and verified. We expect further growth in the next fiscal year onward, but H2 of the current fiscal year will see calm activity.

Both power device and battery-related businesses concentrated in H1, especially in Q1, and will temporarily decline in H2, but we expect further growth in the next fiscal year onward.

2. **Orders in H2 are expected to decrease compared to H1, but what is your forecast for the next fiscal year onward?**

A: We expect orders to increase in the next fiscal year onward, mainly for the growth drivers. Orders for growth drivers are expected to be more than 1.6 times larger in FY26/6 than in FY23/6, and consolidated orders are expected to be more than ¥300 billion in FY26/6.

3. **Please tell us about the current investment trends for the growth drivers and the prospects for orders in the next fiscal year onward.**

A: ① **Power Devices**

In addition to China, where SiC investment has been active, 6-inch SiC investment has started in Japan. Japanese companies are considering the 8-inch model, and after the pilot line investment, full-scale investment is expected to begin in H2 of the next fiscal year or later.

Business opportunities are expanding over the medium to long term due to increased demand from the

shift to green energy and EVs, active SiC investment, increased wafer size, and the shift to trench structures. We expect the business to remain flat or slightly decrease in the next fiscal year, but to increase further in FY26/6, growing about 1.5 times compared to FY23/6.

② **Various Electronic Devices**

In various electronic devices, technological innovation and investment to increase production continues. We expect orders to increase as investment in μ OLED for AR/VR continues and investment in packaging is becoming more active as the limits to miniaturization are beginning to be seen and to support energy saving.

In wafer-level packaging, our strength lies in our ashing equipment for cutting-edge processes and was also awarded by TSMC. In the future, we will also expand sales for sputtering equipment. In addition to wafer-level packaging, we expect to see full-scale investment in panel-level packaging in the future. The packaging business is expected to grow 4.4 times in FY26/6 compared to FY23/6.

Overall orders of various electronic devices are expected to grow about 1.2 times in FY26/6 compared to FY23/6.

③ **Memory**

Memory investment will shift from the inventory adjustment phase to the investment recovery phase. HBM-related investment made a partial contribution this fiscal year, and we expect investment, mainly in DRAM, to recover from H2 of the fiscal year.

④ **Logic**

Investment in advanced logic will also shift from the adjustment phase to the investment recovery phase. In particular, since the North American logic manufacturer became the third company to use our MHM process, we intend to grow in new processes in addition to the MHM process. Continued orders are expected from the North American legacy manufacturer that we newly entered last fiscal year, and our business base in the logic field is expanding.

⑤ **Battery**

The first round of investment in double-sided aluminum evaporation film for EV battery cathode current collectors went into full swing in Q1. The company expects further growth in the next fiscal year and onward.

4. What are the investment trends for power devices and batteries in the face of sluggish EV demand?

A: In terms of power device investment in Japan, 6-inch SiC investment was expected to be active in H1, and orders for development equipment for 8-inch SiC investment are expected from H2 onward, the full-scale 8-inch SiC investment is expected to be active from H2 of the next fiscal year when the investment to mass production start. In addition, the change in SiC structure from planar to trench will expand business opportunities for etching equipment. Although investment will temporarily slow down, we expect it to pick up in H2 of the next fiscal year onward.

Chinese investment in power devices continues to be driven by mass-production investment for domestic production, supported by various preferential policies of local governments under China's policy of domestic production. Orders in H2 are expected to be lower than in the H1 due to a slowdown in business negotiations in H2 after the New Year and Chinese New Year, but the investment for 8 inch other than 6 inch is expected to be active continuously.

As for batteries, investment is expected to grow even if the shift to EVs slows down, as the demand is to replace the aluminum foil used in conventional cathode current collectors with double-sided aluminum evaporation films for the purpose of improving safety and reducing size and weight.

The investment in double-sided aluminum evaporation films is still in the first stage, and equipment from the first stage will begin operating from H2 sequentially.

Further growth is expected as we are working to increase film width to further improve productivity and is also developing a double-sided evaporation roll-to-roll equipment to replace the anode current collector from copper foil to a double-sided copper evaporation film.

5. Orders for power devices in H1 were at a high level of about ¥20 billion. What was the weight of orders by type, region, and equipment?

A: In H1, mid-80% of power device orders were for SiC, 10% were for Si-MOSFETs, and few percent were for IGBTs. By region, China accounted for 60% and Japan 40%.

By equipment, ion implantation equipment accounts for about 60%, sputtering equipment for about 30%, and evaporation equipment for Si-MOSFETs for the remaining 10%.

We have received an order for ion implanter used for 6-inch SiC in Japan, and would like to focus on expanding the ion implanter business in Japan which is expected to shift to 8 inch SiC.

6. What are the semiconductor-related business opportunities in China?

A: As for semiconductor-related orders in China, ULVAC will not receive as much weight as other companies due to its limited track record in legacy nodes, but we hope to gradually increase the orders by utilizing our technology, which is also adopted by other customers. We haven't factored in that large an amount as a plan.

7. What is the impact of the U.S. restrictions on Chinese semiconductor exports, etc.? Will it affect the power devices, etc. business?

A: The semiconductor-related business in China is not factored in by a large amount of orders in the plan. The expanding business of power devices, various electronic devices, and batteries is not subject to the regulations, so there is no impact on the business. In fact, while there are restrictions on investment in cutting-edge semiconductors, there is a sense that more effort is being put into investment in power devices, etc., and investment in power devices, etc., is becoming more active.

Net Sales and Profit (%)

8. Net sales and Operating profit exceeded the plan in H1, but what will happen in H2? Will the full-year forecast, which has not been changed, swing upward?

A: Net sales in H1 were largely due to the impact of the revenue recognition based on construction progress, which exceeded the original plan. In H2, sales are expected to increase compared to H1, but the increase is expected to be moderate. Both gross profit margin and operating profit margin are expected to improve in H1 compared to H1 due to the effect of increased sales. SG&A expenses tend to be higher in H2, and full-year operating profit is expected to be almost in line with the plan.

9. Why do SG&A expenses tend to increase in H2?

A: This was due to an increase in R&D expenses and an increase in selling expenses in line with an increase in orders received.

10. I would like to know about lead time by major business, field, and product.

A: In terms of delivery lead time to customers, sputtering equipment for logic and memory applications took 3 to 5 months, thanks in part to the effects of planned production,

In the electronic device field, sputtering, evaporation, and etching equipment, which are being manufactured on a prearranged basis, require 3 to 7 months, while some special equipment requires 12 months or more because parts are ordered after orders are received.

Ion implanter for power devices is 10-17 months due to the fact that some special type parts have not been able to keep up with the production capacity of suppliers as a result of the rapid increase in orders.

11. What is the breakdown of orders and net sales for semiconductor electronic devices and FPDs in H1 by application and the ranking of operating profit margin by segment?

A: See Appendix.

<Appendix>

● Breakdown for Order Received

Order Received	FY24/6 H1
Semiconductor/ Electronics(¥1billion)	48.9
•Memory	mid-10%
•Logic	more than 10%
•Electronics Device	more than 20%
•Power Device	more than 40%
•Packaging	less than 10%
•Others	-
FPD(¥1billion)	30.8
•LCD	less than 20%
•OLED	more than 30%
•Battery	mid-40%
•Others	several %

● Breakdown for Net Sales

Net Sales	FY24/6 H1
Semiconductor/ Electronics(¥1billion)	42.0
•Memory	more than 20%
•Logic	mid-10%
•Electronics Device	less than 30%
•Power Device	more than 30%
•Packaging	mid-single digit
•Others	-
FPD(¥1billion)	25.8
•LCD	mid-40%
•OLED	more than 30%
•Battery	about 20%
•Others	mid-single digit

● Operating Profit Margin Rank of FY24/6 1H

Rank	Segment
1	Components
2	General Industries
3	Semiconductor and Electronics
4	Others
5	Materials
6	FPDs

Overall average is between
3) Semiconductor・Electronics and
4) Others