

ULVAC, Inc.

Q&A for FY2021 Business Results Presentation (held on Aug 10, 2022) and Analyst Meetings

[FY21 Results]

- 1. Why were the 4Q results higher than you expected in 3Q?
- A: 4Q orders received were higher than expected in 3Q overall, including FPD and semiconductor electronics.
 - 4Q sales were expected to be similar to 3Q results due to the impact of longer delivery times for parts and materials, but sales were higher partly due to steady progress in manufacturing processes, mainly for FPDs, corresponding requests from customers to move up the delivery schedule.
- 2. What factors contributed to the improvement in gross profit margin from 29.4% to 30.6%? What was the improvement by segment?
 - What is the magnitude of the contribution in sales increase and the effect of strengthening of manufacturing capabilities?
 - Why did the gross profit margin fail to reach the level announced at the beginning of the period?
- A: Profit margins improved in many segments, including semiconductors, electronics, FPD, general industrial, materials, and others.
 - The increase in sales from JPY183.0 billion to JPY241.3 billion had a significant effect, while the effect of improving the profit margin by strengthening of manufacturing capabilities was only about 20% of the improvement.
 - Despite efforts to improve the profit margin by strengthening of manufacturing capabilities, we had to prioritize procurement of parts with long delivery lead times, thereby making it difficult to realize cost reductions through standardization and commonization of parts, etc., and the effect of productivity improvement was also diminished by the need to rearrange production processes and additional installation after delivery due to long delivery lead times of parts. The impact was significant. In addition, the long delivery times of parts delayed the contribution of high-margin semiconductor electronics sales, while the increased ratio of FPDs to the total sales deteriorated the sales mix, which is another reason why the gross profit margin did not reach the plan.
- 3. Why is R&D-related capital investment less than planned? Will it increase in the next fiscal year and beyond?
- A: In FY2021, capital investment was lower than planned due to delays in the delivery of long-delivery parts and materials. On an order basis, capital investment was close to the plan.
 - In the next mid-term management plan, we plan to increase R&D investment for further growth, mainly in semiconductors and electronics.

- 4. What is the breakdown of orders and sales of FPDs and semiconductor electronic devices by application in FY2021?
- A: As per the appendix I.
- 5. What is the ranking of operating margin in FY2021?
- A: As per the appendix I.

[Plan for FY2022]

- 6. The gross profit margin is planned to improve to 33.0% in FY2022 from 30.6% in FY2021. What factors will contribute to this improvement?
- A: We will make efforts to improve profit margins for all segments.

 Assuming that the impact of longer delivery times for parts and materials will continue for the time being, the effect of improvement through strengthening of manufacturing capabilities will be limited.

 Gross profit margin is expected to improve significantly due to higher sales, and sales mix improvement caused by higher sales contribution from semiconductor electronics and lower sales from FPD.
- 7. SG&A expenses in the FY2022 plan are JPY48.0 billion, an increase of JPY4.3 billion from the FY2021 result of JPY43.7 billion, but what will increase?
- A: We expect an increase in expenses, mainly development-related and system-related expenses, which is necessary for future growth.
- 8. What is the breakdown of orders and sales of FPDs and semiconductors and electronic devices by application in FY2022?
- A: As per the appendix II.

[Parts procurement]

- 9. What parts and materials are taking longer delivery times? What measures are being taken?
- A: The availability of electronic components continues to be difficult, and the range of impact of long delivery times are expanding from parts to products.
 - In general, control units, power supplies, mass flow controllers, etc. are taking longer delivery times, and module parts suppliers are also continuing to face long delivery times due to tight supply and demand.

As a countermeasure, we are working to secure parts and materials in advance, cooperate with suppliers in procuring raw materials, secure parts for standard units at an early stage, and cooperate with manufacturers through periodic meetings.

In addition, we also share information on parts that are difficult to obtain with suppliers and some of our customers, and work together to secure parts. In addition, we are replacing parts by changing specifications.

10. How much has the equipment lead time extended?

A: It varies depending on the equipment, for example, in semiconductors and electronics, the lead time, which had been kept at 6 to 8 months through various measures, has now exceeded 12 months or more due to the longer delivery time of components.

11. What is the impact of higher parts and materials procurement costs and higher logistics costs?

A: In our equipment business, additional cost increase can be absorbed through price negotiations on a case-by-case basis, as equipment prices are often negotiated for each quotation. In addition, it also can be absorbed by improving the profit margin through strengthening of manufacturing capabilities, but there is a delay in progress in the improvement.

The impact of higher logistics costs is relatively minor, as many of the logistics costs associated with delivering products to customers are borne by the customer, such as FOB term.

[Investment trends of Semiconductor & Electronics]

12. Most people expect that the semiconductor equipment market will slow down in 2023. What are your thoughts on this?

A: We have formulated our plans by checking the latest investment plans of our customers.

Since our share of the semiconductor equipment market is still small, we are not always coincide with the trends in the semiconductor equipment market, but rather influenced by increases due to adoption in new processes by our customers.

Our entry into the logic MHM process has provided us with opportunities to enter other processes, not only in the logic but also in the memory field, and we intend to take advantage of these opportunities to achieve growth that exceeds the market growth.

13. What factors make you think you would grow in Logic and Memory in FY2022?

A: Orders in the logic field are expected to increase 1.7 times YoY this fiscal year, with the MHM process being the mainstay, while orders for other process in which our equipment has already been adopted will contribute. We also expect an increase in orders from new customers.

In addition to conventional memory processes, there are opportunities for us to be evaluated as a second vendor for other processes, and we plan a 15% YoY increase in orders due to the penetration into other processes.

14. How do you plan to expand power devices by region and by equipment?

A: Strong demand for power devices is driving the capital investment in Japan and China. In China, demand is particularly strong for Ion implanter for high-end power devices such as SiC and locally produced evaporation equipment for low-end power devices.

In Japan, demand for sputtering equipment for IGBT continues to be strong.

Orders for power devices in FY2022 are planned to be 2.8 times that of FY2019.

15. As for other electronics-related field, which applications and regions will grow?

A: In optical devices, investment in μOLED for AR/VR in Japan and China will increase due to the expansion of metaverse and remote applications.
 In addition, investment in Piezo-MEMS for automotive sensors and MEMS microphones is expected to

[Investment trends of FPD]

grow.

- 16. FPD orders in FY2021 of JPY80.5 billion were significantly higher than the JPY52.7 billion in the previous year and the JPY67 billion in the plan. What was the reason? Were there orders that were brought ahead of schedule? Or did the orders suddenly increase?
- A: The orders of about JPY4 billion planned for FY2022 were received in FY2021 in advance, and there were some other orders that had not been included in the plan, although related investment had been anticipated.

In particular, investment in LCDs for IT panels such as tablets and PCs became more active than expected in 1H of FY 2021, resulting a significant excess against the order plan.

17. With LCD panel prices continuing to fall, is the LCD investment plan for FY2022 realistic?

A: While competition for TV panels is intensifying with the launch of several G10.5 lines in China, supported by the Chinese government, investment in G8.5 panels is becoming more active as higher definition and higher productivity are required for IT panels, depending on the application. LCD investment plans in FY2022 includes line investment plans mainly from Chinese manufacturers as well as some additional investment, and the projects anticipated in the order plan are based on the latest customer information.

18. What are ULVAC's strengths and competitive advantages in G8.5 sputtering equipment? Please tell us about both the single-wafer and the vertical types.

A: Our multi chamber sputtering equipment for G6 has dramatically reduced particles and has been highly evaluated as a sputtering equipment for G6 size OLED backplanes.

The multi chamber sputtering system for G8.5 is an increase in size of the sputtering system for G6, and leverages the cluster technology of the sputtering system for G6 and our technological expertise in reducing particles from both the equipment and cathode sides, as well as the use of AI technologies to predict deposition processes for stable operation, improved productivity, and labor savings. The system is designed to meet the needs for (1) higher definition by reducing particles, (2) improved productivity, and (3) larger screens.

We are aiming for the world's first release of this equipment.

Meanwhile, we have always taken the lead in the development of vertical sputtering equipment for larger substrates.

In terms of technology, we have maintained a high market share by staying on the cutting edge of particle minimization and high productivity equipment such as vacuum transportation. The competitive advantage of our vertical sputtering equipment is extremely high.

19. What is the potential business volume of Roll to Roll evaporation equipment for batteries in the future?

A: We are aiming for the top market share and expect the scale of our business to be in the tens of billions of JPY in the future.

[Investment trends of Components, Materials and Customer Support]

- 20. In addition to semiconductors, electronics, and FPDs, you also plan to increase components, materials, and customer support in FY2022. What are the factors for each increase?
- A: In components, sales are expected to be 1.2 times that of FY2019 due to an overall increase in sales of pumps, measuring instruments, power supplies, and other products for electronics and EV-related devices production equipment.
 - In materials, sales are expected to be 1.6 times that of FY2019 due to an increase in high quality targets (W, WSi, etc.) for advanced semiconductors and an increase in targets (AI, Ti, etc.) linked to semiconductor equipment.

In customer support, sales in FY2022 are expected to be 1.3 times that of FY19 due to active investment in semiconductors and electronics, and higher equipment utilization rates.

[Earnings forecast for the next fiscal year and beyond]

- 21. Please tell us about your business forecast for the next fiscal year and beyond.
- A: We are going to announce our next mid-term management plan in August of next year, and there is no change in our policy of concentrating R&D investment in growth areas centered on semiconductors, electronics, and FPDs to further promote sales & profits and improve profit margins.
 - Specifically, growth areas include the entry into other processes such as the wiring process in addition to the MHM process for cutting-edge logic and adoption by other customers and the entry into other processes as second vendor which is expected by the customers.
 - The electronics field will grow by responding to investment in technological innovation in power devices and various electronic devices in Japan and China, and by taking advantage of opportunities such as the introduction of module-type equipment and domestic production in China. In FPD, sputtering equipment for large-size OLED substrates and roll to roll evaporation deposition equipment for batteries will grow.

Components and materials will also grow as a stable business bases.

We will also engage in management reforms to achieve further growth.

<Appendix I>

Breakdown for Order Received

Order Received	FY2021
Semiconductor/ Electronics(¥1billion)	81.7
•Memory	more than 30%
•Logic	more than 10%
·Electronics Device	less than 30%
•Power Device	more than 20%
 Packaging 	mid-single digit%
•Others	several%
FPD(¥1billion)	80.5
·LCD	more than 50%
(for large-sized)	(about 70%)
•OLED	less than 40%
•Others	about 10%

Breakdown for Net Sales

Net Sales	FY2021
Semiconductor/ Electronics(¥1billion)	67.8
•Memory	more than 30%
•Logic	mid-10%
·Electronics Device	about 30%
•Power Device	less than 20%
 Packaging 	mid-single digit%
•Others	-
FPD(¥1billion)	81.3
·LCD	more than 40%
(for large-sized)	(about 80%)
·OLED	less than 50%
•Others	about 10%

Operating Profit Margin Rank of FY2021

Rank	Segment
1	Component
2	Semiconductor and Electronics
3	General Industries
4	FPD
5	Others
6	Materials

Overall average is between 4) FPD and 5) Others

<Appendix II>

Breakdown for Order Received

Order Received	FY2022 Plan
Semiconductor/ Electronics(¥1billion)	98.0
•Memory	about 30%
•Logic	less than 20%
·Electronics Device	mid-20%
·Power Device	more than 20%
 Packaging 	mid-single digit%
•Others	-
FPD(¥1billion)	63.0
·LCD	mid-30%
(for large-sized)	(almost 100%)
•OLED	more than 50%
•Others	mid-10%

Breakdown for Net Sales

Net Sales	FY2022 Plan
Semiconductor/ Electronics(¥1billion)	90.5
•Memory	less than 30%
•Logic	mid-10%
·Electronics Device	mid-20%
·Power Device	more than 20%
 Packaging 	mid-single digit%
•Others	several%
FPD(¥1billion)	66.0
·LCD	more than 40%
(for large-sized)	about 50%
·OLED	more than 40%
•Others	less than 20%