ULVAC, Inc.

Q&A for FY2019 Business Results Presentation (held on Aug. 12, 2020) and Analyst Meetings

【New Mid-Term Management Plan】

①What's the meaning of Breakthrough 2022？

A : Amidst the drastic changes in the management environment surrounding our company, to turn the changes into opportunities, we decided to name our new mid-term plan as "Breakthrough 2022" to encourage all employees of our group to review our conventional values and working methods and to boldly take on new challenges, so as not to be left behind in the changing environment.

②How do you perceive the business environment and how do you respond to it?

A : We believe that we can contribute to technological innovation for a smarter society and lower power consumption with our vacuum thin film technology, and that the business opportunities are great. We will grow while contributing to society with the focus on semiconductors and electronics.

③What is the goal of the new mid-term management plan?

A : Under the new mid-term management plan, the company's basic policies are to invest in development for growth (selection and concentration) and to focus on gaining profit through structural reform.

The company will focus on selection and concentration for growth, such as by integrating research laboratories and refining development themes that will lead to the business that are more fruitful.

Reflecting on the fact that we did not make sufficient efforts to generate profits through manufacturing, we will strengthen our manufacturing capabilities and shift to a more profit-oriented structure.

④What is the selection and concentration of R&D?

A : Until today, the company has increased its investment in R&D while increasing the weight of its investment in the development of semiconductors and electronics. Under the new mid-term management plan, we will further increase R&D investment in semiconductors and electronics to a ratio of 7:3 to FPD and focus on growth.

⑤ What is the shift in focus from process development to product development?

A : Shifting from the development of elemental technologies and applications for the deposition process to the development of products (equipment) that anticipate market demands and directly affect the competitiveness of the product itself.

⑥ The company plans to invest ¥50 billion in R&D over the next three years, but in which areas will it mainly invest？

A : We will increase our weight in semiconductors and electronics.

In semiconductors, we will improve the metal-hard mask (MHM) process, which is the key to addressing miniaturization in line with the introduction of EUV at the newly entered Logic Foundry, and will aim to enter other processes. Meanwhile, we will develop new processes in line with changes in the structure and materials of DRAM.

In electronics, we will respond to the needs for small-quantity,customized,low-volume production through the development of modularized equipment for communication and electronic devices ,etc.

In FPD, we will focus on developing the next-generation large substrate OLEDs for mass production.

⑦ What is the profit margin improvement through manufacturing reform?

A : By strengthening our manufacturing capabilities and promoting production reform in all processes from engineering, design to production and purchasing, we will improve the profit margins through productivity improvement by reducing manufacturing man-hours and lead times by 50% and reducing procurement costs.

In terms of technological design reform, we will clarify the concept of the equipment in advance, grasp the customer's required specifications at an early stage to improve the level of completeness of the technical drawings, and reinforce value engineering at the design stage to shorten the production process and reduce the cost per equipment and the manufacturing burden.

As for the reform of the production process, we will eliminate the duplication of production between production sites and increase productivity by specializing the manufacturing in each of them.

For procurement reforms, we will unify the purchasing organizations of the various production sites and restructure the global supply chain to reduce procurement costs.

We will also strengthen the information system infrastructure that supports the standardization of business processes and the immediate sharing of information for such productivity improvement.

⑧ How do you see the results of strengthening your manufacturing capabilities?

A : We plan to reduce manufacturing man-hours by 50%, manufacturing lead-time by 50%, and reduce procurement costs by 2022 to raise the gross profit margin to 35% or more by reinforcing our manufacturing capabilities through technical design reform, production process reform, and purchasing reform, as well as strengthening the information system infrastructure to support these reforms.

⑨ What exactly is the success of the Advanced Electronics Equipment Division in manufacturing reform?

A : In the past six years, the Advanced Electronics Equipment Division has been working to reform its manufacturing process in order to achieve stable profits while accurately responding to customer needs with a wide variety of products in small lots.

We have been promoting standardization of equipment, narrowing down the types of equipment and developing new equipment so that we can propose various equipment such as sputtering, CVD, etchers and ashers, etc., on a single platform, as well as standardization through modularization.

In addition, we have established a system that prevents additional costs by thoroughly incorporating the customer's required specifications into the drawings.

As a result of these efforts, the Advanced Electronics Equipment Division's profit margin improved by about 6% over the three years of the previous medium-term management plan.

⑩ Can the success stories of Advanced Electronics Equipment Division be developed into other businesses? Is there any difference?

A : Certainly, each business has a different customer market, but the reforms in technological design, production processes, and purchasing, which are all part of strengthening manufacturing capabilities, are common issues. We can make improvements by adapting the best practices already in place in our electronics business. We have already begun to see the results of our efforts in our FPD business.

The biggest obstacle is that some of us cannot break away from the traditional way, so we are assigning leaders who have an awareness to reform.

⑪ What do you think about pricing to increase the effectiveness of profit margin improvement?

A : By strengthening research and development and manufacturing capabilities, we will increase the attractiveness of our equipment so that customers will recognize its merits and improve our profit margin.

⑫ You've replaced two-thirds of the group's managers, what are your objectives and results?

A : We began to revitalize the organization by changing managers to young and ambitious persons.

In particular, we are strengthening the management of our group companies that have their own products by appointing top managers to concurrently serve as ULVAC's executives or transferring ULVAC's executives to group companies.

⑬ What is your specific growth strategy for semiconductor logic?

A : Future investments in logic foundries will be made in miniaturization using EUVs.

With the expectations from the customer that Ulvac serves as a second vendor, we are entering the logic field for the first time in the MHM process to support the miniaturization requested by the introduction of EUV, and other companies are continuing to adopt our technology.

Going forward, we aim to increase our market share by (1) increasing investment in the MHM process which we have entered, (2) increasing MHM processes for further miniaturization, (3) to be adopted in processes other than MHM, and (4) increasing manufacturers that use our products.

⑭ What is your growth strategy for semiconductor memory?

A : In addition to capturing continued growth of DRAM and NAND demand, we are aiming gain market share and growth by entering into new processes in line with changes in DRAM structures and materials.

With regard to PCRAMs, although the investment by the leading companies has been slow, other companies are continuing to invest in mass production development, and we expect full-scale investment by the leading companies in the second half of the mid-term plan period in association with the market development.

⑮ How will the company increase its market share in the face of competition from the largest U.S. semiconductor equipment manufacturer?

A : Customers are accustomed to using the equipment of the largest competitor, and it is not easy to replace them. However, semiconductor manufacturers do not satisfy with only one supplier and want to broaden their choice of suppliers. In addition, our entry into the field of leading-edge logic devices has raised their reputation for quality and performance, and the number of joint development themes are increasing.

The competitor needs a certain amount of volume to respond, but our scale of semiconductors is not so large, so we are able to respond to cases that are worthwhile even if the process is flexible and the volume is not so large.

Of course, the final selection will be made on a basis of technological differences, so

we need to continue our efforts. Our equipment has been adopted in comparative evaluation studies for several key advanced processes against the competitors, and we will gradually increase our market share.

⑯What are your thoughts about the competition between the Chinese equipment manufacturers?

A : China is also trying to promote domestic equipment production, and Chinese equipment manufacturers are catching up for example in the case of LEDs. On the other hand, there are still technical gaps in semiconductor equipment and cutting-edge processes in electronics equipment. Chinese equipment manufacturers are proceeding the development with government support and there are concerns that they may catch up in the next two to three years at the earliest. On the other hand, Chinese customers tend to introduce equipment that has been successfully developed by other companies, so we will secure the market share in the emerging investment of electronics, etc. and increase our market presence. Meanwhile we will continue to refine our cutting-edge technology so that we can further differentiate ourselves from Chinese equipment manufacturers at the time they catch up.

⑰ What is your growth strategy in the electronics business?

A : We will expand our business in five areas: power devices, sensors and other electronic devices, optical devices, communication devices, and packaging. In particular, we will focus on expanding our business in the Chinese market, where the domestic production of electronics is increasing.

In addition, we will expand our business by proposing various equipment such as sputtering, CVD, etchers and ashers, etc. on a single platform.

⑱ What is your thought about the China's growth in the electronics sector and how will you respond?

A : Due in part to the trade friction between the U.S. and China, China is focusing on domestic production in the electronics field, and various forms of support, including support from local governments, are increasing the appetite for investment.

We see this as an opportunity for us and will continue to develop our customer base by strengthening our sales technical support system, developing products to meet local needs, installing demonstration equipment, and holding technical seminars.

⑲ How do you see the future investment trends in FPDs and plan to secure sales?

A : Investment in large-sized TV LCDs will end after the completion of negotiations with a major Chinese panel maker in the first half of this fiscal year. Subsequent investment in LCDs will be limited to the investment for 8K, etc.

Investment in OLED (Organic Electroluminescence) for smartphones will continue.
Comparing to LCDs, OLEDs are more suitable for high-end monitors and panels such as large size, high contrast, high frame rate, high viewing angle, flexible, and foldable, which are expected to be used for game displays, foldable tablets, aspect displays, flat-screen TVs, and rollable TVs in addition to smartphones.
Major panel manufacturers in Korea and China are developing large substrate OLEDs for mass production with their own methods, and we will secure our market share by taking advantage of sputtering and transfer equipment for large substrates.

【FY2019 Consolidated Business Results】

⑳ What are the reasons for the higher orders, sales, and operating profit than the forecast revised in 3Q?

A : Orders was ¥4.6 billion and sales was ¥4.4 billion higher than the forecast revised in 3Q as the impact of COVID-19 was lower than expected in terms of both sales activities and equipment installations. Operating profit was ¥4.0 billion higher than the revised forecast due in part to selective and focused R&D investment and fixed cost reductions.

㉑ Has the impact of COVID-19 been resolved?

A : We are working to minimize the impact on customers while taking measures to prevent the spread of infection.
The impact on production and procurement was minor and there is no particular problem at present.
There were delays in installation and acceptance in China due to movement restrictions, but these activities have been gradually resumed, thanks to local employees strengthening their response by remote support and the start of some traveling from Japan and South Korea.
Electronic business inquiries and orders increased after local employees have resumed operations with the removal of movement restrictions within China and we also we have enhanced remote support from Japan.

㉒ What is the breakdown of orders and sales in the semiconductor, electronics, and FPD in FY2019?

A : As shown in the attached Exhibit.

㉓ What is the ranking of profit margin by segment in FY2019 results?

A : As shown in the attached Exhibit.

【Consolidated Earnings Forecast for FY2020】

㉔ Why are sales down to ¥165 billion YoY?

A : It`s because the orders received in the previous fiscal year decreased, mainly for FPD segment, and as a result, the backlog of orders received at the beginning of FY2020 decreased.

㉕ Why operating profit will only decrease by ¥1 billion, from ¥16 billion to ¥15 billion while sales is expected to decrease by approximately ¥20 billion?

A : The decline in profits due to lower sales is expected to be compensated by improving the gross profit margin and the operating profit margin through manufacturing reforms

㉖ Will the profit margin really improve by manufacturing reforms YoY?

A : This is a challenge for us, but we are working to make improvements across the company based on the successes of the Advanced Electronics Equipment Division, and hope to achieve this goal.

㉗ The plan for orders and sales is to bottom out in 1H and increase from 2H, but what will increase in 2H?

A : Orders and sales are expected to increase in 2H of the fiscal year, mainly in FPD (investment in OLED for Smartphones), semiconductors and electronics.

㉘ What are the prospects for orders, sales, and operating profit in 1Q and 2Q of the fiscal year?

A : Orders, sales, and operating profit will bottom out in 1Q and will improve thereafter.

㉚ What is the breakdown of orders and sales in the semiconductor, electronics, and FPD in FY2020 plan?

A : As shown in the attached Exhibit.

－END－

＜Exhibit＞

●Breakdown for Order Received

Order Received	FY2019 Results	FY2020 Plan
FPD	**※¥36.9 billion**	**¥47.0 billion**
・LCD	mid-40%	mid-30%
（for large-sized）	（80% for large-sized）	（Mostly for large-sized）
・OLED	around 50%	mid-50%
・Others	mid-single digit	more than 10%
Semiconductor/ Electronics	**¥44.9 billion**	**¥50.5 billion**
・Memory	mid-30%	mid-30%
・Logic	less than 10%	less than 10%
・Electronics Device	more than 30%	more than 30%
・Power Device	less than 20%	mid-10%
・Packaging	less than 10%	less than 10%

※Orders in 1Q FY 2019 excluding the impact of contract cancellation.The disclosed figure is ¥33.5 billion.

●Breakdown for Net Sales

Net Sales	FY2019 Results	FY2020 Plan
FPD	**¥62.1 billion**	**¥42.7 billion**
・LCD	mid-50%	mid-50%
（for large-sized）	（Mostly for large-sized）	（Mostly for large-sized）
・OLED	less than 40%	around 40%
・Others	mid-single digit	mid-single digit
Semiconductor/ Electronics	**¥45.1 billion**	**¥46.0 billion**
・Memory	more than 30%	less than 40%
・Logic	more than 10%	less than 10%
・Electronics Device	around 30%	less than 30%
・Power Device	around 20%	mid-10%
・Packaging	mid-single digit	less than 10%

●Operating Profit Margin Rank of FY2019

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

Overall average is between
3) Others and 4) General Industries