# ULVAC



### **Disclaimer regarding forward-looking statements**

Forward-looking statements of the company in this presentation are based on information that was available at the time these documents were prepared.

There are several factors that directly or indirectly impact the company performance, such as the global economy; market conditions for FPDs, semiconductor, electronic devices, and raw materials; trends in capital expenditures and fluctuations in exchange rates. Please note that actual business results may differ significantly from these forecasts and future projections.

### Note:

This document has been translated from the Japanese original for reference purposes only. In the event of any discrepancy between this translated document and the Japanese original, the original shall prevail.



# **Summary**



- 1. Summary of Consolidated Business Results for FY2022 1H
  - Orders: Semiconductor & Electronics orders continued strongly but FPD orders declined due to a reactionary decline from last year, -11% YoY, but mostly in line with plan
  - Net sales: -6% from plan due to longer delivery lead times for parts and materials, but +5% YoY
  - Operating income: Due to increase in SG&A expenses, including R&D-related expenses, -8% YoY

(Unit: ¥1 billion)	FY2021 1H Actual	FY2022 1H Actual	YoY	FY2022 1H Plan	Vs. Plan
Orders Received	144.6	129.1	-11%	132.0	-2%
Net Sales	105.7	111.4	+5%	118.0	-6%
Operating Profit	11.4	10.5	-8%	13.5	-22%

- 2. Revision of FY2022 Full-Year Earnings Forecasts · Environment Surrounding ULVAC
  - Revised downward to ¥230 billion in sales, and ¥24 billion in operating profit
  - Both sales and operating profit (margin) are on a recovery trend from FY2022 2H
  - Expect continuous growth in logic, power devices, and various electronic devices despite the slowdown in memory investment
- 3. Future Growth Strategy
  - Next Mid-term Management Plan (to be announced in August 2023):
     Achieve net sales of ¥300 billion or more, gross profit margin of 35% or more, and operating profit margin of 16% or more by concentrating R&D investment in growth areas



# FY2022 1H Consolidated Business Results

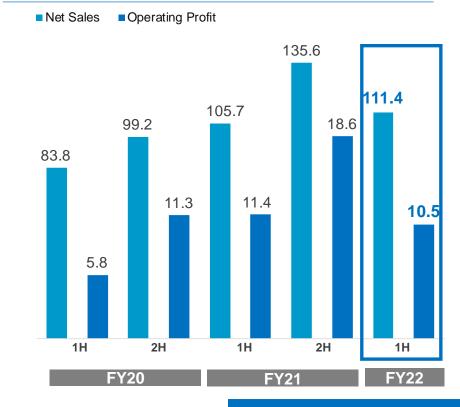
# 1. Summary of Business Results for FY2022 1H



- Orders received: Mostly as planned by growth in Semiconductor & Electronics but a reactionary decline in FPDs, -11% YoY
- Net sales: +5% YoY though -6% from plan due to longer delivery times for parts
- Operating income: -8% YoY due to increase in SG&A such as R&D-related expenses

	FY2021 1H	FY2022 1H					
(Unit: ¥1 billion)	Actual	Plan	Actual YoY		Y	Vs.Plan	
Orders Received	144.6	132.0	129.1	-15.5	-11%	-2.9	-2%
Net Sales	105.7	118.0	111.4	+5.7	+5%	-6.6	-6%
Gross Profit	32.1	-	33.3	+1.2	+4%	-	-
Gross Profit Margin	30.4%	-	29.9%	-0.5pt	-	-	-
SG&A	20.7	-	22.8	+2.1	+10%	-	-
Operating Profit	11.4	13.5	10.5	-0.9	-8%	-3.0	-22%
Operating Profit Margin	10.8%	11.4%	9.4%	-1.4pt	-	-2.0pt	-
Profit attributable to owners of parent	8.1	9.2	9.3	+1.2	+15%	+0.1	+1%
To net sales ratio	7.7%	7.8%	8.4%	+0.7pt	-	+0.6pt	-

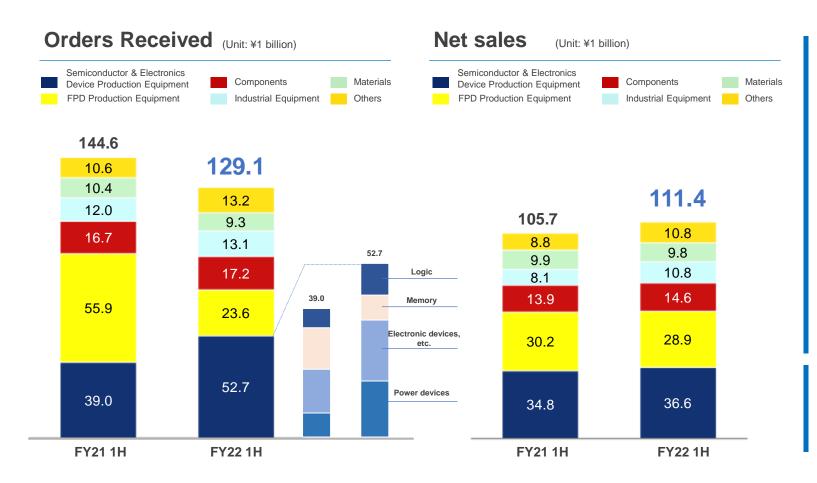
### **Net Sales and Operating Profit**



# 2. Orders and Net Sales: Grow Steadily in Semiconductor & Electronics



- Orders received: Decreased YoY due to reactionary decline in FPD despite the increase of Semiconductor & Electronics (+35%) and Components (+3%) that has higher margin.
- Net sales: Increased YoY



### **Orders Received**

- Semiconductor & Electronics: x1.4 YoY due to Logic contribution from new processes, new customers and a significant increase in Power devices & Electronics devices, etc. despite the slowdown in capex for memory, etc.,
- FPD: Decrease YoY due to reactionary decline of investment in LCDs for IT panels, which was active in FY2021
- Components: Favorable partially to orders received ahead of schedule as a result of longer delivery times for parts and materials

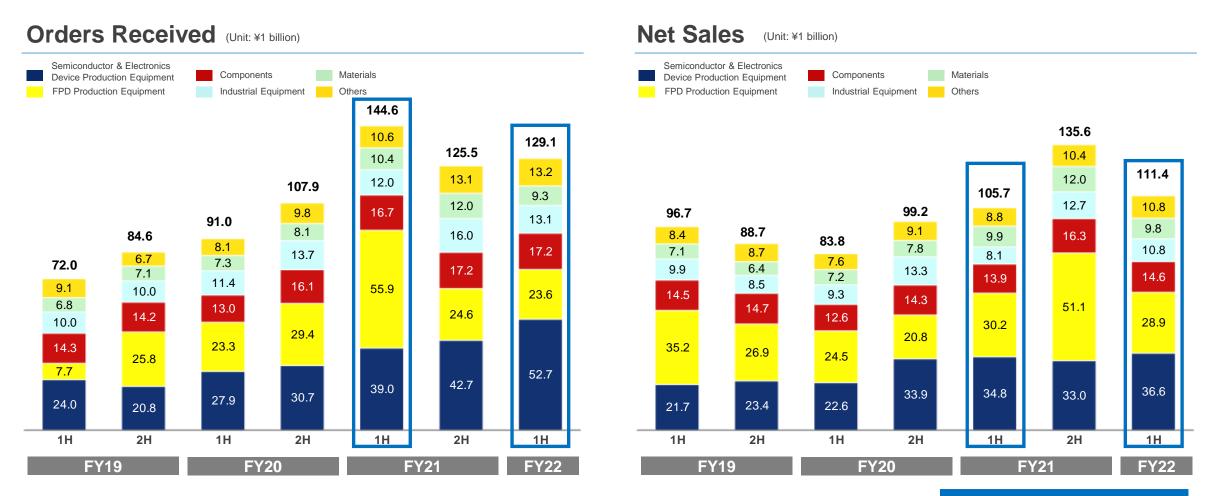
### **Net Sales**

Increased YoY

### 3. Orders and Net Sales: Growing steadily in Semiconductor & Electronics



- Steady growth in Semiconductor & Electronics driven by Logic, Power devices, Electronic devices, etc.
- Order backlogs: ¥136 billion (+¥15.8 billion YoY)

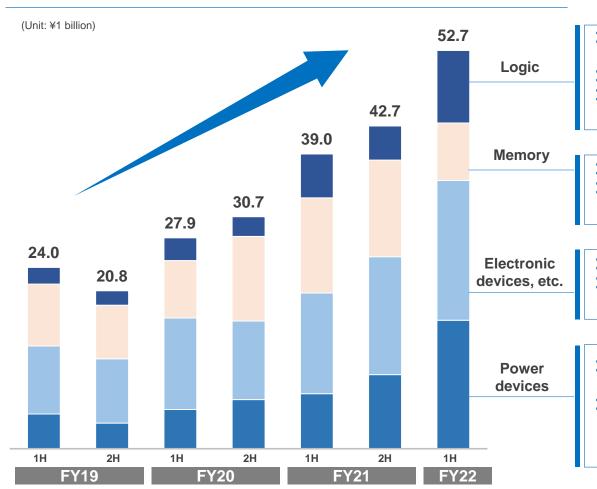


4. Semiconductor & Electronics: Driven by Logic, Power, Electronic Devices, etc.



Steady growth mainly in Japan and China, driven by Logic, Power devices, Electronic devices, etc.

### **Semiconductor & Electronics Orders by Sector**

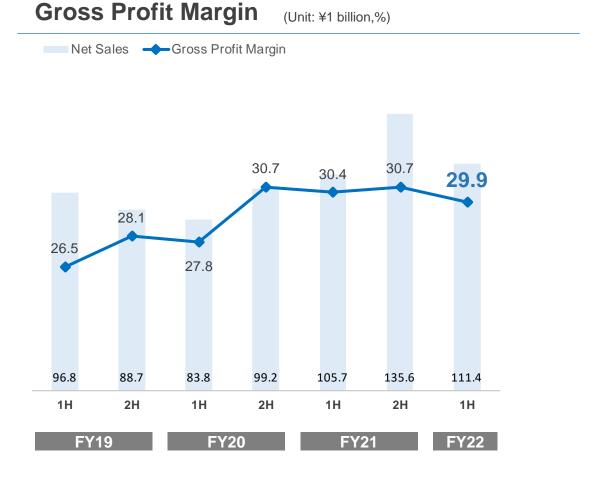


- MHM Process: Grow steadily despite slight slowdown in advanced logic investment
- New clients: New business started in the legacy area
- New processes:MHM process highly evaluated, Highly expected to be a second vendor⇒ Entry into new processes realized
- Memory: Slowdown in DRAM and NAND investment
- China semiconductor export restrictions: Expectations of starting new businesses were difficult
- Optical device: Received large order for µOLED used for AR/VR
- Various electronic devices: Investments in technological innovation and production increase continued at a high level
- Japan: Major companies continue to invest aggressively over the medium to long term (IGBT, SiC)
- China: SiC investment expansion (domestic production policy, local government support)
   Si-MOSFET investment continues

# 5. Half Year Profit Margin Trends

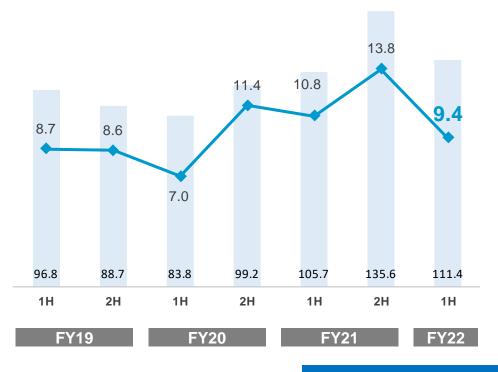


 Gross profit margin (29.9%) and operating profit margin (9.4%) both declined due to lower sales compared to FY2021 2H





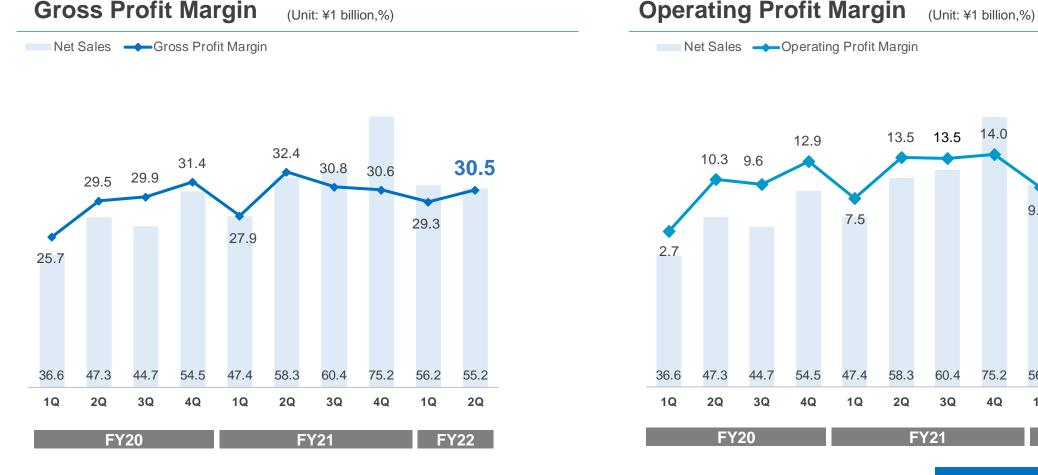
■ Net Sales → Operating Profit Margin



# 6. Quarterly Profit Trends



- Gross profit margin (30.5%) and operating profit margin (9.7%) both improved due to an improved mix of Semiconductor & Electronics compared to FY2022 1Q
- Continue to improve profit margin by improving mix and increasing sales of Semiconductor & Electronics, etc.



56.2

1Q

9.7

55.2

2Q

9.1



# Revision of FY2022 Earnings Forecast & Environment Surrounding ULVAC

### 1. Revision of FY2022 Forecasts



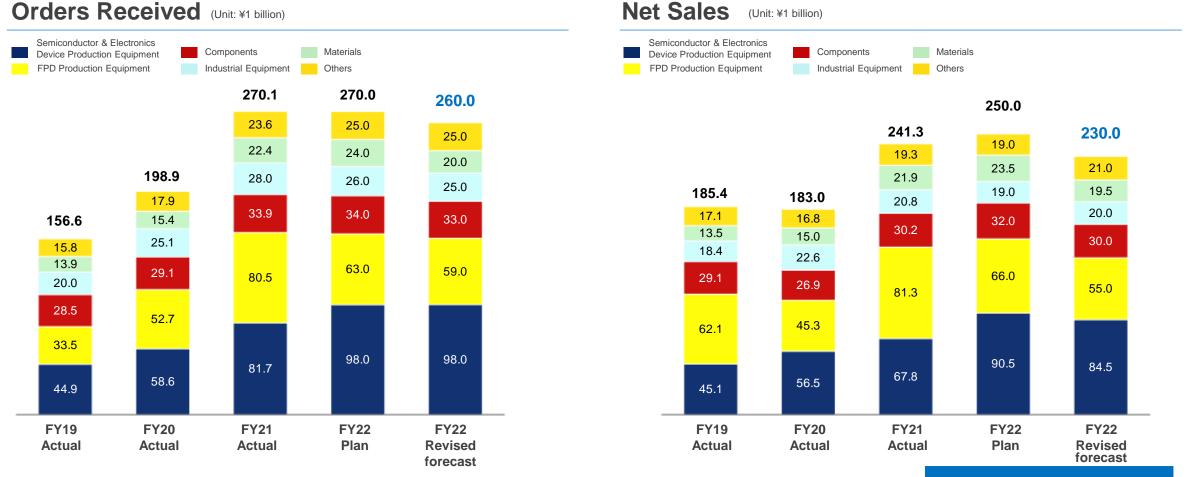
- Revised downward net sales, operating profit, and profit attributable to owners of the parent due to expected decrease in orders received for FPDs and materials and decrease in net sales and operating profit resulting from longer delivery time of parts
- Both net sales and operating profit (margin) are expected to recover from FY2022 2H

	FY2021		FY2	FY2022			
(Unit: ¥1 billion)	Actual	Plan	Revised Forecast	Vs.Plan	YoY	1H	2H
Orders Received	270.1	270.0	260.0	-10.0	-10.1	129.1	130.9
Net Sales	241.3	250.0	230.0	-20.0	-11.3	111.4	118.6
Operating Profit	30.1	34.5	24.0	-10.5	-6.1	10.5	13.5
Operating Profit Margin	12.5%	13.8%	10.4%	-3.4pt	-2.0pt	9.4%	11.4%
Profit attributable to owners of parent	20.2	23.0	20.0	-3.0	-0.2	9.3	10.7
To net sales ratio	8.4%	9.2%	8.7%	-0.5pt	+0.3pt	8.4%	9.0%

# 2-(1) Revision of Orders Received and Sales Forecast



- Orders are expected to be ¥260.0 billion, mainly due to FPDs and Materials expected not to reach the plan.
- Net sales are expected to be ¥230.0 billion due to the delay in contribution to sales caused by the failure to achieve the plan for orders and the long delivery time for parts and materials
- Order backlog at the end of FY2022 is expected to be around ¥150 billion

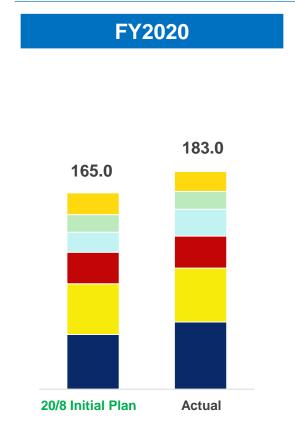


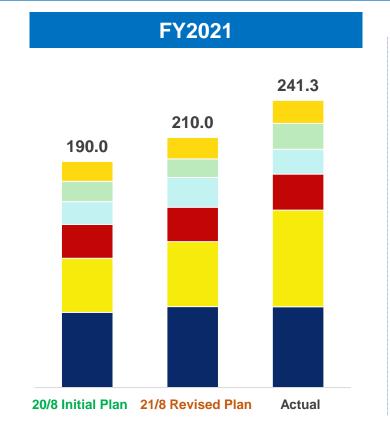
# 2-(2) Revised sales targets

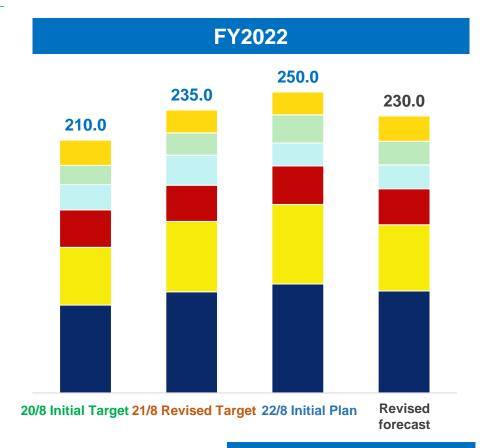


- Sales targets in the mid-term management plan established in August 2020 have been revised upward every year (¥210 billion ⇒ ¥235 billion ⇒¥250 billion)
- FY20 and FY21 results far exceeded the initial plan.
- The revised forecast of ¥230 billion is higher than the initial target of ¥210 billion.



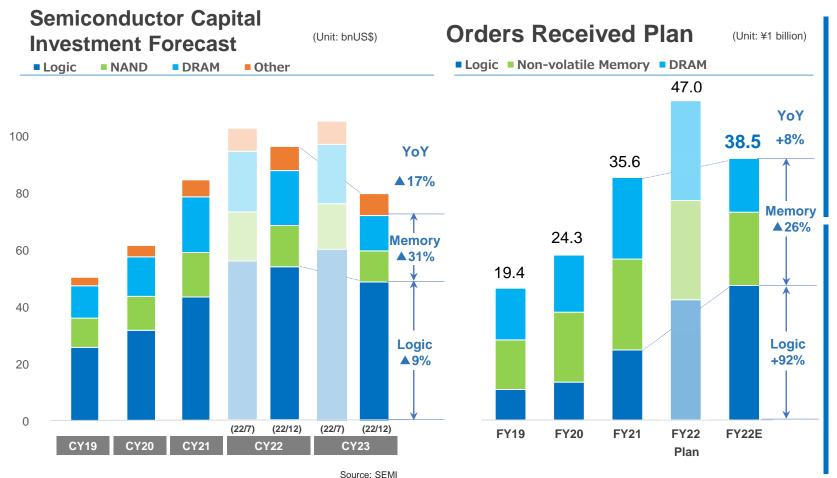






### 3. Semiconductor: Growth through entry of new customers and new processes in addition to logic MHM ULVAC

- Growth exceeding the market through MHM process of logic, new customers, and entry into new processes
- Mid to long-term trend of investment expansion remains unchanged, especially from FY24 onward, with significant growth expected due to the recovery of memory investment and expansion of investment in the U.S. and other countries, in addition to the expansion of logic investment



# Orders Received in FY2022 : Growth exceeding the market

### **Memory**

 Decrease expected YoY due to slowdown in memory investment, U.S. restrictions on Chinese semiconductor, etc.

### Logic

Expect 1.9x YoY due to MHM process, new customers (legacy area), and entry into new processes

### FY2023 Onwards

### **Memory**

 Orders expected to remain flat in FY2023, but expected to increase in FY2024 and beyond due to entry into new processes and recovery in memory investment

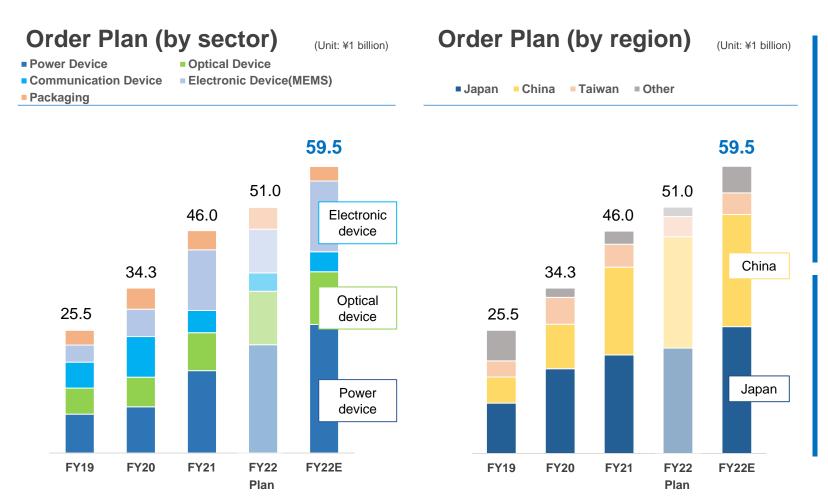
### **Logic**

- Continued order growth due to MHM process, new customers, and entry into new processes
- Expectation of Cutting-edge investments to establish regional supply chains in the U.S. and other regions are becoming more active from FY2024 onward

# 4-(1) Electronics: Power Devices Grow Mainly in Japan and China



- Investment in power devices, optical devices, electronic devices, etc. expanded in Japan and China
- Continous growth in power devices and various electronic devices is expected from FY2023 and beyond



### **Order Received in FY2022**

### Power device

Expect 1.3x YoY growth due to increase the investment in IGBT (mainly in Japan) and SiC (mainly in China)

### **Optical device**

 µOLED-related investment increase in Japan and China.

### **Electronic device**

 Investment in technological innovation and in production increase continues at a high level

### **FY2023 Onwards**

- Continuously expand of orders for power devices mainly due to the shift to green energy, EVs and China's policy of domestic production
- Continuously expand of orders for various electronic devices in line with the shift to smart society, digitalization, expanded utilization of metaverse and remote use, etc.

# 4-(2) Electronics: Grow Power Devices with the Shift to Green Energy and EVs



Power devices grew strongly, especially in Japan and China (orders in 1H: 2.3x YoY)

Orders received portions in 1H



China

portions in 1H

**IGBT** 

SiC



**Market Environment** 

Continuously invest in 8-inch production increase + Start investment in 12-inch production

### **Growth Strategy**

Abundant track record with major companies + high market share of sputtering equipment for backside electrodes

→ Maintain market share of 8-inch and promote sales of 12-inch

**Market Environment** 

Start investment in 12-inch facilities (Domestic production policy and local government support)

### **Growth Strategy**

→Actively deploy 12-inch ion implanter

High voltage and high current

High voltage and

high current

### **Market Environment**

Full-scale investment to increase 8-inch production

### **Growth Strategy**

Extensive track record with major companies + High market share in sputtering equipment for backside electrodes

→ Promote sales of 8-inch

**Market Trends** 

Expand investment to increase 6-inch production and enhance SiC wafer production

(Domestic production policy and local government support)

### **Growth Strategy**

Over 70% market share of ion implanter for SiC + Technical sales force with engineers dispatched onsite

 $\rightarrow$  Expand local production and sales of 6-inch ion implanter and sputtering equipment

### Si-MOSFET



### **Market Environment**

Si-MOSFET-related investment have already made in Japan.

### **Market Trends**

Inverterization of low to mid-end equipment, home appliances, etc.

(Domestic production policy and local government support)

### **Growth Strategy**

Customization support + price competitiveness (local design

+ local production)

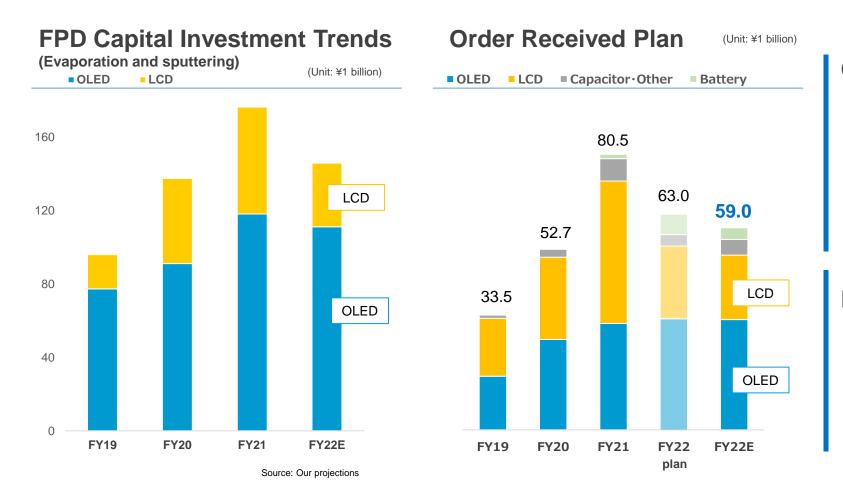
ightarrow Expand vapor deposition equipments sales

Low voltage and low current

# 5.FPD: Driven by OLEDs and Roll-to-Roll Deposition Equipment for EV Batteries



- Lower than planned due to postponement of some additional LCD investments and battery investments
- Orders are expected from FY23 onwards mainly for sputtering equipment for large-size substrate OLED for IT panels and Roll-to-Roll deposition equipment for batteries



### **Order Received in FY2022**

- Expect to see a reactionary decrease in investment in LCDs for IT panels, which was active in FY2022 1H compared to the plan.
- Projected to fall short of plan due to delays of some additional LCD investment and battery investment

### **FY2023 Onwards**

 Orders are expected mainly for sputtering equipment for large-size substrate OLEDs for IT panels and roll-to-roll deposition equipment for batteries (orders of around ¥60 billion are expected)

### 6. Stable Business Bases Also Solid



### **Components**



### **FY2022 Forecast**

In addition to accelerated orders due to longer delivery time for parts, leak detectors for EV Li batteries and small pumps for analytical and scientific instruments performed well.

### FY2023 onwards

Aiming for growth in Semiconductor & Electronics, FPD, EV Li battery-related products, etc.



Dry Screw Pump LS Series



### **Materials**



### FY2022 Forecast

Temporary decrease in orders received due to lower FPD-related equipment utilization rates

### FY2023 onwards

Aim for growth by expanding market share of the products for the analog semiconductor such as power devices and high-quality sintered targets (W and WSi) for advanced semiconductor



W Sputtering target for semiconductor



Ti sputtering target for semiconductor

### **Customer Support**

Net sales	Vs. FY19 <b>1.3</b> times
FY19 Results	FY22 Forecast
CS out of net sales 28%	29%

### **FY2022 Forecast**

Steady growth due to active investment and rising equipment utilization in electronic business such as power devices

### FY2023 onwards

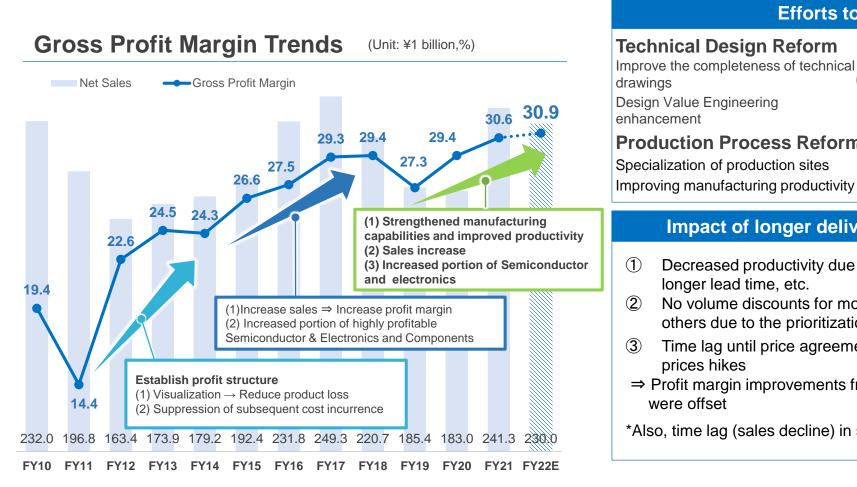
- Growth through CIP\* business and global expansion of strengthening of new product development
  - \* Continuous Improvement Program



# 7. Initiatives to Improve Profit Margin



- Gross profit margin improved to 30.9% due to the effect of Semiconductor & Electronics mix improvement
- In the next mid-term management plan, we aim to achieve a gross profit margin of 35% or more by improving the Semiconductor & Electronics mix, increasing sales, and realizing the fruits of manufacturing reforms with the alleviation of long delivery times for parts



### Efforts to improve pofit margin **Procurement Reform** Technical Design Reform Improve the completeness of technical Integrated Purchasing System Global Supply Chain Design Value Engineering Strengthening the Information System Infrastructure Business Process Standardization **Production Process Reform** Specialization of production sites Improvement of productivity and business

management

### Impact of longer delivery times of parts on profit margin

- Decreased productivity due to process rearrangement, double workload. longer lead time, etc.
- No volume discounts for modularization and communization of parts and others due to the prioritization of delivery date negotiations.
- Time lag until price agreement for equipment against the parts and material prices hikes
- ⇒ Profit margin improvements from strengthened manufacturing capabilities were offset
- \*Also, time lag (sales decline) in sales contribution.

# 8. Mid-term Management Plan on Track



# **Basic Policy**

Investment in Development for Growth (Selection and Concentration)

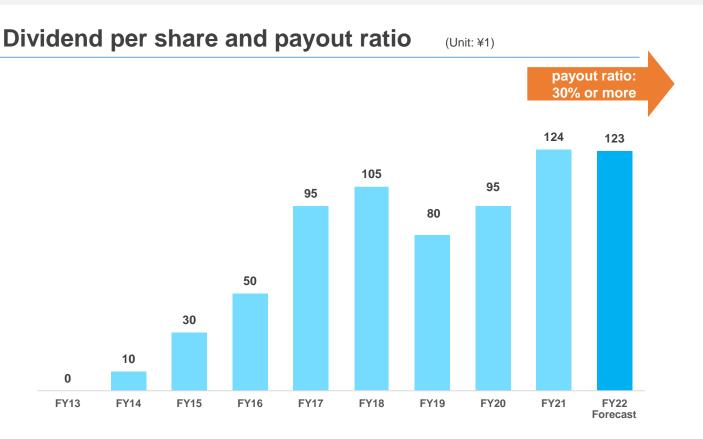
Profit-oriented management through structural change

Priority Strategies	Outcome and progress evaluation
Strengthen Growth Business Strengthen R&D capabilities	<ul> <li>Semiconductor: Growth through new customers and entry into new processes in addition to MHM processes</li> <li>Electronics: Orders for power Optical-devices, etc. increased in Japan &amp; China</li> <li>FPD: Mass production of large substrate OLED and EV battery equipment under development</li> </ul>
Enhancing manufacturing capabilities	> Profit margin steadily improved, but the impact of longer delivery times of parts and materials has reached its peak.
Enhancing Group Management Efficiency	> Integration of domestic manufacturing subsidiaries; integration of overseas subsidiaries, etc.
Strengthening of the management base	<ul> <li>Introduce new personnel system; Establish Education Center</li> <li>Steadily implement various system development for productivity improvements</li> </ul>

### 9. Shareholder Return



- Aiming for further growth by strengthening R&D investment in growth areas centered on semiconductor and electronics
- Steadily increasing dividends by positioning shareholder return as one of the most important policies
   Aiming to increase dividends over long term bases by achieving further growth
- Expanding our financial base to respond the risks and capital needs of the industry undergoing rapid changes and technological innovations





# 10. Growth in FY2023 and beyond



- The next mid-term (3 years) management plan is scheduled to be announced in August 2023
- The mid to long-term investment expansion trend in semiconductor & electronics, etc. remain unchanged, and the following growth drivers will continue to outperform the market
- Concentrating development investment in growth areas, aiming for net sales of ¥300 billion or more, gross profit margin of 35% or more, and operating profit margin of 16% or more

### 

- > In addition to advanced logic MHM processes, enter new processes such as wiring processes and start business with new customers
- > Enter new processes for Memory to meet second vendor expectations. Respond to investment recovery.
- > Responding to technological innovation investment in Power devices and various electronic devices in Japan and China, also introducing modular-type equipment
- > Responding to China's domestic production

### **FPD**

> Building business bases in sputtering equipment for large substrate OLEDs and roll-to-roll deposition equipment for batteries

### **Profitability Improvement**

> Aiming for gross profit margin of 35% or more by improving the Semiconductor & Electronics mix, increasing sales, and realizing the results of manufacturing reforms by recovery of long delivery times for parts and materials

# **Topics**



# **Construction of Technology Center in Korea**

As part of R&D investment in the semiconductor business, ULVAC has decided to build Technology Center PYEONGTAEK. It is intended to accelerate product and technology development, be closer to customers, and enhance collaboration and technical support.

The semiconductor business is positioned as a future growth pillar, ULVAC will continue to invest aggressively in R&D with the aim of achieving further growth.

### **Technology Center PYEONGTAEK Overview**

Address: 1029 Yulbuk-ri, Cheongbuk-eup, Pyeongtaek-si, Gyeonggi-do

Construction scheduled to begin: March 2023

Construction scheduled to be completed: March 2024

Site area: Approx. 11,550 m2

Building area: Approx. 13,168m2 (Clean room area: approx. 2,008m2)

Investment amount: Approx. ¥6 billion



# Value Report 2022 issued

- Formulation of Vision 2032  $\sim$ To be a "Field of Potentiality" for the future continuously  $\sim$
- Materiality Publication
- Promotion of creation and co-creation of innovation with vacuum technology at the core
- Development of diverse human resources and promotion of their advancement; cultivation of resilient organizations
- Respect for human rights and responsible conduct in the value chain
- Contribution to a sustainable global environment

### Value Report 2022

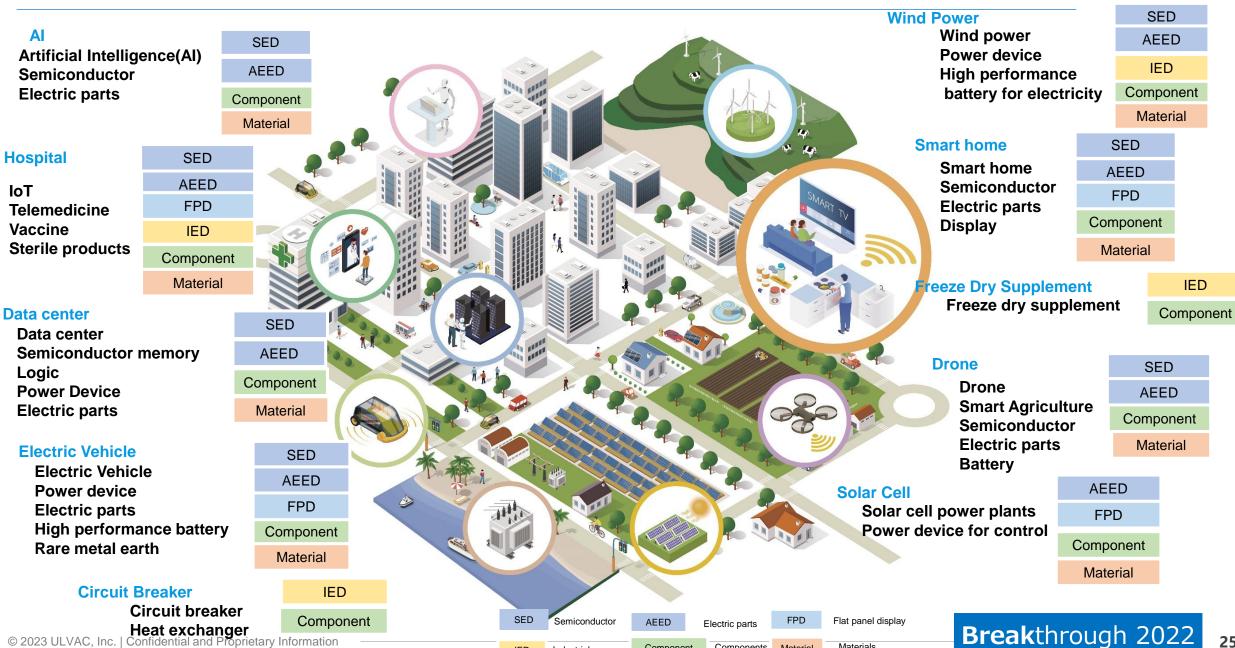






# **ULVAC's Value Creation: "Here & There, Near your side"**





Component

Industrial

Components

Materials



# **Smart and Digital Society** Realization





















**Green Energy Conversion Low Power Consumption** 

# **Smart Society⇒Solving Social Problems**

Memory

**Logic IC** 

Sensor

Communicating Device

**Battery** 

**Miniaturization** 

**High performance** 

Low power consumption

**Sputtering** 

**Etching** 

Vacuum Thin Film Processing Technology

Component

**Material** 

**Vacuum Evaporation** 

**Chemical Vapor Deposition** 

**Customer support** 



# **Appendix**

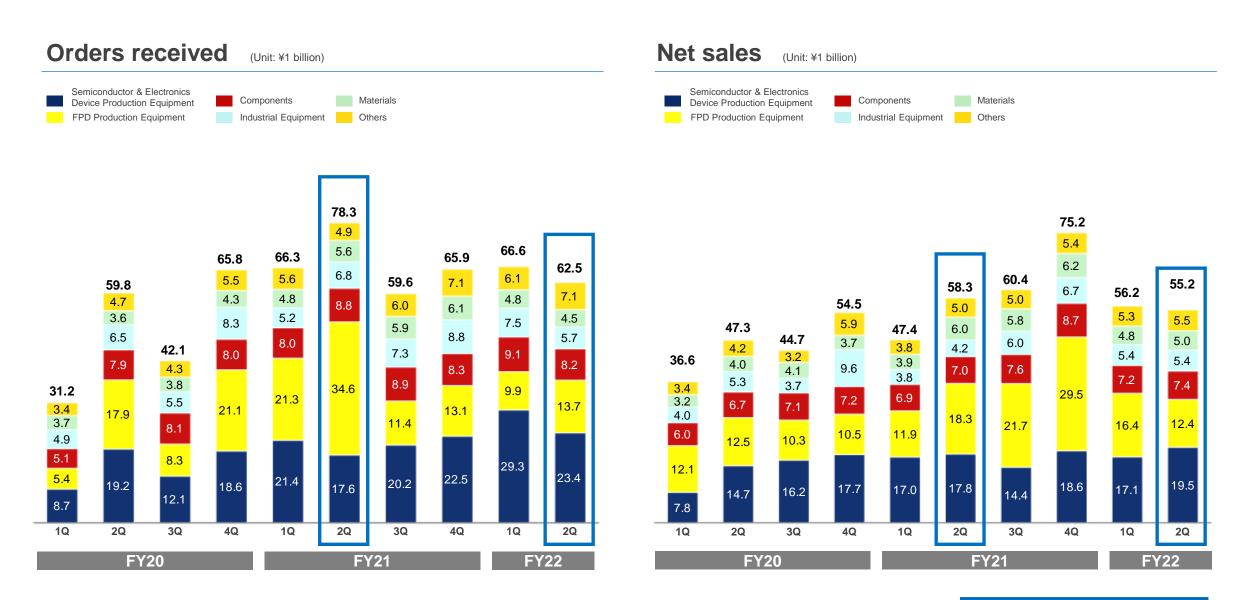
# **Quarterly Consolidated Financial Results**



	FY2021				FY2022			
(Unit: ¥1 billion)	1Q	2Q	3Q	4Q	1Q	2Q	Yo Amount	γ %
Orders Received	66.3	78.3	59.6	65.9	66.6	62.5	-15.8	-20%
Net Sales	47.4	58.3	60.4	75.2	56.2	55.2	-3.1	-5%
Gross Profit	13.2	18.9	18.6	23.0	16.5	16.8	-2.0	-11%
Gross Profit Margin	27.9%	32.4%	30.8%	30.6%	29.3%	30.5%	-1.9pt	-
SG&A	9.7	11.0	10.5	12.5	11.3	11.5	+0.4	+4%
Operating Profit	3.6	7.8	8.1	10.5	5.1	5.3	-2.5	-32%
Operating Profit Margin	7.5%	13.5%	13.5%	14.0%	9.1%	9.7%	-3.8pt	-
Profit attributable to owners of parent	2.2	5.9	5.6	6.4	4.1	5.3	-0.6	-11%
To net sales ratio	4.7%	10.1%	9.3%	8.6%	7.2%	9.6%	-0.6pt	-

# Orders received and Net sales by Segment (Quarterly)



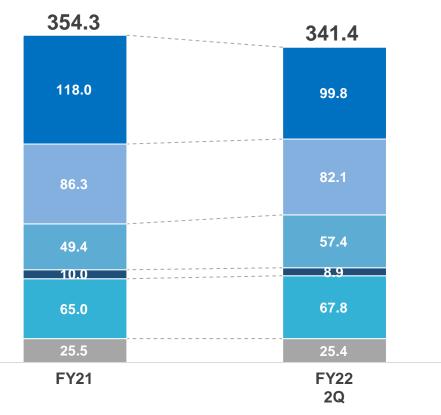


### **Consolidated Balance Sheet**



### **Assets** (Unit: ¥1 billion)

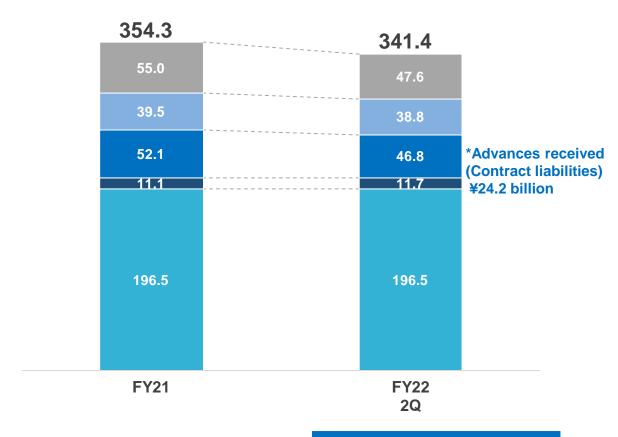
- Cash and deposits
- Notes and accounts receivable,trade
- Inventories
- Other current assets
- Property, plant and equipment
- Investment securities etc.



### **Liabilities and Net Assets**

(Unit: ¥1 billion)

- Notes and accounts payable,trade
- Interest-bearing debt
- Other current liabilities
- Other non-current liabilities
- Net Assets



# **ULVAC Vacuum Technology Contributes** to Many Industries and Applications



ULVAC