### 1H FY2024 Results

- **Sales**: 103.9 billion yen (YoY: -7.6 billion yen, vs. plan: -7.5 billion yen)
  - Decrease in special demand related to corona, and decrease in orders due to backlash from customer’s order that exceeded actual demand against backdrop of materials shortages over past two years become apparent in various applications.

- **Operating profit**: 20.0 billion yen (YoY: -11.4 billion yen, vs. plan: -3.6 billion yen)
  - Operating margin: 19.3%
  - YoY: Main reason of decrease in profit is lower sales (5.8 billion yen), change in product mix etc (3.0 billion yen), increase in personnel expenses (2.1 billion yen), and increase in depreciation (1.1 billion yen)

### FY2024 Full Year Forecast

- **Sales**: 211.1 billion yen (YoY: -10.3 billion yen, vs. plan: -13.2 billion yen)
  - Impact of order decline due to backlash from customer’s advance order has been more prolonged and spread across wide applications than initially expected, and customers’ excess inventories situation will not be resolved in this fiscal year.
  - Recovery is expected to be delayed until FY2025 or later.

- **Operating profit**: 37.5 billion yen (YoY: -19.1 billion yen, vs. plan: -10.9 billion yen)
  - Operating margin: 17.8%
  - Review of capital investment and expenses is underway, while investment for future growth will continue.
1. Summary of results
2. Earning forecast
3. TOPICS
1. Summary of results
2. Earning forecast
3. TOPICS
## Summary of 1H FY2024 Financial results

### Decrease in sales and profit both YoY and vs.plan
Decline in profit margin due to lower sale

(Unit : billion yen)

<table>
<thead>
<tr>
<th></th>
<th>1H FY2023</th>
<th>1H FY2024</th>
<th>1H FY2024</th>
<th>YoY</th>
<th>vs. plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Actual)</td>
<td>(Plan)</td>
<td>(Actual)</td>
<td>Change</td>
<td>%</td>
</tr>
<tr>
<td>Sales</td>
<td>111.6</td>
<td>111.5</td>
<td>103.9</td>
<td>-7.6</td>
<td>-6.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-7.5</td>
<td>-6.7</td>
</tr>
<tr>
<td>Gross profit</td>
<td>62.1</td>
<td>57.9</td>
<td>53.4</td>
<td>-8.7</td>
<td>-14.0</td>
</tr>
<tr>
<td></td>
<td>(55.7%)</td>
<td>(51.9%)</td>
<td>(51.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-8.7</td>
<td>-14.0</td>
<td>-4.4</td>
<td>-7.6</td>
<td></td>
</tr>
<tr>
<td>Operating profit</td>
<td>31.5</td>
<td>23.7</td>
<td>20.0</td>
<td>-11.4</td>
<td>-36.2</td>
</tr>
<tr>
<td></td>
<td>(28.2%)</td>
<td>(21.3%)</td>
<td>(19.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-11.4</td>
<td>-36.2</td>
<td>-3.6</td>
<td>-15.2</td>
<td></td>
</tr>
<tr>
<td>Net profit</td>
<td>23.7</td>
<td>18.3</td>
<td>16.7</td>
<td>-6.9</td>
<td>-29.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.5</td>
<td>-8.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exchange rate</th>
<th>$1</th>
<th>€1</th>
<th>RMB1</th>
<th>FX sensitivity/Year (1-yen fluctuation)</th>
<th>Impact by currency fluctuation to operating profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Yen)</td>
<td>$1</td>
<td>€1</td>
<td>RMB1</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>135.00</td>
<td>145.00</td>
<td>19.50</td>
<td>148.23</td>
<td>160.16</td>
</tr>
<tr>
<td></td>
<td>143.23</td>
<td>145.00</td>
<td>20.02</td>
<td>148.23</td>
<td>160.16</td>
</tr>
<tr>
<td></td>
<td>20.02</td>
<td>19.50</td>
<td>20.19</td>
<td>148.23</td>
<td>160.16</td>
</tr>
<tr>
<td></td>
<td>$1</td>
<td>€1</td>
<td>RMB1</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>135.00</td>
<td>145.00</td>
<td>19.50</td>
<td>148.23</td>
<td>160.16</td>
</tr>
<tr>
<td></td>
<td>143.23</td>
<td>145.00</td>
<td>20.02</td>
<td>148.23</td>
<td>160.16</td>
</tr>
<tr>
<td></td>
<td>20.02</td>
<td>19.50</td>
<td>20.19</td>
<td>148.23</td>
<td>160.16</td>
</tr>
</tbody>
</table>

Decrease in sales and profit both YoY and vs.plan
Decline in profit margin due to lower sale
Operating profit variation Analysis 1H FY2023-2024

Operating profit of 1H FY2023: 31.5 billion yen

- Decrease in gross profit due to decrease in sales: -5.8 billion yen
- Amount due to change in gross margin (change in product mix, inventory fluctuations, increase in fixed fee ratio): -6.1 billion yen
- Operating profit: -11.4 billion yen

Without impact of currency fluctuations:
- Impact to Operating profit: +2.3 billion yen

Increase of SG & A and R & D expenses: -1.8 billion yen

*Within impact of currency fluctuation:
- To Gross profit: 3.2 billion yen
- To SG & A expenses: -0.9 billion yen
- Impact to Operating profit: 2.3 billion yen

Currency fluctuation:
- $ : 136.97 → 148.23
- € : 143.23 → 160.16
- RMB: 20.02 → 20.19 (Unit: billion yen)
## Sales by application

<table>
<thead>
<tr>
<th>Application</th>
<th>1H FY2023 (Actual)</th>
<th>1H FY2024 (Plan)</th>
<th>1H FY2024 (Actual)</th>
<th>YoY vs. plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Change</td>
</tr>
<tr>
<td>Medical-bio instrument</td>
<td>40.9</td>
<td>38.6</td>
<td>33.7</td>
<td>-7.2</td>
</tr>
<tr>
<td>Industrial instrument</td>
<td>38.5</td>
<td>37.8</td>
<td>34.9</td>
<td>-3.6</td>
</tr>
<tr>
<td>Analytical instrument</td>
<td>11.3</td>
<td>11.4</td>
<td>10.0</td>
<td>-1.3</td>
</tr>
<tr>
<td>Academic research</td>
<td>6.1</td>
<td>8.5</td>
<td>9.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Measuring instrument</td>
<td>4.8</td>
<td>5.1</td>
<td>5.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Transport instrument</td>
<td>3.4</td>
<td>2.9</td>
<td>2.8</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

(Unit : billion yen)
Sales by application (Medical-bio instrument)

<table>
<thead>
<tr>
<th></th>
<th>1H FY2023 (Actual)</th>
<th>1H FY2024 (Plan)</th>
<th>1H FY2024 (Actual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiographic testing</td>
<td>27.1</td>
<td>24.0</td>
<td>21.0</td>
</tr>
<tr>
<td>Laboratory testing</td>
<td>12.2</td>
<td>12.2</td>
<td>10.5</td>
</tr>
<tr>
<td>Medical-bio instrument</td>
<td>40.9</td>
<td>38.6</td>
<td>33.7</td>
</tr>
</tbody>
</table>

(Unit : billion yen)

<table>
<thead>
<tr>
<th></th>
<th>YoY vs. plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>%</td>
</tr>
<tr>
<td>Radiographic testing</td>
<td>-6.1</td>
</tr>
<tr>
<td>Laboratory testing</td>
<td>-1.7</td>
</tr>
<tr>
<td>Medical-bio instrument</td>
<td>-7.2</td>
</tr>
</tbody>
</table>

- **For X-ray CT (YoY: -3.4)**
  Demand decrease due to restrained capital investment by high interest rates in Europe and U.S.

- **For Dental (YoY: -2.1)**
  Demand decrease due to intensified price competition mainly in Chinese market, as well as curbs on capital investment by small and medium-sized clinics due to high interest rates in Europe and U.S. (excess inventories continue).

- **For PCR (YoY: -0.8), DNA testing (YoY: -0.6)**
  Special demand related to corona declined

- **For pathological diagnosis (YoY: +0.2)**
  Demand increase from Japanese medical institutions due to sales expansion as medical equipment.
Sales by application  (Industrial instrument)

<table>
<thead>
<tr>
<th></th>
<th>1H FY2023 (Actual)</th>
<th>1H FY2024 (Plan)</th>
<th>1H FY2024 (Actual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semiconductor instrument</td>
<td>22.6</td>
<td>20.1</td>
<td>21.3</td>
</tr>
<tr>
<td>Non destructive testing</td>
<td>10.4</td>
<td>12.3</td>
<td>9.3</td>
</tr>
<tr>
<td>Factory automation</td>
<td>4.0</td>
<td>4.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Industrial instrument</td>
<td>38.5</td>
<td>37.8</td>
<td>34.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>YoY vs. plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change</td>
</tr>
<tr>
<td>Semiconductor instrument</td>
<td>-1.3</td>
</tr>
<tr>
<td>Non destructive testing</td>
<td>-1.1</td>
</tr>
<tr>
<td>Factory automation</td>
<td>-0.9</td>
</tr>
<tr>
<td>Industrial instrument</td>
<td>-3.6</td>
</tr>
</tbody>
</table>

- **For Wafer inspection (YoY : -0.3)**
  Market environment is recovering, but demand is declining due to inventory adjustments by customers, which is expected to gradually dissipate from FY2025 onward.

- **Stealth Dicing (YoY : +0.2)**
  Demand increase for HBM (High Bandwidth Memory) due to booming AI market

- **For Battery inspection equipment (YoY : -0.5), Electronic component inspection equipment (YoY : -0.1)**
  Demand decrease due to EV market slowdown, including termination of EV subsidies in China and other countries, and elimination of LiB makers and curbs on capital investment. However, original main market for electronic board inspection is solid.

- **For Encoder (YoY : -0.4)**
  Recovery is expected to be delayed due to unresolved excess inventories at Japanese customers (2-3 times normal inventories) as a result of lower demand for machine tools and other products due to slowdown in Chinese economy and a shift to low-priced products made in China.
## Sales by application (Analytical instrument and Academic research)

<table>
<thead>
<tr>
<th></th>
<th>1H FY2023 (Actual)</th>
<th>1H FY2024 (Plan)</th>
<th>1H FY2024 (Actual)</th>
<th>YoY vs. plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analytical instrument</strong></td>
<td>11.3</td>
<td>11.4</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Change</td>
<td>1.3</td>
<td>-11.5</td>
<td>-1.4</td>
<td>-12.3</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Academic research</strong></td>
<td>6.1</td>
<td>8.5</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>Change</td>
<td>2.9</td>
<td>47.5</td>
<td>0.5</td>
<td>5.9</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### For Analytical instrument
- **For Liquid chromatography systems (YoY: -0.8)**
  - Demand decrease due to restrained capital investment caused by stagnation in drug discovery market

### For Academic research
- **For High energy physics experiments (YoY: +1.7)**
  - Shipments for Hyper-Kamiokande and CERN
  - Demand increase for scientific measurement cameras
Sales by application  （Measuring instrument and Transport instrument）

<table>
<thead>
<tr>
<th></th>
<th>Measuring instrument</th>
<th>Transport instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales by application</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sales by application</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1H FY2023 (Actual)</td>
<td>4.8</td>
<td>3.4</td>
</tr>
<tr>
<td>1H FY2024 (Plan)</td>
<td>5.1</td>
<td>2.9</td>
</tr>
<tr>
<td>1H FY2024 (Actual)</td>
<td>5.6</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>YoY vs. plan</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change</td>
<td>0.8</td>
<td>-0.6</td>
</tr>
<tr>
<td>%</td>
<td>16.7</td>
<td>-17.6</td>
</tr>
</tbody>
</table>

**Measuring instrument**

- For Geological exploration(YoY : +0.8)
  Despite geopolitical risks, oil exploration demand is strong, driven by high oil prices

**Transport instrument**

- For LiDAR(YoY : -0.6)
  Demand decrease due to economic slowdown in China and delay in launch of automated driving market

(Unit : billion yen)
Sales by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>1H FY2023</th>
<th>1H FY2024</th>
<th>Change</th>
<th>Ratio(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>24.0</td>
<td>22.3</td>
<td>-1.7</td>
<td>-7.1</td>
</tr>
<tr>
<td>Asia (of which China)</td>
<td>31.0</td>
<td>30.6</td>
<td>-0.4</td>
<td>-1.3</td>
</tr>
<tr>
<td>Japan</td>
<td>26.7</td>
<td>23.5</td>
<td>-3.2</td>
<td>-12.0</td>
</tr>
<tr>
<td>North America</td>
<td>29.7</td>
<td>27.3</td>
<td>-2.4</td>
<td>-8.1</td>
</tr>
</tbody>
</table>

(Unit: billion yen)

*Excluding other regions

Growth in China, which drove growth in recent years, become slow
1. Summary of results
2. Earning forecast
3. TOPICS
## Earning forecast

Full-year forecast is revised downward due to prolonged and diverse effects of decline in orders received as a backlash from customer’s advance order. Recovery is expected to be delayed until FY2025 or later.

(0 applicant : billion yen)

<table>
<thead>
<tr>
<th></th>
<th>FY2023 (Actual)</th>
<th>FY2024 (Plan)</th>
<th>FY2024 (Forecast)</th>
<th>YoY Change</th>
<th>YoY %</th>
<th>vs. plan Change</th>
<th>vs. plan %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>221.4</td>
<td>224.3</td>
<td>211.1</td>
<td>-10.3</td>
<td>-4.7</td>
<td>-13.2</td>
<td>-5.9</td>
</tr>
<tr>
<td>Gross profit (%)</td>
<td>120.0 (54.2%)</td>
<td>116.9 (52.1%)</td>
<td>107.1 (50.7%)</td>
<td>-12.9</td>
<td>-10.8</td>
<td>-9.8</td>
<td>-8.4</td>
</tr>
<tr>
<td>Operating profit (%)</td>
<td>56.6 (25.6%)</td>
<td>48.4 (21.6%)</td>
<td>37.5 (17.8%)</td>
<td>-19.1</td>
<td>-33.7</td>
<td>-10.9</td>
<td>-22.5</td>
</tr>
<tr>
<td>Net profit</td>
<td>42.8</td>
<td>36.7</td>
<td>29.4</td>
<td>-13.4</td>
<td>-31.3</td>
<td>-7.3</td>
<td>-19.9</td>
</tr>
</tbody>
</table>

| Exchange rate (Yen)  | $1 139.03       | $1 135.00     | $1 146.62         | $1 0.3     | 0.3   | $1 0.3          | 0.3       |
|                      | €1 148.38       | €1 145.00     | €1 157.58         | €1 0.1     | 0.1   | €1 0.1          | 0.1       |
|                      | RMB1 19.74      | RMB1 19.50    | RMB1 20.35        | RMB1 0.8   | 0.8   | RMB1 0.8        | 0.8       |
Operating profit variation Analysis FY2023-FY2024

Without impact of currency fluctuations

- Operating profit of FY2023: 56.6
- Amount due to change in gross margin (change in product mix, inventory fluctuations, increase in fixed fee ratio): -8.1
- Decrease in gross profit due to decrease in sales: -9.3
- Increase of SG & A and R & D expenses: +3.4
- Operating profit variation: -19.1

Impact by currency fluctuation (Unit: billion yen)

- $: 139.03 → 146.62
- €: 148.38 → 157.58
- RMB: 19.74 → 20.35

- Operating profit of FY2024: 37.5

*Within impact of currency fluctuation to Gross profit: 4.6
  to SG & A expenses: -1.2
  Impact to Operating profit: 3.4
Orders continue to decline in many industries due to backlash from customer’s advance orders. There has been no significant change of our position in key industries, and we expect to return to growth path in FY2025 as inventory excesses are resolved and market recovers.

<table>
<thead>
<tr>
<th>Application</th>
<th>FY2023 (Actual)</th>
<th>FY2024 (Plan)</th>
<th>FY2024 (Forecast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical-bio instrument</td>
<td>78.1</td>
<td>77.3</td>
<td>67.5</td>
</tr>
<tr>
<td>Industrial instrument</td>
<td>74.4</td>
<td>77.9</td>
<td>67.5</td>
</tr>
<tr>
<td>Analytical instrument</td>
<td>22.5</td>
<td>23.5</td>
<td>21.3</td>
</tr>
<tr>
<td>Academic research</td>
<td>14.5</td>
<td>16.2</td>
<td>16.8</td>
</tr>
<tr>
<td>Measuring instrument</td>
<td>10.7</td>
<td>10.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Transport instrument</td>
<td>6.0</td>
<td>5.9</td>
<td>5.7</td>
</tr>
</tbody>
</table>

(Units: billion yen)

<table>
<thead>
<tr>
<th>YoY</th>
<th>vs. plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>%</td>
</tr>
<tr>
<td>-10.6</td>
<td>-13.6</td>
</tr>
<tr>
<td>-6.9</td>
<td>-9.3</td>
</tr>
<tr>
<td>-1.2</td>
<td>-5.3</td>
</tr>
<tr>
<td>2.3</td>
<td>15.9</td>
</tr>
<tr>
<td>-0.2</td>
<td>-1.9</td>
</tr>
<tr>
<td>-0.3</td>
<td>-5.0</td>
</tr>
</tbody>
</table>
For X-ray CT (Typical trend of major customer)

From 2021
- Shipment could not keep up with rapid increase in demand for X-ray CT at Corona pandemic and continued to increase production.

From 2022 to 2023
- In complete turnaround, excess inventory due to declining customer demand after Corona pandemic became apparent.
- Production adjustment continued.

From 2024
- Bottoming out in 1H FY2024 and customer demand is forecasted to rise.
- Recovery in normal trend is expected from 2H FY2024
From 2021
Production falls below demand due to shortages of electronic components and other materials.

From 2022 to 2023
We continued to increase production by responding to past customer requests for shipments, but excess inventory at customers became apparent due to sharp drop in demand caused by high interest rates in Europe and U.S. and intensified competition in China domestically.

From 2024
Demand appears to have bottomed out, but it is expected to take time to eliminate excess inventory. Recovery is expected in future, but there are concerns due to intensifying price competition on manufacturer side.
From 2021 to 2023
Production could not keep up with demand and we continued to increase it.

From 2023
We continued to increase production by responding to past customer requests for shipments.
Peaked in 2022, demand declined sharply due to memory recession.

From 2024
Demand clearly bottomed out. Demand is expected to recover from 2H FY2024 and exceed record highs in FY2025. Production to increase with delay of 6 months to 1 year from market.

*Source: SEMI Wafer Fab Equipment Market Information
Generative AI market will expand at a rate of CAGR about 50% over the 10 years.

Source: GENERATIVE AI MARKET, Forecast to 2030, MarketsandMarkets

Generative AI chips includes GPU and HBM (high-bandwidth, high-capacity, high-speed special memory)

Use of wafer bonding technology to improve device performance

Individuating HBM • DRAM chips

Stealth Dicing
Capital investment/Depreciation/R&D expenses

Capital investment and Depreciation

- **Capital investment**
  - FY2023 (Actual): 31.1 billion yen
  - FY2024 (Plan): 43.1 billion yen
  - FY2024 (Forecast): 40.6 billion yen

- **Depreciation**
  - FY2023 (Actual): 14.7 billion yen
  - FY2024 (Plan): 17.7 billion yen
  - FY2024 (Forecast): 17.1 billion yen

R&D expenses and ratio of R&D expense to sales

- **R&D expenses**
  - FY2023 (Actual): 12.3 billion yen (5.6% of sales)
  - FY2024 (Plan): 15.0 billion yen (6.7% of sales)
  - FY2024 (Forecast): 13.6 billion yen (6.4% of sales)

(Unit: billion yen)
Action to Implement Management that is Conscious of Cost of Capital and Stock Price

Stock split

- **Purpose of Stock split**
  To improve liquidity and expand investor base by reducing amount per investment unit through stock split and creating friendly environment to investment

- **Details of Stock split**
  Two-for-one stock split of Company’s common stock (Record date: September 30, 2024, Effective date: October 1, 2024).

Dividends for FY2024

- **Maintain dividends for current fiscal year**
  Annual dividend will be maintained at 76 yen per share as planned

Stock buy-back

- **Under consideration**
  Considering implementation at appropriate time after completion of NKT Photonics acquisition, based on overall funding situation, debt financing, etc.
### Action to Implement Management that is Conscious of Cost of Capital and Stock Price

<table>
<thead>
<tr>
<th>March 28 Disclosure of responses to achieve cost of capital and stock price conscious management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considerations for next Mid-term plan (November, 2024)</td>
</tr>
<tr>
<td>Growth strategy story to enhance corporate value over mid-term</td>
</tr>
<tr>
<td>Consideration of financial strategy in conjunction with mid-term plan</td>
</tr>
</tbody>
</table>

#### Awareness of appropriate allocation of management resources
- Determination of target management indicators, analysis including elemental decomposition, and consideration of countermeasures
- Upgrade Mid-term Capital Allocation Policy
- Investment in growth (M&A, capital investment, R&D, etc.) and consider shareholder return initiatives
- Consideration of leverage effects through use of financing (e.g., increased debt)

#### Balance sheet inspection
- Analysis and evaluation of current situation, and consideration of future goals

#### Management conscious of cost of capital
- Sustained profitability in excess of cost of capital and widening of gap between cost of capital and profit, Consideration of measures to reduce capital costs

---

[https://www.hamamatsu.com/content/dam/hamamatsu-photonics/sites/documents/01_HQ/ir/information/h_ir_info20240328_en.pdf](https://www.hamamatsu.com/content/dam/hamamatsu-photonics/sites/documents/01_HQ/ir/information/h_ir_info20240328_en.pdf)
1. Summary of results

2. Earning forecast

3. TOPICS
Creating synergies through collaboration

Value-added Initiatives

Creation of new technologies and growth businesses
Value-added Initiatives
Creating synergies through business divisions collaboration

~Establishment of new business~

Promotion of high value-added custom module business

- Collaboration of in-house *elemental technologies*
- High value-added custom products in line with customer requirements
- Building *new businesses* across segment
- Can be implemented *directly into customer end products*

### Electron Tube segment
- FOP Fiber Plates
- Scintillator
- Light sources & Detectors

### Imaging and Measurement Instruments segment
- Image processing technology
- Optical design technology
- Circuit and software design technology
- Product realization technology

### Opto-semiconductor segment
- Image sensors
- Light sources & Detectors
Creating synergies through business divisions collaboration
～Strengthening Core Competence～

Newly established X-ray business strategy office (May 1)
✓ Launched as new cross-divisional organization (personnel selected from each segment)
✓ Proposal for development of new high value-added products by coordinating in-house X-ray elemental technologies
✓ Marketing, sales strategy, new product proposals, and technology verification across segments

<table>
<thead>
<tr>
<th>Electron Tube segment</th>
<th>Imaging and Measurement Instruments segment</th>
<th>Opto-semiconductor segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Microfocus X-ray Sources</td>
<td>✓ X-ray line sensor camera</td>
<td>✓ X-ray Flat Panel</td>
</tr>
<tr>
<td>✓ FOP (Fiber Optic Plate)</td>
<td>✓ 2D X-ray camera</td>
<td>✓ TDI-CCD CMOS</td>
</tr>
<tr>
<td>✓ Scintillator</td>
<td>✓ AI de-noising algorithm</td>
<td>✓ Photodiode for X-ray CT</td>
</tr>
</tbody>
</table>
TOPICS

Creation of new technologies and growth businesses
Business Composition (Components)

Optical sensors

- Photomultiplier tube
- Silicon Opto-semiconductors
- Compound Opto-semiconductors

Light emitters

- Vacuum tube light sources
- LED Light Sources
- Laser light sources

Electron Tube Segment
80 billion yen scale

Opto-semiconductor Segment
100 billion yen scale

Laser Segment
5 billion yen scale
Creation of new technologies and growth businesses
~Collaboration with the Central Research Laboratory~

Core technology

- Laser Processing technology
- Nanophotonics technology
- THz technology

Central Research Laboratory collaboration new technology

Business divisions collaboration
Custom module business

Divisions
- Electron tube
- Laser light source
- Opto-semiconductor

Imaging

Semiconductor

Quantum

Spectroscopy · Analysis

Bio
Creation of growth businesses

- Contribution to production of 3D advanced semiconductor chips for generative AI
- Providing new measurement and failure analysis methods

- Supplying key components
- Accelerating practical application

- From selling products to selling services in drug discovery field
- Providing cloud-based analysis technology

- Providing innovative new devices
- Providing new measurement methods

Source: Semiconductor Manufacturing Equipment Market – Forecast to 2028, MarketsandMarkets

Source: Quantum Photonics Market - Forecast to 2030, MarketsandMarkets

Source: Life Science Instrumentation Market - Forecast to 2028, MarketsandMarkets

Source: Cell Based Assays Market - Forecast to 2028, MarketsandMarkets
Creation growth businesses <Quantum>

**Quantum computer**

*Neutral atom main technologies*
- Optical phase modulator  LCOS-SLM
- Qubit detection camera  ORCA-Quest

**Quantum sensing**

*Ultra-sensitive magnetic measurement technology*
- Optical pumping magnetic sensor  OPM
- Magneto brain measurement  MEG

**Quantum network**

*Single photon detection technology*
- Superconducting nanostrip single photon detector  SSPD
- Single photon detection avalanche diodes  SPAD

- Supplying key components
- Accelerating practical application

Source: Quantum Photonics Market - Forecast to 2030, MarketsandMarkets
Creation of growth businesses <Semiconductor>

- Contribution to Production of 3D advanced semiconductor chips for generative AI
- Providing new measurement and failure analysis methods

Semiconductor Production Technology
- Stealth dicing SD
- In-plane film thickness gauge
- Ultra-high D-range spectrometer OPAL-Luxe

Semiconductor Production • Inspection
- High speed and high sensitivity
- TDI-CCDCMOS technology

Enegetiq
- EUV light source
- Laser-Driven Light Sources (LDLS)

Semiconductor Failure Analysis
- From extraction to automation
- iPHEMOS-MPX
- Providing a new heat emission analysis method

Source: Semiconductor Manufacturing Equipment Market – Forecast to 2028, MarketsandMarkets

CAGR 10%
Creation of growth businesses <Spectrum • Analysis>

 ✓ Providing innovative new devices
 ✓ Providing new measurement methods

CAGR 6%

Spectroscopy • Analysis

Innovative new devices
Integration of opto-semiconductor and photocathode technologies
High SN, high D-range, low dark current, low multiplication fluctuation

THz Spectroscopy
THz PMT • THz II
Normal temperature operation THz Light source

Development of new sensor

Source: Life Science Instrumentation Market - Forecast to 2028, MarketsandMarkets
Creation of growth businesses <Bio>

Cloud-based service offerings
- From selling products to selling services
- Ensuring continuous sales
- Ensuring high profit margins

✓ From selling products to selling services
✓ Providing cloud-based analysis technology

From compound discovery to clinical trials
Covering all areas of the drug discovery market

Drug Discovery Research through Screening
- FDSS Series

Evaluation of drug efficacy and toxicity
- CYTOQUBE

Clinical trials
- New products under development
- NanoZoomer

Source: Cell Based Assays Market - Forecast to 2028, MarketsandMarkets
(Progress of disclosure) Acquisition of shares in NKT Photonics A/S, Denmark by a consolidated subsidiary (conversion to a subsidiary)

Notice of Progress of Disclosure Matters
Based on the Board of Directors meeting held on June 9, 2022, the Company concluded a share transfer agreement on June 24, 2022, that its consolidated subsidiary Photonics Management Europe S.R.L. would acquire all the shares of NKT Photonics A/S to make it a subsidiary (a sub-subsidiary of the Company).

Subsequently, we proceeded with the legal and regulatory procedures in the relevant countries and obtained the approvals for the share acquisition from the relevant authorities in Germany, the United Kingdom, and the United States. However, in Denmark, the Minister for Industry, Business and Financial Affairs decided to reject the application for the share acquisition in accordance with the Danish Investment Screening Act after consulting with the Minister for Finance, Minister for Foreign Affairs, Minister for Justice, and Minister of Defense.
On May 2, 2023, we received a notice regarding the decision from the Danish Business Authority.

In response to the above, after the necessary internal and external consultations and on July 20, 2023, we again submitted to the Danish Business Authority an application to acquire shares in NKT Photonics A/S as a subsidiary of Photonics Management Europe S.R.L. (a sub-subsidiary of the Company). The application was received by the Danish Business Authority on July 26, 2023, and after consulting with the Minister for Finance, Minister for Foreign Affairs, Minister for Justice, and Minister of Defense, the Minister for Industry, Business and Financial Affairs decided to approve the application.

On May 6, 2024, the Company received a notice of approval for the share acquisition from the Danish Business Authority.
(Progress of disclosure) Acquisition of shares in NKT Photonics A/S, Denmark by a consolidated subsidiary (conversion to a subsidiary)

【Date of the business combination】
During the third quarter of this fiscal year (Planned)

【Acquisition cost of the acquiree and breakdown thereof by consideration type】
Consideration for the acquisition  Cash  Approx. EUR 239 million (Approx. JPY 39,030 million) (Plan)
Acquisition cost  Approx. EUR 239 million (Approx. JPY 39,030 million) (Plan)
The exchange rate is assumed to be EUR 1 = JPY 163.24 (closing telegraphic transfer middle rate for March 29, 2024 announced by MUFG Bank, Ltd.)
The acquisition cost includes consideration for the acquisition of the shares plus the amount of net interest-bearing debt. The amount will be adjusted for price adjustments as stipulated in the share transfer agreement.

【Details and amounts of main acquisition-related costs】
Advisory fees, etc. (approximate amount): JPY 1,000 million

【Amount of goodwill, reason for recognition, amortization method and amortization period】
Not confirmed at this stage.

【Amount and breakdown of assets to be acquired and liabilities to be assumed on the date of the business combination】
Not confirmed at this stage.