



## **Hamamatsu Photonics K.K.**

Financial Results for the Second Quarter of the Fiscal Year Ending September 30, 2025

May 12, 2025

---

## Point

### | FY25 1H Results

#### **Sales 106.7 Billion yen (YoY : +2.7 Billion yen)**

Demand for Medical-bio instrument is slow to recover due to high interest rates, but demand for Industrial instrument, mainly semiconductors, and analytical instrument is showing signs of recovery

#### **Operating profit 10.7 Billion yen (YoY : -9.2 Billion yen)**

SG&A and R&D expenses increased by 8.4 billion yen  
Main factor behind increase in expenses was M&A, and improvements in profits of acquired companies will be pursued

### | FY25 Forecasts

#### **No change in full-year forecast**

Although there are differences in pace of recovery in demand depending on industry, at present, situation is generally within scope of our plans

Direct impact of reciprocal tariffs is minimal, but indirect impact is unclear

We will carefully examine impact of reciprocal tariffs on our forecasts and may revise them once reasonable calculation becomes possible

**HAMAMATSU**  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

2

**Maruno:** I would like to begin by explaining our financial results. In the first half of FY2025, sales were 106.7 billion yen, up 2.7 billion yen from the same period last year. There was a slight delay in the recovery of demand for medical-bio instrument. However, there is a sense that demand has bottomed out. In addition, we feel that the semiconductor and analytical sectors are on a recovery trend.

Operating profit, on the other hand, was minus 9.2 billion yen compared to the same period last year. The increase in expenses compared to last year was due to M&A. Improving the profitability of NKT Photonics is an important subject, and the entire Hamamatsu group is working together as an internal project to bring the company back into the black in three years.

There is no change to the full-year forecast. Although the recovery in demand varies from industry to industry, at this point we are assuming that demand will be within the scope of our plan. The direct impact of the reciprocal tariffs is minor. The indirect impact will be determined based on market conditions, and the forecast may be changed when a reasonable calculation becomes possible.

---

#### **Support**

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

 **SCRIPTS**  
Asia's Meetings, Globally

## Impact of reciprocal tariffs and responses

### 【 Response policy 】

Tariff on products exported from Japan to U.S. will basically be passed on to price

Production of products exported from China to U.S. is currently under review for transfer to Japan

### 【 Shipment forecast for FY25 2H for U.S. market 】

		Applicable products Shipment value (Unit : Billion yen)	Impact
Japan→U.S.	All products	16.0	
	Semiconductor-related	9.0	No additional tariffs as of April 2025
	Others	7.0	10% tariff added as of April 2025
China→U.S.	—	0.4	145% tariff added as of April 2025

**HAMAMATSU**  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

3

As for the impact of the reciprocal tariffs, the portion of exports from Japan to the U.S. that is subject to the tariffs is 7 billion yen. We are already taking steps to pass on this portion of the tariff to the customer.

In addition, the portion directly exported to the U.S. by the local manufacturing subsidiary in China is very minor and is calculated at 400 million yen. We are currently considering transferring production to Japan. By doing so, we hope to minimize the impact of the tariff.

#### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasia.com

 **SCRIPTS**  
Asia's Meetings, Globally

## Financial Results

Sales increased due to M&A, but profits decreased

(Unit : Billion Yen)

	FY24 1H (Actual)	FY25 1H (Plan)	FY25 1H (Actual)	YoY		vs. plan	
				Change	%	Change	%
Sales	103.9	110.1	106.7	2.7	2.7	-3.3	-3.0
Gross profit	53.4 (51.4 %)	54.3 (49.3 %)	52.5 (49.3 %)	-0.8	-1.6	-1.7	-3.2
Operating profit	20.0 (19.3 %)	12.1 (11.0 %)	10.7 (10.1 %)	-9.2	-46.3	-1.3	-10.9
EBITDA	27.6 (26.6 %)	22.4 (20.3 %)	21.3 (20.0 %)	-6.3	-22.8	-1.1	-4.9
Net profit	16.7	9.2	9.9	-6.8	-40.8	0.7	8.0

**HAMAMATSU**  
PHOTON IS OUR BUSINESS

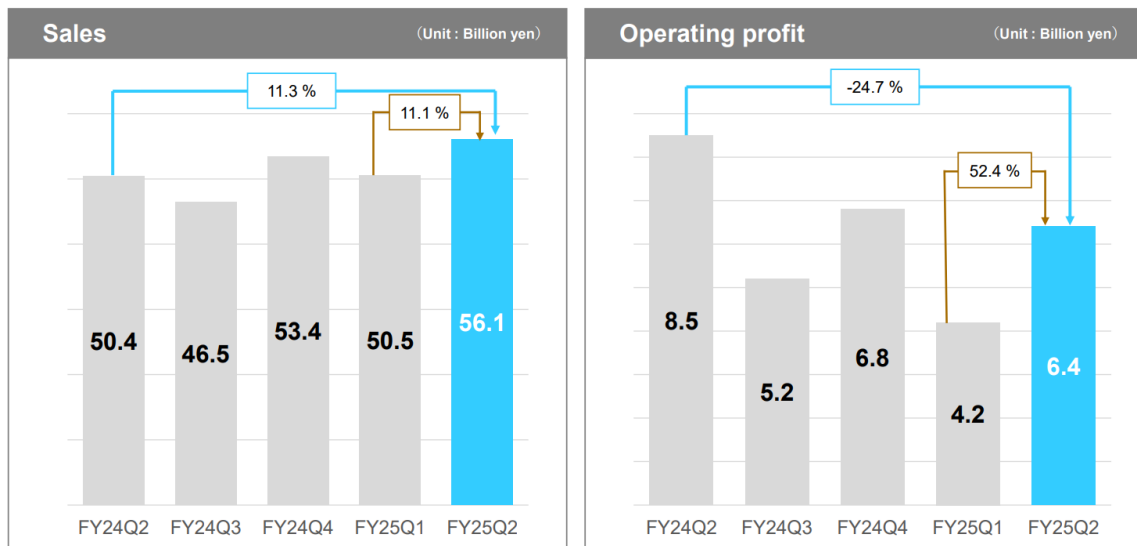
© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

6

This is the Summary of Results.

Due to the impact of M&A, we ended up with increased revenue but decreased profits. Sales totaled 106.7 billion yen and operating profit totaled 10.7 billion yen.

## Quarterly Changes



**HAMAMATSU**  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

7

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

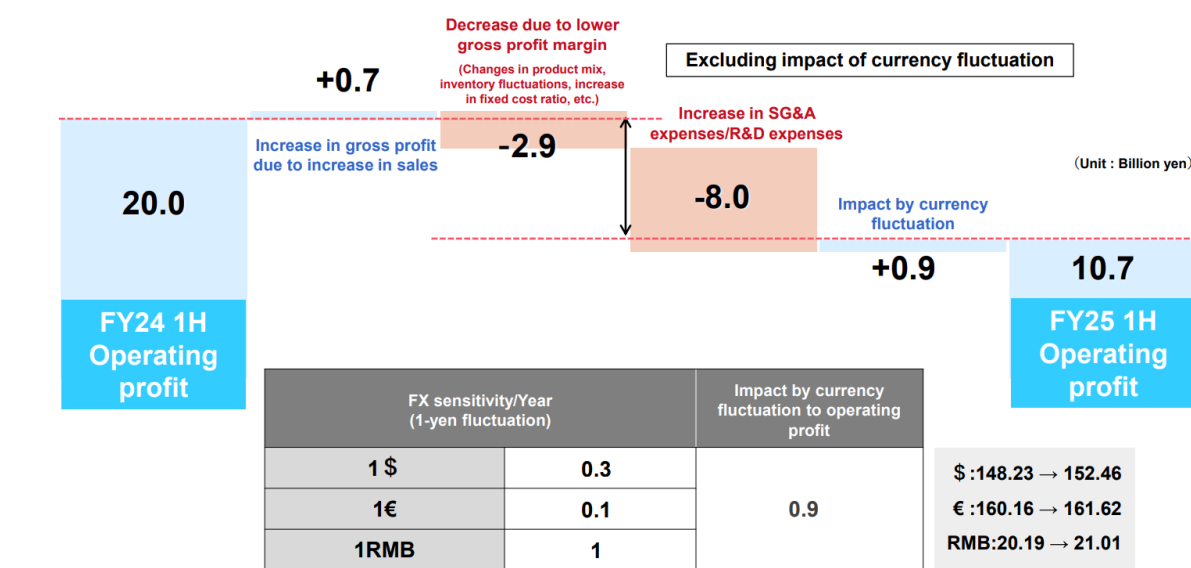
E-mail address support@scriptsasias.com

**SCRIPTS**  
Asia's Meetings, Globally



As you can see from the sales situation, we feel that sales have returned in the second quarter of FY2025. As for operating profit, we originally expected a decline in profit in the first quarter due to the impact of M&A, and we were able to make up for this in the second quarter.

## Factors of Operating Profit Changes (FY24 1H- FY25 1H)



As I mentioned earlier, the negative 8.0 billion yen in profit is due to an increase in SG&A and R&D expenses.

## Factors causing increases in SG&A and R&D expenses

(Unit : Billion yen)

	Item	Comment
Impact of M&A +6.3	R&D expenses +1.7	NKT Photonics +1.4 Fairchild Imaging +0.3
	Personnel expenses +1.7	NKT Photonics +1.5 Fairchild Imaging +0.2
	Depreciation +0.3	NKT Photonics +0.3
	Others +2.6	NKT Photonics +0.9 Goodwill amortization +1.6
Excluding M&A +2.1	R&D expenses +0.8	Electron Tube +0.3 Opto-semiconductor +0.2 Others(Including Central Research Laboratory) +0.2
	Personnel expenses +0.7	Increase due to increase in personnel and base salary (Including impact by currency fluctuation)
	Depreciation +0.6	Increase in head office expenses (Including overseas subsidiaries)
	Others No change	Thorough cost reduction
Impact by currency fluctuation -0.4		Impact amount is deducted because each item includes impact by currency fluctuation

**HAMAMATSU**  
PHOTON IS OUR BUSINESS

\*NKTP : NKT Photonics      \*FI : Fairchild Imaging

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

9

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

**SCRIPTS**  
Asia's Meetings, Globally

The breakdown of the negative 8.0 billion yen in profit is the impact of M&A, which added 5.8 billion yen in new expenses related to NKT Photonics.

In addition, there was a slight increase in R&D expenses, but this was due to an increase in personnel expenses overseas, resulting from inflation. As I mentioned that there was no change in other SG&A expenses, the entire company, including local subsidiaries, has been thoroughly reducing and controlling these expenses, so we have not seen any increase.

## **Sales by application**

**Demand for Medical-bio instrument is slow to recover due to high interest rates, but demand for Industrial instrument, mainly semiconductors, and analytical instrument is showing signs of recovery**

(Unit : Billion yen)

	FY24 1H (Actual)	FY25 1H (Plan)	FY25 1H (Actual)	YoY		vs. plan	
				Change	%	Change	%
Medical-bio	33.7	33.9	30.2	-3.4	-10.3	-3.6	-10.9
Industrial	34.9	35.9	37.5	2.5	7.4	1.5	4.4
Analytical	10.0	10.8	12.7	2.7	27.7	1.9	17.7
Academic Research	9.0	10.7	11.0	2.0	23.0	0.3	3.2
Measuring	5.6	4.8	5.0	-0.5	-10.5	0.1	3.8
Transport	2.8	2.8	2.4	-0.4	-15.4	-0.4	-16.2

The following is a breakdown of sales by industry. Except for medical-bio, sales in the industrial, analytical, and academic research sectors are trending in a positive direction. These figures indicate that demand has entered a recovery trend.

### **Support**

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com



## Medical-bio instrument

- Radiographic testing
- Laboratory testing
- Others medical instrument


© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved. 11

Now let me discuss each of these sectors in a little more detail.

First, I will explain the medical-bio sector.

**▪ Radiographic testing**

Recovery in end-customer demand for X-ray CT inspection equipment and dental inspection equipment remains slow due to factors such as high interest rates in Europe and U.S.




X-ray flat panel sensors

**▪ Laboratory testing**

Demand for blood testing devices declined due to customer inventory adjustments  
Demand for slide scanners for remote pathology diagnosis increased due to expanded sales to medical institutions in Japan and expansion of hospital networks in Europe

**▪ Others**

Demand for ophthalmic lasers is increasing due to growing demand for cataract surgery, increased sales to customers in Europe and U.S., and adoption of new products



Ultrafast fiber lasers

	FY24 1H (Actual)	FY25 1H (Plan)	FY25 1H (Actual)
<b>Radiographic testing</b>	<b>21.0</b>	<b>19.5</b>	<b>17.8</b>
<b>Laboratory testing</b>	<b>10.5</b>	<b>10.1</b>	<b>9.2</b>
<b>Others</b>	<b>2.1</b>	<b>4.3</b>	<b>3.1</b>
<b>Total Medical-bio instrument</b>	<b>33.7</b>	<b>33.9</b>	<b>30.2</b>

(Unit : Billion yen)

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved. 12

Regarding the shipment of products for X-ray CT inspection equipment for radiologic testing, we feel that inventory adjustments to our customers took longer than expected. Until now, we have not been able to conduct in-depth investigations into customer inventory, but we have

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

now done so and feel that the Inventory adjustments to our customers have almost been completed by the end of the first half of the fiscal year.

Regarding dental inspection equipment, the high interest rates in Europe and the U.S. have had an effect, and our customers' equipment sales have been slow to pick up. In China, competition is intensifying due to the rise of Chinese manufacturers.

In the area of laboratory testing, our largest customer has made a major inventory adjustment, and this has had an impact on our business. On the other hand, sales of slide scanners for pathological diagnostic use have been strong in Japan and Europe, and sales are increasing.

As for other medical-bio instruments, NKT Photonics' ophthalmic lasers have been steadily gaining new business, and we also have a maintenance business, which is showing continuous growth.

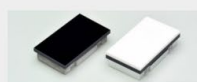


**HAMAMATSU**  
PHOTON IS OUR BUSINESS

## Medical-bio instrument Outlook

### Radiographic testing

- Demand for X-ray CT and PET inspection equipment is gradually improving from FY25 1H, but recovery is slow
- Demand for dental inspection equipment is facing intensifying competition, but there are signs of bottoming out due to new business acquisitions in Europe



Si photodiodes



X-ray flat panel sensors

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved. 13

This is the most important outlook for the future. First, as for Demand for the X-ray CT and PET inspection equipment, we feel that we can expect a gradual recovery from now on after bottoming out in the first half of FY2025. In addition, we have seen a large movement toward the adoption of our products by major CT and PET manufacturers for their new products. This is a positive development, and I will explain the details in the Topics section later.

As for flat panel sensors for dental applications, we are struggling in China.

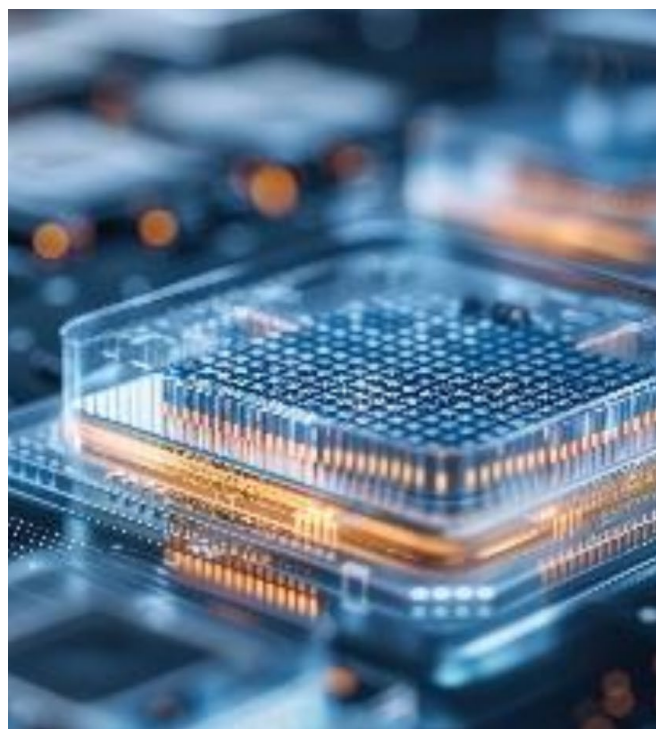
### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

On the other hand, we were able to obtain a large new contract in Europe. This is another big piece of news. Overall, the situation appears to have bottomed out.



**HAMAMATSU**  
PHOTON IS OUR BUSINESS

## Industrial instrument

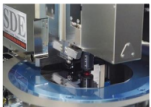
- Semiconductor instrument
- Non-destructive testing
- Factory automation instrument

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved. 14

Next, I would like to talk about industrial instrument.

▪ **Semiconductor instrument**


Stealth dicing and semiconductor failure analysis equipment are in high demand with rise of generative AI



Stealth Dicing™

▪ **Non-destructive testing**


Demand for food inspections is increasing both domestically and internationally  
Demand for automotive battery inspections is declining due to sluggish EV  
Demand for infrastructure inspections is increasing slightly



Microfocus X-ray sources

▪ **Factory automation instrument**

Customer inventory adjustments will move toward optimization



LED

	FY24 1H (Actual)	FY25 1H (Plan)	FY25 1H (Actual)
<b>Semiconductor instrument</b>	<b>21.3</b>	<b>23.8</b>	<b>23.6</b>
<b>Non-destructive testing</b>	<b>9.3</b>	<b>7.1</b>	<b>8.5</b>
<b>Factory automation instrument</b>	<b>3.1</b>	<b>2.7</b>	<b>3.2</b>
<b>Others</b>	<b>1.1</b>	<b>2.2</b>	<b>2.1</b>
<b>Industrial Instrument</b>	<b>34.9</b>	<b>35.9</b>	<b>37.5</b>

(Unit : Billion yen)

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved. 15

First, regarding semiconductor instrument, demand for Stealth dicing and semiconductor failure analysis system continues to be strong. In the stealth-dicing business, we have responded by

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

**SCRIPTS**  
Asia's Meetings, Globally



reallocating personnel across business segments for the first time in our company and increasing manufacturing capacity, but we are still receiving more inquiries than we can manage. We have high expectations that the new trend in semiconductor failure analysis will lead to significant growth in a fairly short period of time.

In addition, detectors and light sources for semiconductor manufacturing and inspection equipment are on the road to recovery, and I think they will start to increase from now on.

In Non-destructive testing, X-ray inspection systems for food testing are performing very well, especially overseas. However, regarding battery inspection, a slight decrease in demand is occurring due to the sluggish EV industry.

On the other hand, there was a slight increase in the inspection of circuit boards, and the situation is now a mixture of positive and negative factors.

Regarding FA, I think we can say that customer inventory adjustments have been completed, and we have returned to an appropriate business situation.



**HAMAMATSU**  
PHOTON IS OUR BUSINESS

## Industrial instrument Outlook

### Semiconductor instrument

- Demand for sensors and light sources for semiconductor inspection equipment continues to increase
- Demand for semiconductor failure analysis system continues to increase, mainly for memory applications

### Non-destructive testing

- There are signs of gradual recovery in investment projects in Asia for EV batteries
- Market for board inspection is recovering slowly for EV, but is gradually increasing for AI servers

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

16

As for the outlook for this sector, there is a new trend in semiconductor failure analysis system, and this is a trend that is expected to grow. In addition, sensors and light sources for semiconductor inspection equipment are on the road to recovery.

### Support

Japan 050-5212-7790

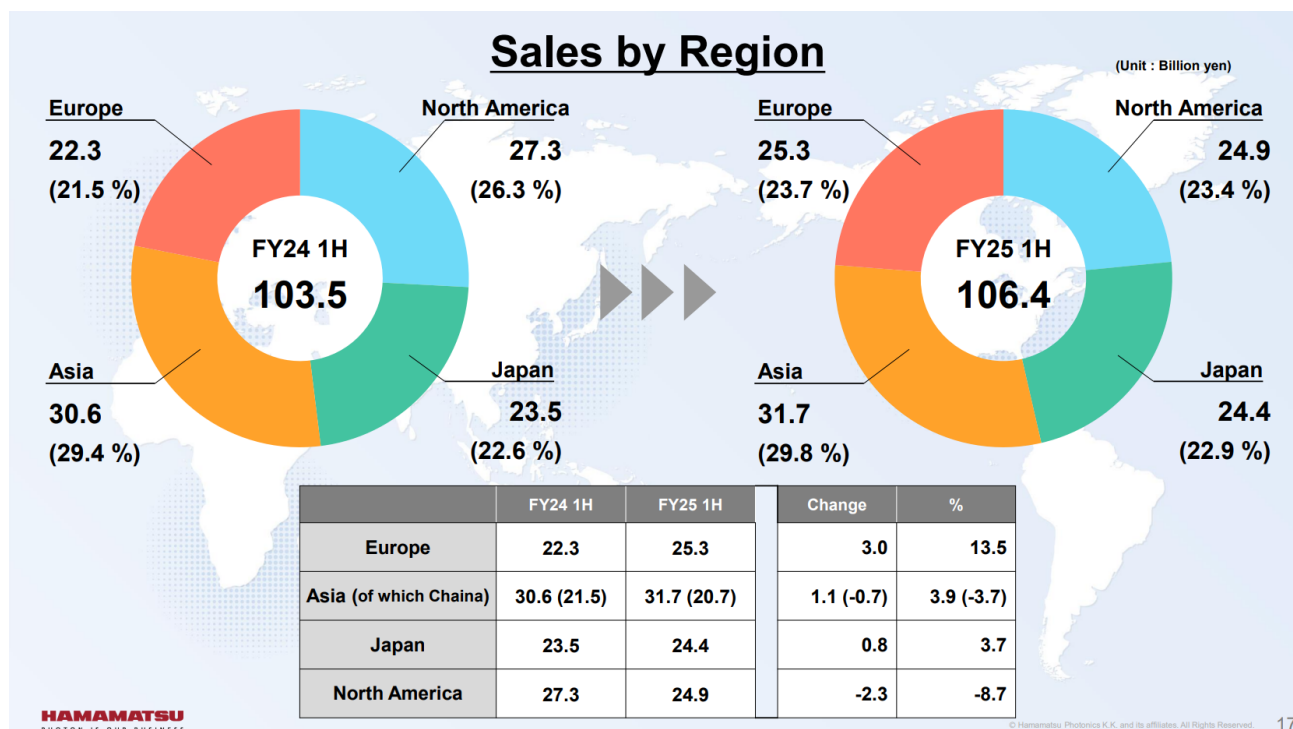
Toll Free 0120-966-744

E-mail address [support@scriptsasias.com](mailto:support@scriptsasias.com)

**SCRIPTS**  
Asia's Meetings, Globally

One topic is that a completely new light source is being evaluated by a major customer of semiconductor inspection equipment, with very good results.

Regarding battery inspections, I am currently reading that a gradual recovery is becoming apparent in Asia. With trends such as the increasing size of lithium batteries, there is a demand for high-voltage X-ray sources, and we would like to differentiate ourselves in this area and further promote this field. X-ray inspections for AI servers are on the rise.



This is the Sales by region. There is no major change in the composition of sales. Although sales in China decreased slightly in the first half of this year, the members of our Chinese subsidiary are working together to increase sales for the full year.

#### Support

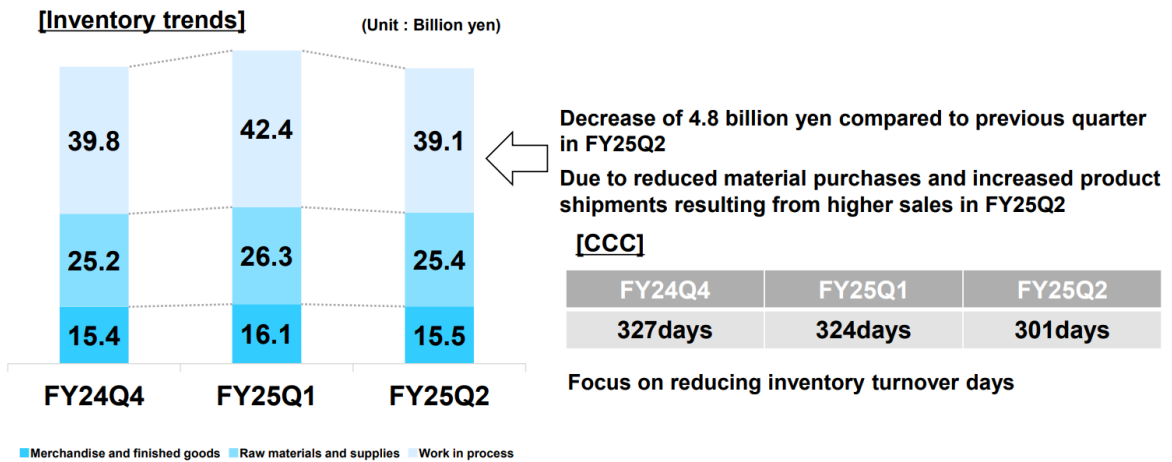
Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

## Inventory status

### Started efforts to shorten the cash conversion cycle (CCC)



**HAMAMATSU**  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

18

This is Inventory status. I believe that we have turned around the situation where inventories have been continuously increasing. We have had each division report the status of their inventories, and the entire company has been working on how to reduce the inventories.

We are particularly aware of the cash conversion cycle and have tried to shorten that, and in the second quarter of FY2025 we were able to bring it down to 300 days. It is still high, but our goal is to have it improve to 250 days or less.

The following is the forecast for business performance.

#### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

**SCRIPTS**  
Asia's Meetings, Globally



## Forecasts

### No change in full-year forecast

### Direct impact of reciprocal tariffs is minor, but indirect impact is unclear

		FY24		FY25	
Sales		203.9		218.9	
Gross profit		103.8 (50.2 %)		109.9 (50.2 %)	
Operating profit		32.1 (15.7 %)		24.1 (11.0 %)	
Net profit		25.1		18.0	
Exchange rate	1 \$ (¥)	150.54		145.00	
	1€ (¥)	163.16		155.00	
	1RMB (¥)	20.62		20.00	

(Unit : Billion yen)

YoY	
Change	%
15.0	7.4
6.1	5.9
-8.0	-24.9
-7.1	-28.3

**HAMAMATSU**  
PHOTON IS OUR BUSINESS

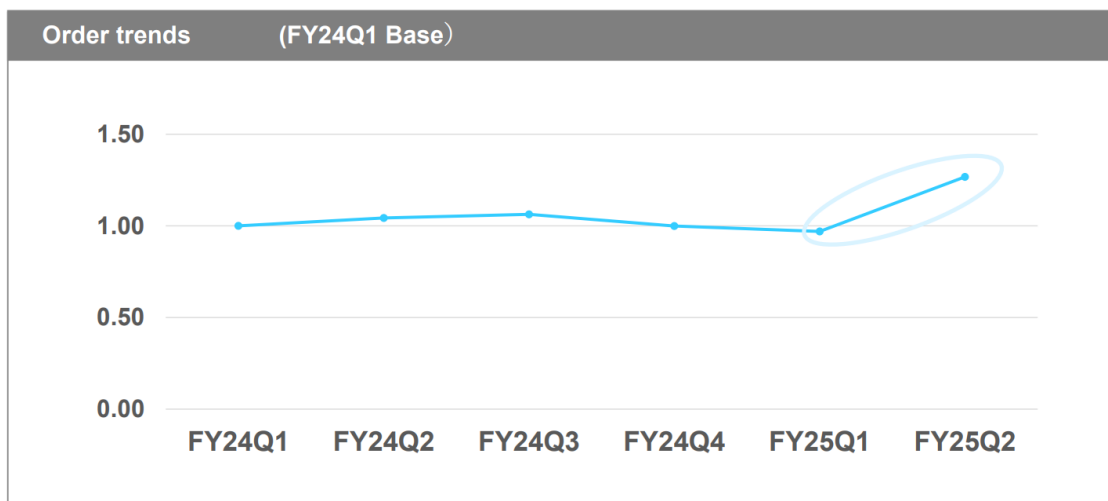
© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

20

As I mentioned at the beginning, there is no change to our full-year forecast. We have told you that the direct impact of the reciprocal tariffs will be minor, but the impact of the indirect portion of the tariffs is still uncertain.

## Order trends

### Increased orders in major industries such as Medical-bio and Industrial



**HAMAMATSU**  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

21

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

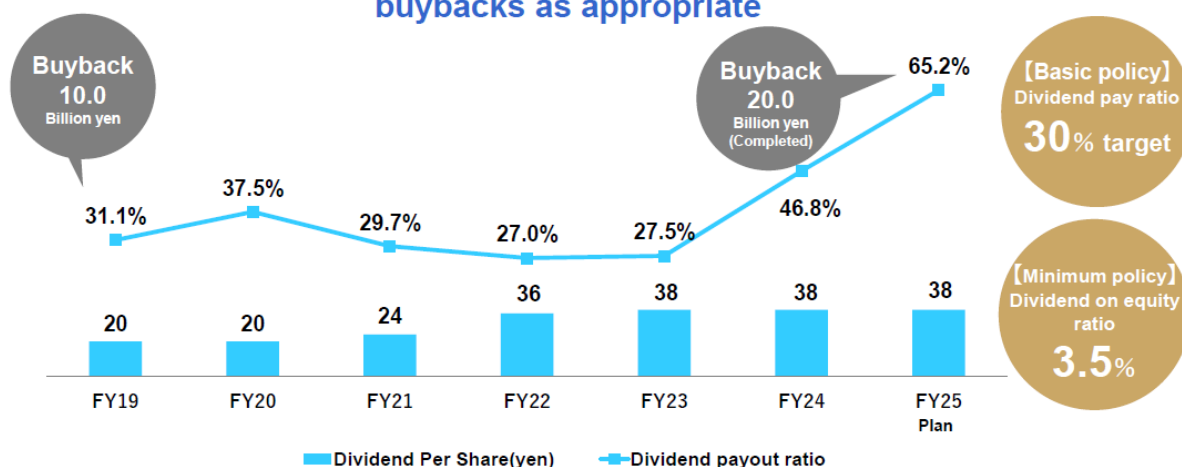
E-mail address support@scriptsasias.com

**SCRIPTS**  
Asia's Meetings, Globally

Although there may be some changes depending on the impact of these changes, orders received in the second quarter of FY2025 showed a significant upturn, which we consider to be a positive trend.

## Shareholder Return Policy

Basic policy is to pay stable dividends and consider share buybacks as appropriate



\*Including consideration of effect of 1-for-2 stock split in October 2025

HAMAMATSU  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

22

Next, I will explain shareholder returns. We have been targeting a dividend payout ratio of 30%. We have also set a lower limit of 3.5% based on DOE, and by applying this lower limit of 3.5%, we are maintaining the dividend unchanged at 38 yen per share. We have already conducted a share buyback of 20 billion yen, and we are considering a flexible share buyback depending on the situation in the future.

I would like to move on to the next topic.

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasiasia.com

**SCRIPTS**  
Asia's Meetings, Globally

## Progress of Growth strategies

1

### X-ray CT / PET Detectors

Growth in Top Share through New Technology Development

2

### Semiconductor Failure Analysis System

Growth through New Trends

3

### Products for Semiconductor Inspection equipment

Development of New products with Equipment manufacturers (Customers)  
High-profit products with high entry barriers and high added value

4

### NKT Photonics

48 billion yen core market potential in 10 years

5

### High Value-Added Modules

Customer-In / Market-In

HAMAMATSU  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

24

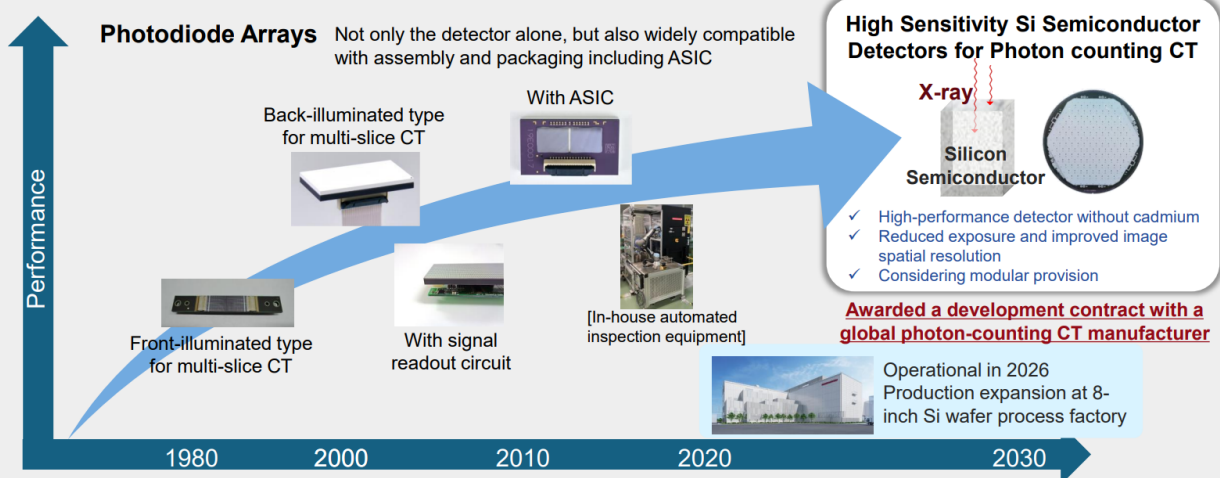
We will continue to discuss the various growth strategies that we have discussed in the past and will continue to discuss in the future.

1

### X-ray CT Detectors

—Growth in Top Share through New Technology Development

**Technology and Product Roadmap** Accommodating various specifications and shapes upon request



HAMAMATSU  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

25

First, in detectors for X-ray CT, we have always provided our customers with the latest photodiode arrays, both surface- and back-illuminated, as well as signal readout circuits and ASICs, and have always offered the most advanced and best technology, but there has been a

#### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

**SCRIPTS**  
Asia's Meetings, Globally

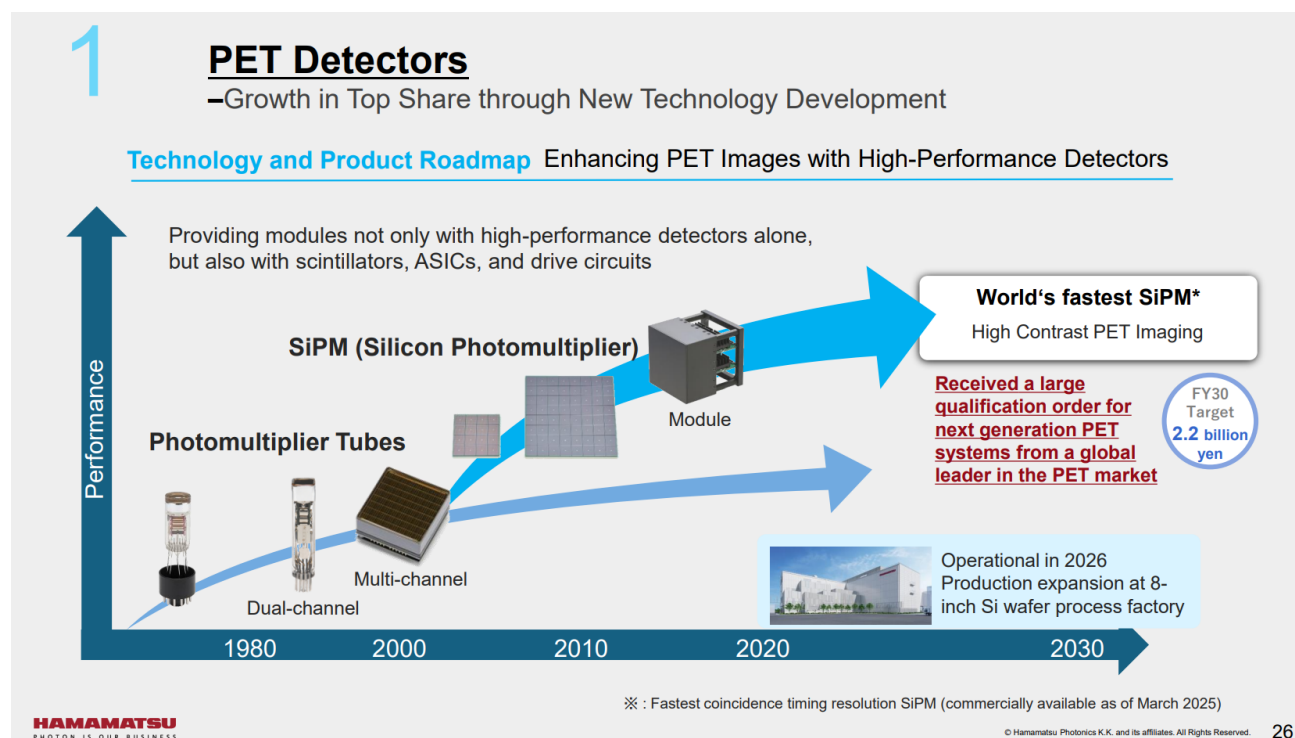
very significant move here. We have always provided our customers with the most advanced and best technology, but now there has been a big move.

We were able to conclude a development contract with a major CT manufacturer for mass production in the direction that the high-sensitivity silicon semiconductor detector that we have been promoting will be used for next-generation photon counting CT. Although there were many factors involved, this business was won through the collective strength of our company.

In addition to flexible support, I believe that our ability to respond with modularization is also having a positive impact on our customers.

We have a long-term relationship with trust with our customers. Long-term supply stability is essential, and our production system as a manufacturer is also highly regarded. In addition, dark current is a significant factor, especially for large-area silicon, and we have been able to apply the technology developed in the CERN (European Organization for Nuclear Research) project to achieve low dark current even for large-area wafers.

Also, since this requires many wafers, our production capacity using the 8-inch manufacturing line was also highly regarded. This method does not use cadmium and has very high energy resolution. This means high contrast and has led to its adoption for next-generation photon counting CT with low exposure and high resolution.



## Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com



Next is a detector for PET. We have a long history in this area as well, starting with photomultiplier tubes in the 1980s, followed by SiPM, and have always provided cutting-edge technology. We have been providing not only sensors but also products with ASICs and drive circuits, and there has been a great deal of movement in this area as well.


By making full use of simulation technology, we succeeded in designing and developing the world's fastest SiPM with the highest time resolution, which was highly evaluated. As a result, we have received a large order from a global manufacturer in the PET market for the evaluation of next-generation PET systems, and we expect sales of about 2.2 billion yen over 30 years.

2

## Semiconductor Failure Analysis System

—Growth through New Trends

**Increasing demand for advanced semiconductor devices with three-dimensional and miniaturized structures due to technological advancements in AI and data centers.**



Dual PHEMOS@-X

A high-resolution emission microscope that identifies failure locations in semiconductor devices by detecting light emissions or heat emissions caused by defects.


FY25 Plan  
11 billion yen

FY27 Target  
15 billion yen

Meeting market demand through new technology and product development, and increased manufacturing capacity

**New Trend ①** Detection of Photoemission/Thermal emission for all units during Process Development

**Single function (Photoemission / Thermal emission) Analysis** Joint Development



Failure Trend Analysis in Pilot Lines


Full Wafer inspection to improve yield at mass production

Multiple units of Thermal analysis equipment and Photoemission analysis equipment for each Pilot Line

Upto 1.5 billion yen per Pilot Line

**New Trend ②** Fully automate Failure Analysis on Production Line

**Full automation Analysis system** Joint Development




Full-Function Analysis


Photoemission + Thermal+ Laser + Prober + Automatic wafer transport

600-700 million yen per system

**Enhancing manufacturing capacity**  
(Operation in Mar. 2025)

**Establishing a New Factory in South Korea**





© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

27

Next is the field of semiconductor failure analysis system. We are determined to grow with the new trend.

The first trend is to inspect all wafers for photoemission and thermal emission when developing a process. This involves inspecting all wafers on the pilot line to analyze failure trends and improve yield as much as possible when transitioning to mass production.

Multiple units of equipment will be used for thermal emission analysis and photoemission analysis, respectively. This means that the product offering will be approximately 1 billion yen per pilot line, and orders will increase by this amount as the pilot line is expanded.

#### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

Another major trend is the fully automated failure analysis of mass production lines, which used to be performed manually by humans. As you can see in the photo, this fully automated inspection system is combined with an automatic wafer transfer system. The system is combined with a full-function failure analysis system and a prober, and costs approximately 600 to 700 million yen.

By incorporating this into the mass production line of manufacturing, failed wafers can be automatically transferred and analyzed automatically.

We are targeting 15 billion yen in FY27, and we believe there is still great potential for growth.


To strengthen our manufacturing capabilities, we have established a new plant in Korea with a manufacturing capacity of approximately 10 billion yen.

2

## Semiconductor Failure Analysis System

—Growth through New Trends

**Increasing demand for advanced semiconductor devices with three-dimensional and miniaturized structures due to technological advancements in AI and data centers.**



Dual PHEMOS@-X

A high-resolution emission microscope that identifies failure locations in semiconductor devices by detecting light emissions or heat emissions caused by defects.

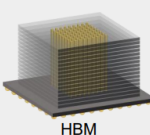
FY25 Plan  
**11 billion yen**

FY27 Target  
**15 billion yen**

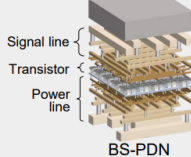
Meeting market demand through new technology and product development, and increased manufacturing capacity

**Expanding market share in Advanced 3D Logic and 3D Memory analysis**

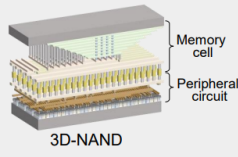
Complexity of Advanced Logic and Memory structures



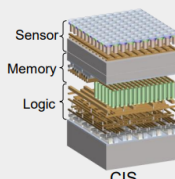
HBM



BS-PDN



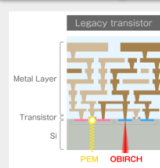
3D-NAND



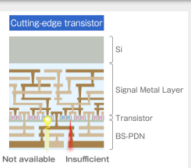
CIS

Issue

Traditional methods struggle to detect Failure location in Advanced Logic



Legacy transistor

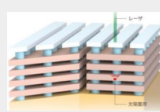



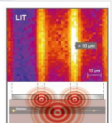
Cutting edge transistor

Not available    Insufficient

**Thermodynamic imaging module** Joint Development with Samsung

Developed a unique laser technology to capture heat generation from reflectivity changes on metal due to heat.



© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

Another major trend is 3D logic and 3D memory, as shown in this figure. The structures of state-of-the-art logic have become complex. Unfortunately, light cannot reach deep into the device anymore. Instead of using light for analysis, we have developed a thermodynamic imaging module.

We believe that this new technology will also contribute to increased sales, as it is attracting a great deal of attention as an inspection method for next-generation semiconductor logic and memory.

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

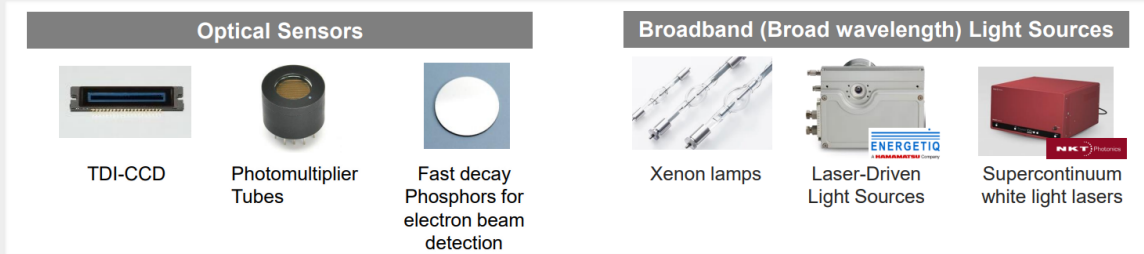
E-mail address support@scriptsasias.com

# 3

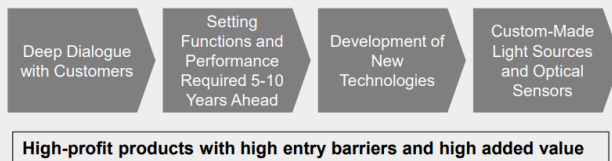
## Products for Semiconductor Inspection equipment

—Development of New products with Equipment manufacturers (Customers)

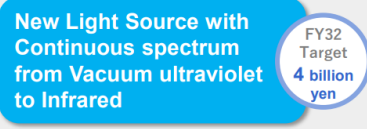
### Product lineups



### Product development process



### Products under development with Equipment manufacturers (Customers)



**HAMAMATSU**  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

29

Next, products for semiconductor inspection equipment. We have been providing a variety of optical sensors and light sources by maintaining deep dialogue and a good relationship with our customers to receive information ahead of time and to provide the functions required 5 to 10 years ahead of time. This is one of our strongholds, and it is not an area where competitors can easily enter. It is also an extremely profitable field.

We have now succeeded in developing a new light source with a very wide continuous spectrum from vacuum ultraviolet to infrared. We have already started evaluating with the largest semiconductor manufacturer and have received very high evaluation results. We believe that we can expect business on the scale of 4 billion yen, which we have written down as our target value.

#### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

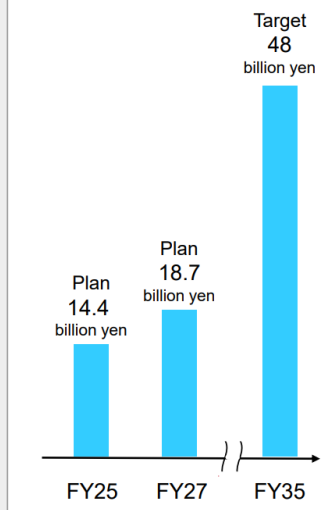
**SCRIPTS**  
Asia's Meetings, Globally



# 4

## NKT Photonics – 48 billion yen core market potential in 10 years

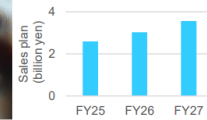
### Sales plan and target



### Target markets

#### Ophthalmology

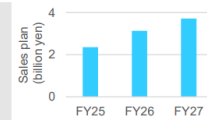
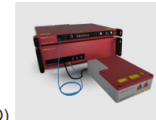
Precise cuts are needed during the procedure, and FLACS (Femtosecond Laser Assisted Cataract Surgery) replaces the surgeon using a scalpel. Delivering lasers to 4 of TOP 10\* ophthalmic laser device manufacturers. Negotiations are underway with the other.



FY30 Target  
4 billion yen

#### Quantum computer

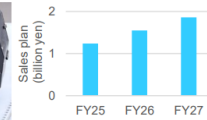
Leverage fiber laser technology combined with frequency conversion. Drive towards industrially reliable high power laser systems at very specific wavelengths.



FY30 Target  
7 billion yen

#### Security

Development and production of kW fiber lasers for disabling drones as well as Target Illumination Lasers (TIL).



FY30 Target  
8 billion yen

(Main Customer : IonQ)

(Main Customer : Rheinmetall)

※based on our own research

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

30

This is NKT Photonics. The company is currently in the red, but we are working on a three-year plan to bring it back into the black. 18.7 billion yen in sales is the plan for FY27, and we expect the potential to reach 48 billion yen in FY35.

As for the main target markets, I think they can be broadly divided into three categories: lasers for ophthalmology, quantum computers, and security.

Ophthalmic Lasers. With the aging of the population, the number of people suffering from cataracts is increasing. Currently, doctors treat cataracts with a scalpel, but we have delivered lasers to three of the top 10 ophthalmic device manufacturers, and now we have added another company to the list. We have delivered lasers to three of the top 10 equipment manufacturers, and now we have added a new company to the list. Additionally, other companies are also in negotiations. There is also a business for replacement services. Since this is a medical device, it is almost impossible for a similar laser manufacturer in China, for example, to enter the market. We have a very high reputation in this field, so we have high expectations for this field.

NKT Photonics' lasers are the de facto standard in quantum computers using light.

Finally, there is the area of security. This means disabling drones, high power fiber lasers, and lasers that track targets. This has already been technically verified in the field. The rest is like just waiting for orders. We expect this to be a large growth market, with sales of less than 2

### Support

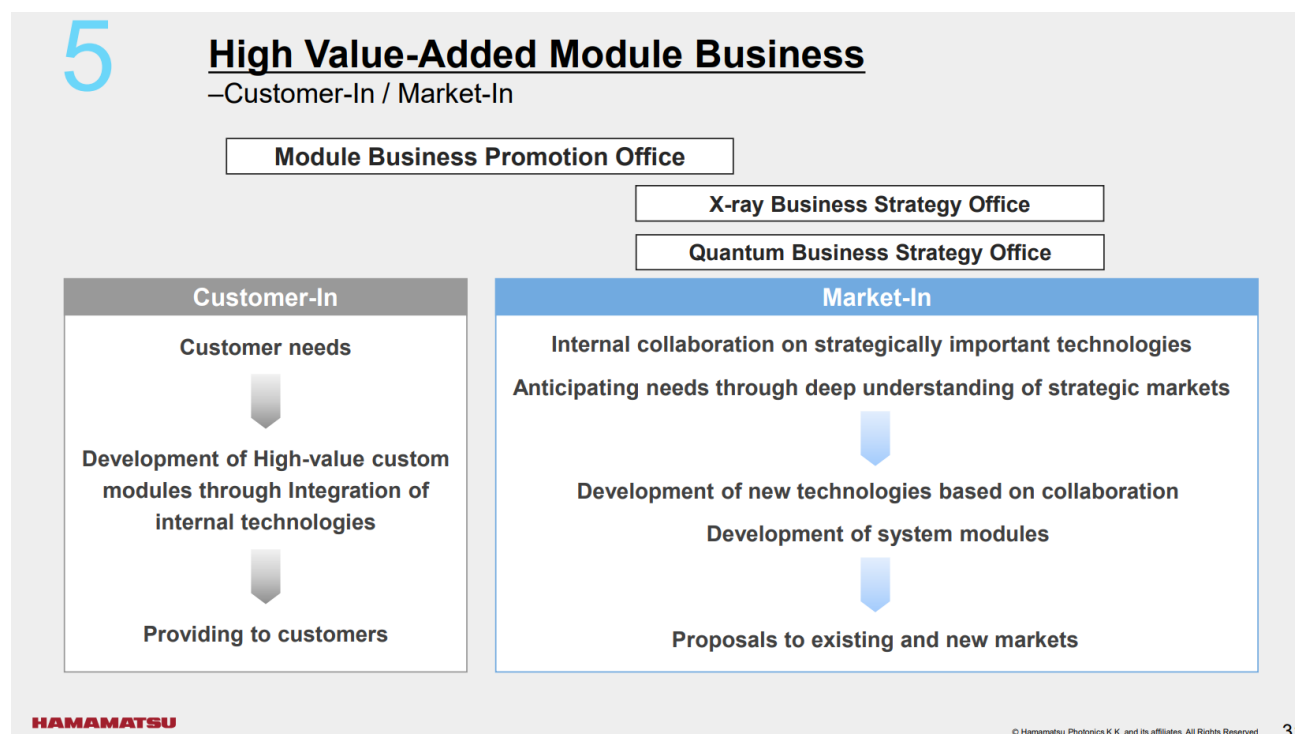
Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com



billion yen for FY27, but we expect this to increase quickly once we receive orders from our major customer.



Lastly, high value-added modules. This is a project that I have been promoting since I became president, and we have recently established the Module Business Promotion Office. This office will develop high value-added module products by firmly grasping the needs of our customers, or what we call "customer-in", and by working across the various dispersed technologies within the company and across business divisions.

## Support

Japan 050-5212-7790

Toll Free 0120-966-744

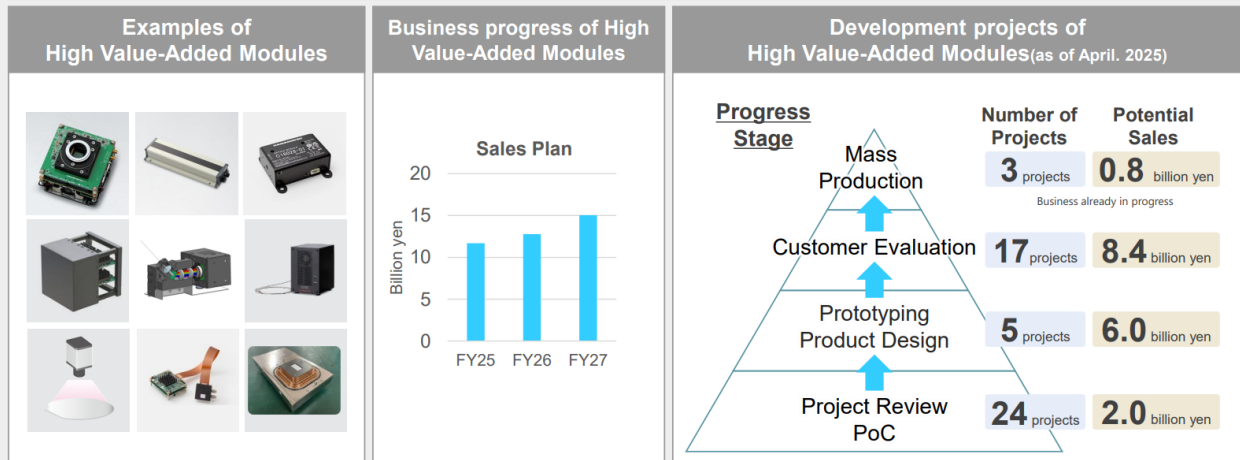
E-mail address [support@scriptsasia.com](mailto:support@scriptsasia.com)

# 5

## High Value-Added Module Business –Customer-In

### Module Business Promotion Office

Providing Evaluation Modules and Assemblies for our devices / Responding to custom requests from customers with expanding perspectives



HAMAMATSU  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

32

In addition, we have established the X-ray Business Strategy Office and the Quantum Business Strategy Office in cooperation with the Module Business Strategy Promotion Office.

As I mentioned 'market-in,' we are strategically working to integrate truly important strategic technologies within the company. We aim to thoroughly understand the needs of strategic markets and develop new technologies based on collaboration. And we are strategically moving to provide system products like modules.

To speak in more detail, the Module Business Promotion Office is a business model that links various in-house technologies to create high value-added modules and sell them at high profit margins.

As I have written on the rightmost page, many projects have already started from PoC/conceptual verification to prototyping, customer evaluation, and mass production. We believe that this will be the core of our next new business.

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasiasia.com

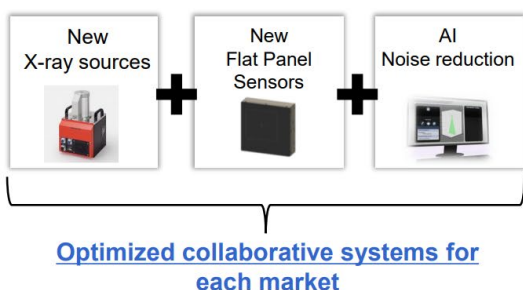


# 5

## High Value-Added Module Business –Market-In

### X-ray Business Strategy Office

- Providing optimized systems for each market
- New product development based on collaboration is in progress



Printed Circuit Board Inspection



Next generation Battery inspection



Semiconductor fabrication



3D Machining



Security



Food inspection



Dental

Seven Markets of Interest

HAMAMATSU  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

33

And the X-ray Business Strategy Office as a market-in. Until now, X-ray sources and flat panel sensors have been produced and sold by separate business units, so we have approached them separately and have not been particularly conscious of this collaboration, but now we will link these products in this Business Strategy Office. By linking them together, we can optimize them. We are moving forward with a completely new movement to develop new products by determining the target for each market.

Our target markets are the seven markets listed here, but we have already begun the development of new products by first prioritizing and approaching areas such as printed circuit board inspection and semiconductor fabrication.

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

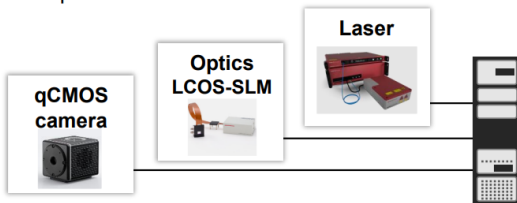
E-mail address support@scriptsasias.com



**Quantum Business Strategy Office**

- New technology development based on collaboration
- Units optimized for each method and customer
- Scalability-conscious configuration

New technology development optimized for quantum computers



Scalability is important to improve computing power  
Quantum computer control system module

Driving the photonics-based quantum computer market

**Neutral Atoms platform**

**Trapped ions platform**

**Photonics platform**

Conscious of cooperation with governments

Cooperation with quantum computer manufacturers

Quantum Machines and Hamamatsu Photonics Team Up for Enhanced Quantum Computing Control  
2024/04/30

IonQ Announces Partnership with NKT Photonics for Next-Generation Laser Systems to Power Future Quantum Computers  
2024/11/07

**HAMAMATSU**  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

34

Finally, our Quantum Business Strategy Office. As I mentioned, our lasers, optics, spatial light modulators, and image sensors are indispensable in the field of quantum computers using light. It would not be possible without our products.

The trend from now on is to scale this up. To improve computing power, a major trend is to increase computing power by making these three components into a single unit, turning it into a computation unit of quantum qubit, and increasing the number of these units by modularizing them. We would like to develop new products in this direction. We intend to design new lasers, and we also intend to take LCOS and qCMOS to a new level.

Japan is putting considerable effort into this as a national policy, so in that sense we would like to be very aware of our collaboration with the government. In addition, there has been considerable investment in quantum computer manufacturers, and we would like to develop this into a large business in close cooperation with Quantum Machines and IonQ, as I have mentioned here.

**Support**

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

## Progress of Growth strategies

1

### **X-ray CT / PET Detectors**

Growth in Top Share through New Technology Development

2

### **Semiconductor Failure Analysis System**

Growth through New Trends

3

### **Products for Semiconductor Inspection equipment**

Development of New products with Equipment manufacturers (Customers)  
High-profit products with high entry barriers and high added value

4

### **NKT Photonics**

48 billion yen core market potential in 10 years

5

### **High Value-Added Modules**

Customer-In / Market-In

**HAMAMATSU**  
PHOTON IS OUR BUSINESS

© Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved. 35

I have discussed our growth strategy. We will continue to update you on these areas, and at the same time, we will further strengthen cooperation among our business units to bring high value-added products to the market in a timely manner.

That concludes my presentation. Thank you for your attention.

---

#### **Support**

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address [support@scriptsasia.com](mailto:support@scriptsasia.com)

 **SCRIPTS**  
Asia's Meetings, Globally

## Question and Answer session

Question	Answer.
Q1. How certain do you think you are of achieving your plan for the full year ending September 30, 2025?	A1: We recognize that the first half results were slightly weaker than planned. One of the reasons for the weak performance was the delay in the recovery of demand for medical and biotechnology equipment. Based on the order status, we can see that the second half is gradually recovering. The two main risks are whether the company will be able to cover the behind-the-scenes effects of the first half and the extent of the indirect effects of the reciprocal tariffs.
Q2: Orders have been increasing from January to March; will this trend continue?	A2. Looking at the current situation, we do not see any signs of a sudden decline from here. We believe that this situation can be maintained comparatively. This is one of the reasons why we have concluded that the outlook remains unchanged. However, we will continue to monitor the situation closely, including reciprocal tariffs and exchange rates.
Q3. Are customers' inventory levels being optimized?	A3: Not everything, but quite a lot has been normalized.  Since this is a BtoB business, it is difficult to grasp the inventory status of customers, but the entire company has been working together to check the inventory status with as much accuracy as possible. I have the impression that the excess inventory of medical and biotechnology equipment has continued, but other than that, the situation has been normalized.

### Support

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address support@scriptsasias.com

Q4. Was there any rush in March regarding tariffs?	A4: There were some rush orders at our U.S. subsidiary, but they were small, in the order of several hundred million yen. Other than that, there were no rush orders.
Q5. What is the status of production adjustment?	A5: No production adjustments have been made. Inventories decreased by about 5 billion yen, but since the increase in sales had a large impact, the utilization ratio has not changed significantly. We will maintain the capacity utilization ratio to some extent in the future.
Q6. What is the status of NKT Photonics?	A6. Orders have been strong this fiscal year, and sales have been in line with plans. There are many factors for significant growth in the next fiscal year and beyond, including in the area of security.  As for profits, the company is still in the red. This is due to high R&D and other expenses. The company has already closed its U.S. office and consolidated its U.K. offices. As a result, earnings will gradually improve.
Q7. What is the progress of specific projects for semiconductor failure analysis equipment, and what are your future sales expectations?	A7. Regarding full automatic inspection, the development is expanding from memory to logic. A major trend is to perform analysis from the development stage to increase yield in anticipation of mass production when pilot lines are launched. Many manufacturers are moving in the same direction. Considering this trend, semiconductor failure analysis system will grow to become a main product within our company.

---

**Support**

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address [support@scriptsasias.com](mailto:support@scriptsasias.com)

<p>Q8. PCCT may not use Si in some cases.</p>	<p>A8. Si detectors have an environmental advantage in that they do not use cadmium. We can provide Si detectors of stable and high quality.</p> <p>The energy resolution, which had been a concern, is not inferior to that of cadmium-based sensors. The dark current is also very low, which is highly evaluated. We hope that customers will create a strong position in the market with Si detectors instead of those using Cadmium.</p>
---	---

---

**Support**

Japan 050-5212-7790

Toll Free 0120-966-744

E-mail address [support@scriptsasia.com](mailto:support@scriptsasia.com)