

## Financial Results Briefing of FY2024

QD Laser, Inc. May 2025

## Remarks from Osamu Nagao, President & CEO

We are pleased to present the financial results briefing materials for QD Laser, Inc. of the fiscal year ending March.

For the full fiscal year, strong performance in the Laser Device Business continued, resulting in net sales of 1,308 million yen (up 5% year-on-year) and an operating loss of 445 million yen, an improvement of 158 million yen compared to the previous year. These results exceeded both the projections in the mid-term business plan announced in November 2024 and the revised outlook disclosed in February 2025.

For the fiscal year ending March 2026, we project net sales of 1,387 million yen (up 11% year-on-year) and an operating loss of 445 million yen, driven mainly by continued growth in the Laser Device Business. While we have set conservative figures for this segment in consideration of factors such as yen appreciation, the outlook remains largely in line with our mid-term business plan. We will also focus on building partnerships with other companies in the Visual Information Device Business to lay the groundwork for achieving profitability in the fiscal year ending March 2027.

Additionally, we are pleased to announce today that Mr. Kiyoshi Okubo, currently COO, has been nominated to assume the role of President and CEO at the Annual General Meeting of Shareholders scheduled for June 24, 2025. We expect that under his leadership, QD Laser will move beyond the milestone of achieving profitability and further enhance its business foundation, realizing its full potential and making a significant leap forward. Although my tenure as President was brief, I will continue to contribute to the company as an Executive Director, working closely with our new, younger President.

We sincerely ask for your continued support for QD Laser under its new leadership.

Osamu Nagao President & CEO

## Mission

# With the power of the semiconductor laser, Expanding the "Can Do" of Humanity.

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What was once thought to be impossible is now a reality; we have become the only company in the world to successfully mass produce Quantum Dot LASERs.

We make the impossible possible, and we also create new "can do" that doesn't yet exist.

Our laser technology will enable dramatic improvements in our ability to process information, support low vision people, eye health check, and enhance vision, continually pushing the boundaries of human possibility.

## **Company Profile**

## Spin-off venture from Fujitsu. IPO in February 2021 at TSE Mothers (currently Growth): securities code: 6613

Company Name	QD Laser, Inc.
Foundation	April 24, 2006
Fiscal year-ended	March 31
Representative	Osamu Nagao, President and CEO
Number of Persons *1	48
Location	Headquarters: 1-1 Minamiwatarida-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa
Business	Semiconductor Laser Device business     Commercialization of state-of-the-art semiconductor lasers for communication, processing, and sensors.     Visual Information Device business     *2     Commercialized the world's first "RETISSA" utilizing laser retinal projection technology     Sales of devices and parts for people with low vision
Licenses	Class II Marketing License for Medical Devices     Registration of medical equipment manufacturer     ISO 9001



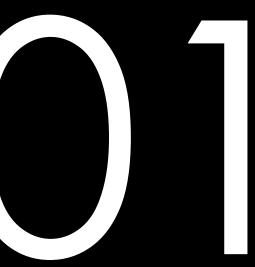
Osamu Nagao, President &CEO

<sup>\*1:</sup> As March 31, 2025. Excluding 11 dispatched employees.

<sup>\*2:</sup> Name changed from Laser Retinal Projection business to match segment name

## History of product expansion

#### **Laser Device** Commercialize world's first optical -Start mass production of Ouantum Dot Laser (1300nm etc.) communication Quantum dot laser Quantum dot laser for optical wiring Commercialize DFB laser for DFB Laser (1064nm etc.) precision processing and sensors Commercialize high-power laser High-Power Laser (660nm etc.) for levels and sensors Commercialize compact visible laser Launch the driver Compact Visible Laser (532nm etc.) for biological testing, etc. built-in unit "Lantana" Established as a Fujitsu Listed on the TSE Mothers Laboratories spin-off venture (currently Growth) market **Visual Information Device** Started shipping the consumer laser Started shipping retinal projection device "RETISSA® "Neoviewer" Low Vision Aid DISPLAY" **Smart Glass** Joint research begins on laser retinal scanning smart glasses



Financial Results for FY2024

## Financial Results Highlights for FY2024 vs FY2023

(1) Laser Device (LD) business sales increased 20% YOY to 1,120 million yen, Visual Information Device (VID) business sales decreased 40% YOY to 188 million yen, and company-wide sales increased 5% YOY to 1,308 million yen.

Sales in the LD business increased by 20%, driven by growth in DFB lasers, compact visible lasers, and high-power lasers, despite a decline in quantum dot lasers. Sales in the VID business decreased by 40%, as contract development increased, but equipment sales declined due to the absence of sales of RETISSA NEOVIEWER in the U.S. and MEOCHECK in the previous fiscal year.







## Financial Results Highlights for FY2024 vs FY2023

O2 Company-wide operating loss improved by 158 million yen (26%) YOY, LD business operating income increased 242% YOY to 141 million yen.

In the LD business, SG&A expenses rose due to increased personnel and depreciation costs, but higher sales led to a rise in gross profit, resulting in an operating profit of 141 million yen, up 242% year-on-year.

In the VID business, although sales declined, the absence of inventory write-downs and lower SG&A costs led to an improvement in operating loss by 63 million yen, to 311 million yen.

As a result, the overall operating loss improved by 158 million yen to 445 million yen.





## 03 Ordinary loss improved by 157 million yen (26%) YOY, net loss improved by 196 million yen (31%) YOY.

The ordinary loss improved by 157 million yen year-on-year, the same as the operating loss, totaling 443 million yen.

The net loss improved by 196 million yen to 445 million yen, due to the absence of fixed asset disposal losses recorded in the previous fiscal year, resulting in a greater improvement than that of the ordinary loss.





## Financial Results Highlights for FY2024 vs FY2023

#### Sales increased and losses decreased compared to the previous year

Net sales increased by 20% year-on-year in the LD business and decreased by 40% in the VID business, resulting in an overall 5% increase company-wide. Operating profit in the LD business rose by 242% year-on-year to 141 million yen, while the VID business saw a 63 million yen improvement in its operating loss. As a result, the company-wide operating loss improved by 158 million yen (26%) compared to the previous year.

#### **Performance Summary**

(Million JPY)	FY2024	FY2023	YOY	FY2024 Forecast <sub>*1</sub>	vs Forecast
Sales	1,308	1,247	+5% (+61)	1,271	+ 3% (+ 37)
(LD) (VID)	1,120 188	934 312	+20% △40%	1,102 169	
Operating Profit or Loss $(\triangle)$	△445	△604	+158	△547	+101
(LD) (VID)	141 △311	41 △375	+99 +63	107 △371	+34 +60
Ordinary Loss ( $\triangle$ )	△443	△600	+157	△534	+91
Net Loss (△)	△445	△642	+196	△538	+92

#### Sales by Product Group

	(Million JPY)	FY2024	FY2023	YOY
	DFB Laser	526	394	+34%
	Compact Visible Laser	257	202	+28%
	High-Power Laser	236	228	+4%
	Quantum Dot Laser	99	109	△9%
	LD Total	1,120	934	+20%
	Products	29	188	△85%
	NRE	155	107	+44%
	Self Check Service	3	16	△76%
	VID Total	188	312	△40%
	Grand Total	1,308	1,247	+5%

## **Balance Sheet**

Total assets decreased by 640 million yen due to a decrease in cash and deposits and an increase in fixed assets, total liabilities decreased by 191 million yen due to decreases in other accounts payable, and the equity ratio was 94.8% (92.1% at the end of the previous fiscal year).

#### Balance Sheet

(Million JPY)	End of March 2025	End of March 2024	YOY
Current Assets	4,554	5,762	△1,207
Fixed Assets	950	384	+ 566
Total of Assets	5,505	6,146	△640
Current Liabilities	256	444	△18
Fixed Liabilities	30	34	△3
Total of Liabilities	286	478	△191
Net Assets	5,219	5,667	△448
Total Liabilities and Net Assets	5,505	6,146	△640

## **Cash Flow**

Cash flow from investing activities decreased by 430 million yen year-on-year, mainly due to expenditures such as long-term loans for the construction of the new LD facility. Cash flow from financing activities decreased by 1,845 million yen year-on-year due to lower proceeds from stock issuance. As a result, cash and cash equivalents decreased by 1,082 million yen compared to the end of the previous fiscal year.

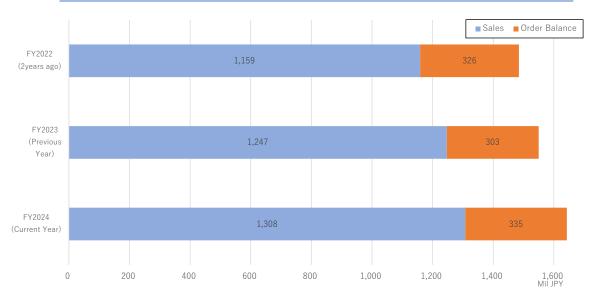
#### Cash Flow

(Million JPY)	FY2024	FY2023	YOY
CF from Operating Activities	△506	△443	△63
CF from Investing Activities	△568	△138	△430
CF from Financing Activities	△9	1,835	△1,845
Effect of Exchange Rate Change on Cash and Cash Equivalents	2	1	1
Cash and Cash Equivalents Year-end Balance	3,754	4,836	△1,082

## **Order Status**

Sales are steadily increasing. The order backlog as of the end March 2025 is 335 million yen, up 11% from the previous fiscal year.

## Net sales for FY2024 and order backlog as of the end of FY2024



## DFB Lasers<sup>1</sup>: Sales in FY2024

## 526 million JPY sales, increased by 34% year over year.

Strong orders for our main products of light sources for micromachining and measurement(sensor system).

• Micromachining: 265 million JPY sales (51%<sup>\*2</sup>)

Sales increased by 113% YOY due to strong orders for new processing equipment from North America and those from China.

Measurement(Sensor system): 128 million JPY sales (24%<sup>\*2</sup>)

Sales increased by 29% YOY due to strong orders for light sources for sensors in China and North America.

• Medical equipment: 70 million JPY sales (14%\*2)

Sales roughly the same as in FY2023. Sales of light sources for medical devices in Europe are steady.

Measurement(Semiconductor manufacturing):
 57 million JPY sales (11%\*2)

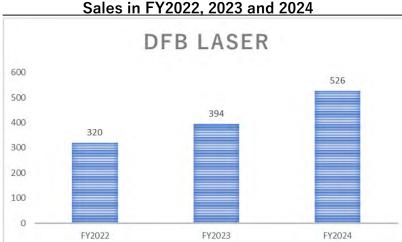
Sales decreased by 40% YOY, though FY2023 was a strong year. On the other hand, mass production certification of light sources for inspection equipment for semiconductor wafer processing with a Japanese customer has been completed.

DFB lasers

Left: for 15 ps pulsed operation

Right: for 50 ps pulsed,

ns pulsed, and CW operations



## Compact Visible Lasers: Sales in FY2024

## 257 million JPY sales, increased by 28% year over year.

Orders from our largest customer, which had been sluggish last fiscal year, have returned, and orders have steadily accumulated as forecast.

Blood/cell analysis(Flow cytometer/cell sorter<sup>\*1</sup>): 190 million JPY Sales (74%<sup>\*2</sup>)

Sales increased by 80% YOY. For our biggest customer in China (Headquartered in North America), sales of light sources for biomedical equipment increased by 81 million JPY YOY due to the end of inventory adjustment.

• Microscope: 61 million JPY sales (24%\*2)

Sales decreased by 32% YOY. Sales of light sources for biomedical STED<sup>\*3</sup> microscope and laser microscope decreased by 42 million JPY YOY in Europe. On the other hand, sample orders for mass production certification of light sources for biomedical equipment in Japan resulted in sales of 13 million JPY.

Lantana<sup>TM</sup> \*4

Sample rentals began in March 2025. Plan to release products in June.

Compact visible lasers Left: green Middle: yellow-green Right: orange







\*1 : A type of flow cytometer to separate specific cells.
\*2 : Percentage in compact visible laser sales.

\*4. All-in-one compact visible

<sup>\*3 :</sup> STED: STimulated Emission Depletion microscopy. A type of fluorescence microscope

## **High-Power Lasers: Sales in FY2024**

## 236 million JPY sales, increased by 4% year over year.

Sales increased slightly, driven by the start of mass production for new sensor light sources. This growth occurred despite decreased orders for light sources used in other sensors, levelers, and wafer transfer machines.

• Leveler for construction/DIY and sensor: 125 million JPY sales (53%<sup>\*1</sup>)

Sales increased by 23% YOY. Sales increased due to start of mass production of new sensor light sources, as well as orders for light sources from a European sensor manufacturer and other customers.

- Sensor in semiconductor factories: 56 million JPY sales (24%<sup>\*1</sup>)
- Sales increased by 5% YOY. Sales of light sources for sensors on wafer transfer machines used in semiconductor factories for two companies decreased by 20% YOY due to low orders. However, total sales slightly increased by strong orders for light sources for particle counters and others.
- Machine vision and data communication in factories:
   49 million JPY (21%<sup>\*1</sup>)

Sales decreased by 18% YOY. Sales of light sources for machine vision increased by 85% YOY in North America, which accounted for the greatest sales in this category. However, sales from other customers are slow.



High-power lasers TO package



## Quantum Dot Lasers : Sales in FY2024

## 99 million JPY sales, decreased by 9% year over year.

- Various progress in research and development aimed at mass production of quantum dot lasers for incorporation into our customers' final products.
- •Working on quantum-dot lasers for silicon photonics with nine customers in Japan, the US, and Europe for applications including optical connector, chip-to-chip communications, LiDAR, and electronics.
- The demand for quantum dot lasers for research and development among our customers is expected to generally remain in line with the previous trend, although some fluctuations are anticipated.
- •Shipped quantum dot wafers to nine universities and research institutes in Japan, North America, Europe and Asia.
- •Continue to receive orders and ship wafers for optical connector and chip-to-chip communications.
- A Japanese customer involved in mass production ordered 60,000 units from 2023 to 2024. Of the remaining 18,000 units, 14,800 have already been shipped. The remaining 3,200 units will be shipped in FY2025 due to a revision of product specifications



Quantum dot

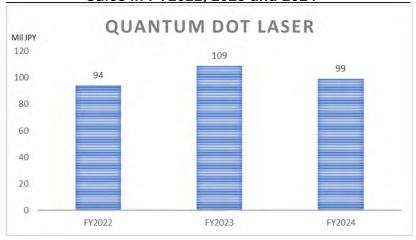


Quantum dot wafer



Quantum dot laser chip

#### Sales in FY2022, 2023 and 2024



## Visual Information Device (VID): Sales and Progress of the Mid-term Business Plan

## 188 million JPY sales, decreased by 40% year over year.

- Product and Service Sales (Annual Cumulative Sales: 33 million JPY)
- Based on the Mid-term Business Plan policy, the business has been consolidated into the following three key areas ①Expansion of sales for the handheld visual support device RETISSA ONHAND, ②Development, production, and sales support for newly developed third-party visual assistance products ③ Provision of core components and technology.
- The head mount display RETISSA Display II has been discontinued. The RETISSA NEOVIEWER, a collaborative product with Sony, has achieved its full-year sales target of JPY 21 million, and additional production is currently on hold.
- ①RETISSA ONHAND Promoting adoption in public facilities, such as museums and sports venues.
- ②Under Discussion about sales schemes for Third-party visual assistance products
- 3 Progressing negotiations on technology licensing.
- Contract Development (NRE) (Annual Cumulative Sales: 155 million JPY)
- Focusing on the development of next-generation laser retinal projection eyewear (smart glasses).
- The Mid-term Business Plan initially set a basic policy of not accepting NRE orders; however, an exception was made to accept projects exceeding JPY 83 million in the fourth quarter.
- Joint business development in the fields of smart glasses and vision health care applications
- · Discussions are ongoing with multiple candidates



## Forecast for the FY2025

Steady growth of the LD business and efforts to restructure the VID business to achieve the mid-term business plan

## **Laser Device business**

**Operating profit** 

consecutive 11 years

Operating profit: 66 million yen Sales: 1.24 billion yen (11% increase YOY) Increased costs for new product development and depreciation \*1 **Expansion of certified mass production** 

107⇒**116** products

Expanding customer base for compact visible lasers Expanding DFB laser applications

New product development and commercialization

Solution product launch\*2

The world's smallest

Compact Visible Laser Unit

Lantana™ Mass production begins

## Visual Information business\*3

Sales 140 million yen
(-25% YOY)
Operating loss
-197 million yen
(114 million yen improve YOY)

# Optical unit and component business launch

Expanding the "laser + optical system" developed through retinal projection equipment products to industrial applications and launching a component business

Reorganization of business for the \*4 next fiscal year and beyond

# Strengthening corporate collaboration

Consideration of joint ventures through collaboration with other companies

Technology licensing, sales of other companies' retinal projection devices



<sup>\*1:</sup> Due to the shortening of the useful life associated with the decision to relocate the business unit

<sup>\*2:</sup> Contributing to the enhancement of product competitiveness for customers through miniaturization and improved design flexibility of biomedical equipment
\*3: Due to the expansion of the business domain, the name was changed from Laser Evewear (LEW) Business.

<sup>\*4:</sup> Changed items in line with the policies of the mid-term business plan

## Financial Forecast for the FY2025

While the LD business is growing steadily, the VID business is undergoing restructuring with the aim of turning a profit in FY2026, and company-wide sales are expected to increase 6% year-on-year.

(Million JPY)	FY2025 Forecast	FY2024 Actual	YOY
Sales	1,387	1,308	+6%
Jaics	1,507	1,500	(+78)
(LD)	1,247	1,120	+11%
(LEW)	140	188	△25%
Operating Profit		△445	. 0
or Loss ( $ riangle$ )	△445	∠_443	+0
(LD)	66	141	△74
(LEW)	<b>△197</b>	△311	+114
Ordinary Loss (△)	△435	△443	+8
Net Loss (△)	△445	△445	+0

#### [LD business]

- · Sales will increase 11% year-on-year to 1,247 million yen, thanks to growth in DFB lasers and quantum dot lasers.
- SG & A expenses are expected to increase 49% year-on-year to 420 million yen due to securing highly skilled personnel, increased depreciation expenses associated with the operation of new facilities and relocation of bases, an increase in development items, and increased facility repair costs.
- Operating profit is expected to decrease 53% year-on-year to 66 million yen due to a deterioration in gross profit margin due to the strong yen and the increase in SG&A expenses mentioned above.

#### [VID business]

- FY2025 is positioned as a period of business reorganization targeting FY2026, and sales are expected to be down 25% year-on-year to 140 million yen.
- SG&A is expected to be down 21% year-on-year to 262 million yen due to a review of research outsourcing and advertising.
- · Operating loss is expected to be 197 million yen, an improvement of 114 million yen year-on-year.

#### [Company-wide]

- · Sales increased 6% year-on-year to 1,387 million yen.
- · Operating loss was flat year-on-year at -445 million yen.
- · Ordinary loss improved by 8 million yen year-on-year, while net loss was flat year-on-year.

## Goals for the FY2026

## **Laser Device business**

### **Operating profit**

consecutive 12 years
Operating profit: 340 million yen (Improve

gross profit margin to 45%)
Increase in number of certified products and new customers

Price optimization, reduction in outsourcing costs, and improved yield

#### **Global niche new products:**

Sales over 200 million yen

New products in FY2025 will contribute \*1

- Compact visible laser "Lantana™"/New wavelength
- DFB laser for semiconductor inspection/precision processing/sensing

#### **Relocation of production base**

# Establishing a production expansion system

Spring 2026: Relocating to new base in Yokohama. Increase production capacity by purchasing new equipment and expanding clean rooms and product inspection areas.

## Visual Information business

### **Profitability in FY2026:**

Operating profit 0\_2 million yen Aims to achieve profitability in FY2026 by

Aims to achieve profitability in FY2026 by meeting user needs through its low vision aid business, sales of other companies' products, and optical unit and parts business

# **Expanding optical unit and component business**

Aims to expand the component business by applying the "laser + optical system" technology the company has developed for retinal projection device products to industrial applications Utilizing our own technology and sales know-how

# Strengthening corporate collaboration

Expand optical licenses and sales of other companies' retinal projection devices



Business Summary

## Two Businesses to Expand Human Capabilities

Increasing "abilities" with the power of semiconductor lasers, contributing to the improvement of overall human happiness.

\*Note: The name has been changed from the Laser Eyewear (LEW) business due to the expansion of business areas. **Visual Information Device (VID)\*** Laser Device (LD) **Business** Innovation in Communication, Innovation in Vision Area Measurement, and Processing **Precise** What we High-speed and measurement in High-speed and Using laser retinal projection technology to make the difficultcan already stable biomedical and high-precision to-see visible "do" now (Low Vision Aid) communication semiconductor processing manufacturing + **Dramatic** High-"Laser + Optical Safer What we performance improvement in More detailed Components" New visual autonomous smart glasses for can do from computing power analysis and **Utilizing Retinal** experiences in AR/VR and driving through Projection the AR/VR field through optical measurement now on medical light sensing interconnects **Technology** applications

## Our Core Technologies and Competitive Advantages

# Material Creation, Design, and Control <u>Cutting Edge Semiconductor Laser Technology</u> with Several Unique Features

#### Laser Design

A technology to design lasers suitable for each use.

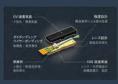
World's fastest (15ps)<sup>\*3</sup> semiconductor laser
for precision material processing
utilizing optical communication technology,



#### **Small Module**

A technology to make DFB lasers ultra compact.

Our yellow/orange laser modules led us
to become one of the finalists at the Prism Awards 2014.



#### **Semiconductor Crystal Growth**

Technology to grow each atomic layer of semiconductor crystals on a semiconductor substrate



#### VISIRIUM Technology

A technology to project images directly on the retina through ultra small laser projectors.

World's First-Commercialization\*

#### **Quantum Dot**

Succeeded in the mass production of quantum dot lasers with world's highest operating temperature '1 and developed world's smallest silicon-based optical transceiver '2



#### **Diffraction Grating**

Technology to form periodic refractive index change inside the laser enabling arbitrary wavelength control.

World's first'5 commercialization of yellow/orange semiconductor laser





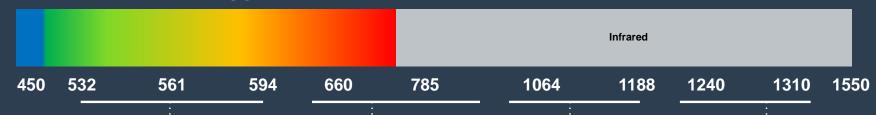
2017 PRISM Award in Industrial Lasers - QD Laser (2<sup>nd</sup> Feb 2017) Prism Awards honour photonic innovations at Photonics West 2019 Japan/U.S. PATENT JP5362301/US8896911





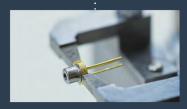
## Variations on semiconductor lasers developed and sold by QD Laser

QD Laser provides a wide range of semiconductor lasers with wavelengths suitable for each application





**Compact Visible Laser** 



**High Power Laser** 



**DFB Laser** 



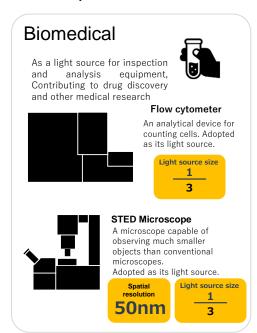
**Quantum Dot Laser** 

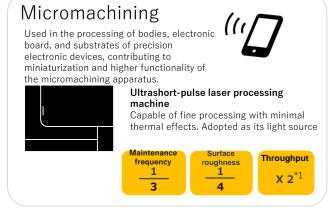
## Our Major Laser Device Products, Wavelengths, Features, and Uses

#### **Compact visible lasers High power laser DFB** laser Quantum dot laser **Produccts** 532, 561, 594 nm 1030, 1053, 1064, 1080, 1120, 1180nm 640-940nm 1100-1330nm Wavelength 1020-1120nm provided with 1nm step · Precise control of wavelength with stable Quantum dots are used for the High power Fabry Perot laser Miniature size, low power operation under continuous, nanosecond. active layer (light-emitting part) consumption, stability, short pulse and picosecond modes. Providing products and solutions of semiconductor lasers. generation, and high-speed · High beam quality, small size, according to applications. Excellent temperature stability, **Features** modulation, etc. lightweight, high electricity-light Supports various wavelengths, high-temperature resistance, conversion efficiency, and long life · World's first current injection small quantities, and custom and low noise performance compared to existing solid-state lasers. yellow-green and orange lasers production. compared to existing • Extensive product lineup that meets the semiconductor lasers. various needs of customers. Measurement Bio. Use Processing Communication Silicon photonics

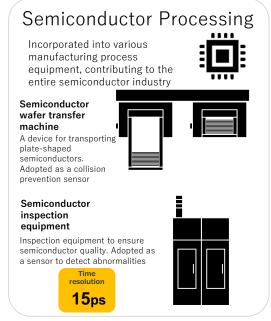
## Laser Device (LD) Division: Cases of QD laser product adoption

QD Laser products are integrated into devices that support various industries, contributing to economic activity and the development of various manufacturing industries and businesses that society focuses on.





By adopting QD laser products, it becomes possible to create small, high-precision, and highperformance devices

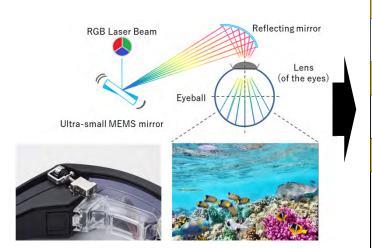


## Visual Information Device (VID) Division: Business Overview

Technology and products that project images directly onto the retina using lasers, bringing innovation to human vision.

World-leading laser retinal projection technology

**VISIRIUM TECHNOLOGY®** 



Three business areas expanding possibilities:

#### 3. Expanding the visible world Augmented Vision

Creating the ultimate 'smart glasses' that are indispensable

## 2. Extending healthy vision lifespan Vision Health Care

Ability to provide peace of mind to eye disease patients through eye health check services

1. Making the hard-to-see visible Low Vision Aid

Enabling those with low vision to accomplish tasks









**ESG** Initiatives

## **Business Development Directly Linked to Sustainability**

Using the power of semiconductor lasers to increase what's possible, contributing to the improvement of well-being for all humanity.

## [Laser Device Division] Advanced Sensing Using Laser Light Sources

New inspection methods using laser light sources

Contribution to innovation through data utilization

Accident reduction in advanced autonomous driving





2024 — to — ≥ 2030

[Visual Information Device Division]

Laser Retinal Projection Technology

Self-check with MEOCHECK

Expanding social implementation of low vision aid Resolving various inconveniences related to vision







2024 — to — 2030

Contributing to medical examinations and research, extending healthy life expectancy through the development of preventive medicine, and realizing an inclusive society.

The expansion of QD LASER's technology and business directly leads to the realization of a happier society.



Terminology

## **Terminology**

Semiconductor laser	A compact device with an approximate length of 1mm that causes laser oscillation by passing an electric current to a semiconductor. In comparison with a solid-state laser or gas laser, more micro-miniature in size; higher speed modulation characteristics up to 10GHz; higher photoelectric conversion efficiency achieving several tens of percent and better controllability of wavelength, among other things. Became widely used in the 1980s as a light source for communication systems and optical recording media, such as CDs and DVDs, etc.
Quantum dot laser (QDL)	A semiconductor laser using a quantum-dot structure comprising nanocrystalline semiconductors in its active layer. QD Laser is the only firm in the world to mass-produce QDLs for optical communications and silicon photonics. In comparison to existing semiconductor lasers, it is superior in temperature stability, high-temperature endurance and low-noise properties.
DFB laser	Distributed Feedback Laser: QD Laser's DFB laser is equipped with a diffraction grating which enables laser oscillation at a single wavelength. It is suitable for applications where the light output needs to be concentrated into a narrow wavelength range, such as the seed light of a fiber laser.
Silicon photonics	A technology which integrates an optical circuit with a silicon electronic circuit that has signal processing and memory functions, thus enabling a breakthrough in the processing capacity limitation of the conventional electronic circuit system (achieving 100 times faster processing speed and lower power consumption) and high-capacity data transmission between LSI chips (10Tb/s).
VISIRIUM technology	A technology that projects images onto the retina using precise optical systems, creating different colors flexibly from the three primary laser light colors - red, green and blue.
Diffraction grating	A technology that freely and precisely controls the wavelength of semiconductor lasers to fit into various applications by forming periodic irregularities inside the laser.
Ultrashort pulse	A laser with a very short pulse width (duration). It is used for microfabrication and other processes as it can prevent shape distortion due to thermal effects.
Compact visible laser	A small module that generates visible light (green, yellow-green, and orange) by combining our unique semiconductor laser and wavelength conversion element.
Retinal projection	To project images onto the retina
Flow cytometer	A device capable of measuring certain properties of cells. By irradiating a cell suspension in a tube with a laser beam, it can measure the number and size of a large volume of cells over a short period of time using fluorescence and scattered light parameters. It is used in various fields including molecular biology, pathology, immunology, plant biology and marine biology.
LiDAR	LiDAR (Light Detection and Ranging) is a technology which irradiates an object and uses a light sensor to detect the reflection to measure the distance. It is expected to be used in autonomous driving systems in the future.



## **Caution When Reviewing This Document**

- The materials and information provided in this presentation include forward-looking statements.
- These statements are based on expectations, forecasts and risk assumptions as of this presentation's publishing, and contain uncertainties that could lead to results that are substantially different from these statements.
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